

Lucent Technologies
Bell Labs Innovations



4ESSTM Switch
1B Processor
Output Messages
Volume 1
ALW - DGN

OM-4B000-01
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July 2002

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**4ESS™
1B PROCESSOR
OUTPUT MESSAGE DOCUMENT**

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SECTION 1

INTRODUCTION

1.1 PURPOSE

The 4ESSTM 1B Processor Output Message Document describes the output messages that are printed through the 4ESSTM output channels. It is designed, together with the 4ESSTM 1B Processor Input Message Document (IM-4B000-01), as a reference for work center personnel and support groups who interact with the 4ESSTM Switch by sending and receiving messages.

The messages in Issue 1.8.1 of this document represent complete documentation for the current generic issues, 4E19 and later. Only certain "recent change" messages associated with updating the generic program are not included. The attached processor system (APS) was incorporated with Generic 4E7. A companion document, the 4ESSTM/APS Output Message Document (OM-4A001-01), describes the messages printed on the APS output channels. The 4ESSTM/APS Output Message Document and the 4ESSTM/APS Input Message Document (IM-4A001-01) together serve as a reference for work center personnel and support groups maintaining the APS of a 4ESSTM switch.

1.2 LUCENT TECHNOLOGIES

As a result of the AT&T divestiture, the AT&T Network Systems division becomes Lucent Technologies, a separate and independent corporation. The 4ESSTM switch, and many other network and transmission products become products of Lucent Technologies. The marketing, sales, engineering, delivery, installation, support, and future development of these products will be provided by Lucent Technologies.

Therefore, the corporate name and logo on this document are being changed from the AT&T brand to the new Lucent Technologies brand. The AT&T name is being removed from the cover, spine, title page, content (where appropriate) as well as the 9-digit document order number.

All modules of this document are not being reissued to make these changes. Instead, the pages will be reissued over a period of time as technical and other changes are required. Customers on standing order for this document, as of this publication, will see references to the AT&T name on previous-issue pages. Customers receiving new orders for this document will see the references changed to the Lucent Technologies name throughout the document as appropriate. Exceptions may exist in software-driven elements such as Input/Output messages, recent change screens, Master Control Complex (MCC) screens, etc.. These elements will not be changed in this document until such time as they are changed in the software code.

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1.3 ORGANIZATION

The Output Message Document is a five-volume document organized into two parts, Overview and Supplementary Information and Output Messages, with each part containing several sections. A tab divider marks each part and section. Part 1, Overview and Supplementary Information, contains the following sections:

- The *Introduction* explains the purpose of the document and the organization of material presented. It also contains a brief overview of output message applications and discusses the documentation management system used to produce this document.
- The *User Guidelines* of the *Input Message Document* contains instructional information for guiding the user in interpreting message formats and descriptions. It discusses the structure of output messages, the variety of formats they use, and the organization and content of the message descriptions.
- The *Indexes* alphabetically lists the output messages by message name and message ID in this document. The indexes may be used as a guide for selecting specific message descriptions in Part 2.

Part 2, Output Messages, contains the actual message descriptions, presented in alphabetical order by message ID. Part 2 divides the message descriptions into thirty sections (spread over five volumes), each marked by a tab divider showing the first and last message verb included in that section. Each message description begins on a right-hand page.

1.4 OUTPUT MESSAGE APPLICATIONS

4ESSTM output messages are generated after the system has performed certain operations that are automatically initiated or document requested. An output message may be issued in response to an input message or other document request, or in response to conditions in the system that require user notification. The data contained in the output message is used for applications such as locating trouble, reporting subsystem status, and supplying information on traffic conditions.

Because of the variety of formats found in output messages (they may contain from one to hundreds of lines of output), it is important to know the different forms these messages can take and the kinds of data they contain. The user should be thoroughly familiar with the rules of structure (message fields) discussed in Section 2. Particular attention should be given to the priority-of-action field; this field gives the importance of the message and, thus, the urgency of action to be taken.

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1.5 DOCUMENTATION MANAGEMENT

This document and its related input message document represent the first phase of a computer-aided system for managing the documentation of input and output messages. The system consists of a data base containing the message documentation, and software to help maintain and update the information in the data base. Five categories of key block data (see Section 2) are presently used to link each message to the processing software for selective retrieval.

Several interrelated goals have been established for the documentation management system:

- Increase the accuracy of message documentation
- Speed the availability of updates
- Improve the readability of the message descriptions
- Facilitate output of all or selected message documents (such as retrieval by application or generic).

Currently, the message data base is accessed only by documentation specialists responsible for the output, correction, and update of the message documents. A later goal is to provide direct user-access to the data base for outputting selected message parts or fully formatted printouts of completed message texts.

1.6 ERROR REPORTING PROCEDURES

User-reporting of documentation errors is an important element in the effectiveness of the documentation management system. Users are encouraged to report any errors encountered and to suggest changes or additions that would make the document more usable or more complete.

A user feedback form and error reporting form have been included for your use. The user feedback form can be used to send us your comments and opinions on the quality and usability of the document. The error reporting form should be used to report any technical errors found in this document. It should be completed and mailed to:

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Naperville, Illinois 60566-7033

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SECTION 2

USER GUIDELINES

2.1 INTRODUCTION

When interpreting 4ESS™ output messages, certain rules of structure and format are important to remember. These rules, together with the organization and content of the message descriptions, are discussed in this section.

In this document, all messages that are displayed by the system contain certain fields that are printed in a prescribed order. This arrangement of output message information creates the *message structure*. Within the message structure is the body of the message, which can be presented in various ways for documentation purposes. The way in which it is presented is referred to as the *message format*.

This section contains a description of the output message structure fields and guidelines for using the individual message format interpretations.

2.2 OUTPUT MESSAGE STRUCTURE

The messages output from the 4ESS™ switch follow the structure defined in the Program Documentation Standards (PDS) document. This structure is summarized following.

2.2.1 Message Fields

When an output message is printed by the system, it is displayed within a prescribed structure consisting of several *fields* of information. Exhibit 2-1 shows how an output message might look when displayed.

A 59 RST:CC 1 ABORTED
01/01/00 10:59:30
#839

Exhibit 2-1. Typical Output Message

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The previous message contains six fields, interpreted as follows:

A = Priority of action
59 = Abbreviated time
RST:CC 1 ABORTED = Body of message
01/01/00 = Optional date
10:59:30 = Optional full time
#839 = Message sequence number

Except for the optional data, these fields are present in most output messages. They will always be printed in the order shown.

2.2.2 Explanation of Message Fields

Each of the six message fields conveys a specific type of information.

- *Priority of Action Field* - Indicates the importance of the message and if it was generated with an audible alarm. The characters or blanks printed by the system are interpreted as follows:

Printed		
Characters	Priority	Alarm/Nonalarm Action
*C	Critical	Accompanied by a critical alarm.
**	Major	Accompanied by a major alarm.
**	Power Failure	Accompanied by a major alarm.
*	Minor	Accompanied by a continuous minor alarm.
*	Spurt Minor	Accompanied by a spurt minor alarm.
M	Manual	Response to a manual request (input message or key request).
(blank)	Information	Gives information about a specific event or problem.

- *Abbreviated Time Field* - Contains the minutes after the hour at which the message started to print.
- *Body of Message* - Presents the message form containing the information for which the message was generated. The message form includes data, informative text phrases, and, if the output message was in response to an input request, results of the request. The possible contents of message forms are summarized by the message formats presented in this document. Interpretation of message forms and formats is discussed in Section 2.3.
- *Full Date and Time Field* - Optional. Consists of the month, day, and year, separated by slashes, along with the hour, minutes, and seconds, separated by colons. The time is referenced to a 24-hour clock. The full time, which refers to the time the message was translated (made ready for output) by the system, may not always agree with the abbreviated time.

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- *Message Sequence Number* - Gives a three-digit number assigned to the message when its print request is accepted by the I/O program. This sequence number can be used to determine the exact order of each message (messages may be printed out of order because higher priority messages must be printed first). If a message is printed on more than one channel, the same sequence number is printed on both channels. The sequence numbers increment up to 999, after which they cycle back to 000.

2.3 OUTPUT MESSAGE FORMAT

Most messages can be printed out in more than one form. For example, different forms of the AUD:NUM message are displayed to indicate the number of errors detected during an audit, the audits that have been requested and are in progress, and any audits that are inhibited.

The multiple forms that an output message may take, combined with the fact that an output message may display from one to hundreds of lines of output, necessitates that an output message format be flexible. The message formats presented in this document use variables and format notation to summarize the possible forms of each message. Therefore, a few general comments about these elements of output message format are made here.

Throughout the message documentation, *uppercase constant width letters* are used to denote information that is printed out exactly as is. *Lowercase constant width letters* are used to denote variables, that is, variable information provided by the system or echoed from an input request. For example, the RMV:TUC message takes the form,

RMV:TUC a b

with the letters *a* and *b* representing the member number of the tape unit controller (TUC) and the termination report of the message. The output seen by the user might be:

RMV:TUC 1 COMPLETED

and would include other message structure fields previously described.

Output message formats occasionally include format notation (brackets [], braces {}, and OR bars |). This happens particularly when an output message begins by echoing the input message to which it is responding and the input message requires format notation for interpretation. Format notation appears only in message documentation; it is not output. A detailed explanation of format notation can be found in Section 2, User Guidelines, of the 4ESSTM 1B Processor Input Message Document (IM-4B000-01).

2.4 ORGANIZATION AND CONTENT

Each message description begins with a block of key data (*key block*) identifying the message and its applications, followed by descriptive material that presents and explains the message format and what action should be taken.

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2.4.1 Key Block Data

The entries in the key block are used as index keys for accessing the computerized data base developed for message documentation. They also provide application information such as the appropriate work center and generic.

Five key block entries are given for each output message:

- *ID* - Uniquely identifies the message and is used to access the data base. It may or may not be the same as the message name. The following examples show message IDs that differ from the message name.

Message Name	ID
DUMP : TSI	DUMP : TSI - CREG
DUMP : TSI	DUMP : TSI - IREG
EX : CS	EX : CS - NOT
REPT : AUD ALM CUTOFF	REPT : AUD - CUTOFF
AUD :	AUD : 0

Note: The zero in the preceding example (AUD : 0) is used for reference only. It means that several options are available to be output, following the action field. The options are depicted in the output message.

The message name, not the ID, appears as part of the message format. It also appears at the upper right corner of each message page. The ID is used for accessing message documentation from the data base and is also used as a page-number prefix.

- *Work Center* - Specifies the work center(s) at which the message is entered or output. One or more of the following is given:

MAC — Machine Administration Center
MOC — Maintenance Operations Center
NMOC — Network Management Center
TEC — Terminal Equipment Center
TOC — Trunk Operations Center

An output message may have key block information listing several work centers. However, if the message is in response to an input message, the work center at which the IM was input may also be the work center at which the OM is output.

- *Generic* - Gives the earliest active generic to which the message applies. Generics 4E19 and later are considered active. The generic key block entry may also give the earliest generic in which the message did not apply. For example:

4E19 and later — The message applies to 4E19 and all later generics.

4E19 only — The message applies to 4E19 only. It was deleted as of 4E20.

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There are cases in which a message applies to more than one generic but has been modified so that all information about the message does not apply to all its generics. In these cases, the restricted information is identified by either a heading, a bracketed notation, or a phrase in parentheses. For example,

Begins with 4E19 — The information under this heading applies to generics beginning with 4E19.

(for 4E19 and later) — The information associated with this phrase applies to generics 4E19 and later.

Deleted in 4E19 — The information under this heading does not apply to generics 4E19 and later.

(deleted in 4E19) — The information associated with this phrase does not apply to generics 4E19 and later.

- *Application* - Specifies the processors (1A,APS) or switching system (4ESSTM) for which the message is output. Application codes used in the key blocks of 4ESSTM messages are:

4E — The message applies to the 4ESSTM switch.

4E,1B — The message applies to the 1B processor of the 4ESSTM switch and the 4ESSTM switch.

4E,1A-APS — The message applies to the 4ESSTM attached processor system (APS) and the 4ESSTM switch.

4E,1B,1A-APS — The message applies to the 4ESSTM/APS, the 1B processor of the 4ESSTM switch, and the 4ESSTM switch.

- *Type* - Specifies that the message is an output message.

2.4.2 Descriptive Material

In general, the descriptive material following the key block data is presented under five headings.

1. *Format* - Presents the message format. Output messages may have more than one format and the multiple formats are generally presented under this heading. In some instances, the number of formats is so large that the individual format types are presented under the Variable Field Definitions heading.
2. *Reason for Output* - Explains why the message was generated.
3. *Variable Field Definitions* - Defines the variables and optional outputs used in the message format. It may also define multiple formats for the message where a large number of them are used. This heading may also cover additional explanatory text, notes, or tables needed for message interpretation.
4. *Action To Be Taken* - Describes any actions that should be taken in response to the information presented in the output message.
5. *References* - A PIDENT reference is given for each message. Additional references that may be included are related input and/or output messages, Practices, and Task Oriented Practices (TOP) documents.

2.5 ADDITIONAL INFORMATION

To aid in message interpretation, additional information on system responses, error codes, number conversions, and acronyms follows.

2.5.1 System Response

The system responds to each input message with an acknowledgment and possibly one or more output messages. Detailed information on acknowledgments for a particular message can be found under the System Response section of that message. The acknowledgment is always printed immediately. Output messages may occur following the output of other messages and data.

The format of all acknowledgments is:

aa[, {CODE xxx | t}]

- where
- aa = Two characters indicating the status of the requested input message. Table 2.4 in Section 2 of the Input Message document is a list of possible characters and their definitions.
 - xxx = Decimal number (001-999), which represents a specific reason for the two character status. The System Response section lists definitions of all applicable numbers. Table 2.5 in Section 2 of the Input Message document lists the definition of the numbers used by the general utility program (GULP), a frequently used program.
 - t = Explanatory text for the two character status. (9 characters or less). The System Response section of an input message lists definitions of explanatory text.

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2.5.2 Binary-Octal-Decimal Conversion

Both input and output messages use values in decimal (base 10), octal (base 8), and binary (base 2). To convert binary to octal, the following procedure may be used:

- Separate the binary number into groups of three, starting with the rightmost number.
- Convert each group of three into its octal equivalent. (See Table 2-1.)
- For example:

001000011110	Binary number
001 000 011 110	Binary number in groups of three
1 0 3 6	Octal equivalent

- To convert an octal number to binary, simply perform the preceding procedure in reverse order.

Table 2-1
Binary-Octal Conversion

Binary	Octal
000	0
001	1
010	2
011	3
100	4
101	5
110	6
111	7

To convert a number from octal to decimal or vice-versa, refer to the matrix in Table 2-2. The top row contains octal numbers in the 8^0 position, and the far left column contains octal numbers from the 8^1 to 8^3 positions (read from right to left). To find a decimal equivalent, locate where the octal numbers intersect on the matrix. For example, octal 146 equals 102 in decimal:

$$\begin{aligned}
 &146 \\
 &(1 \times 8) + 4 = 12 \\
 &(12 \times 8) + 6 = 102
 \end{aligned}$$

Table 2-2
Octal-Decimal Conversion

OCTAL	0	1	2	3	4	5	6	7
000	0000	0001	0002	0003	0004	0005	0006	0007
001	0008	0009	0010	0011	0012	0013	0014	0015
002	0016	0017	0018	0019	0020	0021	0022	0023
003	0024	0025	0026	0027	0028	0029	0030	0031
004	0032	0033	0034	0035	0036	0037	0038	0039
005	0040	0041	0042	0043	0044	0045	0046	0047
006	0048	0049	0050	0051	0052	0053	0054	0055
007	0056	0057	0058	0059	0060	0061	0062	0063
010	0064	0065	0066	0067	0068	0069	0070	0071
011	0072	0073	0074	0075	0076	0077	0078	0079
012	0080	0081	0082	0083	0084	0085	0086	0087
013	0088	0089	0090	0091	0092	0093	0094	0095
014	0096	0097	0098	0099	0100	0101	0102	0103
015	0104	0105	0106	0107	0108	0109	0110	0111
016	0112	0113	0114	0115	0116	0117	0118	0119
017	0120	0121	0122	0123	0124	0125	0126	0127
020	0128	0129	0130	0131	0132	0133	0134	0135
021	0136	0137	0138	0139	0140	0141	0142	0143
022	0144	0145	0146	0147	0148	0149	0150	0151
023	0152	0153	0154	0155	0156	0157	0158	0159
024	0160	0161	0162	0163	0164	0165	0166	0167
025	0168	0169	0170	0171	0172	0173	0174	0175
026	0176	0177	0178	0179	0180	0181	0182	0183
027	0184	0185	0186	0187	0188	0189	0190	0191
030	0192	0193	0194	0195	0196	0197	0198	0199
031	0200	0201	0202	0203	0204	0205	0206	0207
032	0208	0209	0210	0211	0212	0213	0214	0215
033	0216	0217	0218	0219	0220	0221	0222	0223
034	0224	0225	0226	0227	0228	0229	0230	0231
035	0232	0233	0234	0235	0236	0237	0238	0239
036	0240	0241	0242	0243	0244	0245	0246	0247
037	0248	0249	0250	0251	0252	0253	0254	0255

DECIMAL

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Table 2-2
Octal-Decimal Conversion (Continued)

OCTAL	0	1	2	3	4	5	6	7
040	0256	0257	0258	0259	0260	0261	0262	0263
041	0264	0265	0266	0267	0268	0269	0270	0271
042	0272	0273	0274	0275	0276	0277	0278	0279
043	0280	0281	0282	0283	0284	0285	0286	0287
044	0288	0289	0290	0291	0292	0293	0294	0295
045	0296	0297	0298	0299	0300	0301	0302	0303
046	0304	0305	0306	0307	0308	0309	0310	0311
047	0312	0313	0314	0315	0316	0317	0318	0319
050	0320	0321	0322	0323	0324	0325	0326	0327
051	0328	0329	0330	0331	0332	0333	0334	0335
052	0336	0337	0338	0339	0340	0341	0342	0343
053	0344	0345	0346	0347	0348	0349	0350	0351
054	0352	0353	0354	0355	0356	0357	0358	0359
055	0360	0361	0362	0363	0364	0365	0366	0367
056	0368	0369	0370	0371	0372	0373	0374	0375
057	0376	0377	0378	0379	0380	0381	0382	0383
060	0384	0385	0386	0387	0388	0389	0390	0391
061	0392	0393	0394	0395	0396	0397	0398	0399
062	0400	0401	0402	0403	0404	0405	0406	0407
063	0408	0409	0410	0411	0412	0413	0414	0415
064	0416	0417	0418	0419	0420	0421	0422	0423
065	0424	0425	0426	0427	0428	0429	0430	0431
066	0432	0433	0434	0435	0436	0437	0438	0439
067	0440	0441	0442	0443	0444	0445	0446	0447
070	0448	0449	0450	0451	0452	0453	0454	0455
071	0456	0457	0458	0459	0460	0461	0462	0463
072	0464	0465	0466	0467	0468	0469	0470	0471
073	0472	0473	0474	0475	0476	0477	0478	0479
074	0480	0481	0482	0483	0484	0485	0486	0487
075	0488	0489	0490	0491	0492	0493	0494	0495
076	0496	0497	0498	0499	0500	0501	0502	0503
077	0504	0505	0506	0507	0508	0509	0510	0511

DECIMAL

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Table 2-2
Octal-Decimal Conversion (Continued)

OCTAL	0	1	2	3	4	5	6	7
100	0512	0513	0514	0515	0516	0517	0518	0519
101	0520	0521	0522	0523	0524	0525	0526	0527
102	0528	0529	0530	0531	0532	0533	0534	0535
103	0536	0537	0538	0539	0540	0541	0542	0543
104	0544	0545	0546	0547	0548	0549	0550	0551
105	0552	0553	0554	0555	0556	0557	0558	0559
106	0560	0561	0562	0563	0564	0565	0566	0567
107	0568	0569	0570	0571	0572	0573	0574	0575
110	0576	0577	0578	0579	0580	0581	0582	0583
111	0584	0585	0586	0587	0588	0589	0590	0591
112	0592	0593	0594	0595	0596	0597	0598	0599
113	0600	0601	0602	0603	0604	0605	0606	0607
114	0608	0609	0610	0611	0612	0613	0614	0615
115	0616	0617	0618	0619	0620	0621	0622	0623
116	0624	0625	0626	0627	0628	0629	0630	0631
117	0632	0633	0634	0635	0636	0637	0638	0639
120	0640	0641	0642	0643	0644	0645	0646	0647
121	0648	0649	0650	0651	0652	0653	0654	0655
122	0656	0657	0658	0659	0660	0661	0662	0663
123	0664	0665	0666	0667	0668	0669	0670	0671
124	0672	0673	0674	0675	0676	0677	0678	0679
125	0680	0681	0682	0683	0684	0685	0686	0687
126	0688	0689	0690	0691	0692	0693	0694	0695
127	0696	0697	0698	0699	0700	0701	0702	0703
130	0704	0705	0706	0707	0708	0709	0710	0711
131	0712	0713	0714	0715	0716	0717	0718	0719
132	0720	0721	0722	0723	0724	0725	0726	0727
133	0728	0729	0730	0731	0732	0733	0734	0735
134	0736	0737	0738	0739	0740	0741	0742	0743
135	0744	0745	0746	0747	0748	0749	0750	0751
136	0752	0753	0754	0755	0756	0757	0758	0759
137	0760	0761	0762	0763	0764	0765	0766	0767

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Table 2-2
Octal-Decimal Conversion (Continued)

OCTAL	0	1	2	3	4	5	6	7
140	0768	0769	0770	0771	0772	0773	0774	0775
141	0776	0777	0778	0779	0780	0781	0782	0783
142	0784	0785	0786	0787	0788	0789	0790	0791
143	0792	0793	0794	0795	0796	0797	0798	0799
144	0800	0801	0802	0803	0804	0805	0806	0807
145	0808	0809	0810	0811	0812	0813	0814	0815
146	0816	0817	0818	0819	0820	0821	0822	0823
147	0824	0825	0826	0827	0828	0829	0830	0831
150	0832	0833	0834	0835	0836	0837	0838	0839
151	0840	0841	0842	0843	0844	0845	0846	0847
152	0848	0849	0850	0851	0852	0853	0854	0855
153	0856	0857	0858	0859	0860	0861	0862	0863
154	0864	0865	0866	0867	0868	0869	0870	0871
155	0872	0873	0874	0875	0876	0877	0878	0879
156	0880	0881	0882	0883	0884	0885	0886	0887
157	0888	0889	0890	0891	0892	0893	0894	0895
160	0896	0897	0898	0899	0900	0901	0902	0903
161	0904	0905	0906	0907	0908	0909	0910	0911
162	0912	0913	0914	0915	0916	0917	0918	0919
163	0920	0921	0922	0923	0924	0925	0926	0927
164	0928	0929	0930	0931	0932	0933	0934	0935
165	0936	0937	0938	0939	0940	0941	0942	0943
166	0944	0945	0946	0947	0948	0949	0950	0951
167	0952	0953	0954	0955	0956	0957	0958	0959
170	0960	0961	0962	0963	0964	0965	0966	0967
171	0968	0969	0970	0971	0972	0973	0974	0975
172	0976	0977	0978	0979	0980	0981	0982	0983
173	0984	0985	0986	0987	0988	0989	0990	0991
174	0992	0993	0994	0995	0996	0997	0998	0999
175	1000	1001	1002	1003	1004	1005	1006	1007
176	1008	1009	1010	1011	1012	1013	1014	1015
177	1016	1017	1018	1019	1020	1021	1022	1023

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Table 2-2
Octal-Decimal Conversion (Continued)

OCTAL	0	1	2	3	4	5	6	7
200	1024	1025	1026	1027	1028	1029	1030	1031
201	1032	1033	1034	1035	1036	1037	1038	1039
202	1040	1041	1042	1043	1044	1045	1046	1047
203	1048	1049	1050	1051	1052	1053	1054	1055
204	1056	1057	1058	1059	1060	1061	1062	1063
205	1064	1065	1066	1067	1068	1069	1070	1071
206	1072	1073	1074	1075	1076	1077	1078	1079
207	1080	1081	1082	1083	1084	1085	1086	1087
210	1088	1089	1090	1091	1092	1093	1094	1095
211	1096	1097	1098	1099	1100	1101	1102	1103
212	1104	1105	1106	1107	1108	1109	1110	1111
213	1112	1113	1114	1115	1116	1117	1118	1119
214	1120	1121	1122	1123	1124	1125	1126	1127
215	1128	1129	1130	1131	1132	1133	1134	1135
216	1136	1137	1138	1139	1140	1141	1142	1143
217	1144	1145	1146	1147	1148	1149	1150	1151
220	1152	1153	1154	1155	1156	1157	1158	1159
221	1160	1161	1162	1163	1164	1165	1166	1167
222	1168	1169	1170	1171	1172	1173	1174	1175
223	1176	1177	1178	1179	1180	1181	1182	1183
224	1184	1185	1186	1187	1188	1189	1190	1191
225	1192	1193	1194	1195	1196	1197	1198	1199
226	1200	1201	1202	1203	1204	1205	1206	1207
227	1208	1209	1210	1211	1212	1213	1214	1215
230	1216	1217	1218	1219	1220	1221	1222	1223
231	1224	1225	1226	1227	1228	1229	1230	1231
232	1232	1233	1234	1235	1236	1237	1238	1239
233	1240	1241	1242	1243	1244	1245	1246	1247
234	1248	1249	1250	1251	1252	1253	1254	1255
235	1256	1257	1258	1259	1260	1261	1262	1263
236	1264	1265	1266	1267	1268	1269	1270	1271
237	1272	1273	1274	1275	1276	1277	1278	1279

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Table 2-2
Octal-Decimal Conversion (Continued)

OCTAL	0	1	2	3	4	5	6	7
240	1280	1281	1282	1283	1284	1285	1286	1287
241	1288	1289	1290	1291	1292	1293	1294	1295
242	1296	1297	1298	1299	1300	1301	1302	1303
243	1304	1305	1306	1307	1308	1309	1310	1311
244	1312	1313	1314	1315	1316	1317	1318	1319
245	1320	1321	1322	1323	1324	1325	1326	1327
246	1328	1329	1330	1331	1332	1333	1334	1335
247	1336	1337	1338	1339	1340	1341	1342	1343
250	1344	1345	1346	1347	1348	1349	1350	1351
251	1352	1353	1354	1355	1356	1357	1358	1359
252	1360	1361	1362	1363	1364	1365	1366	1367
253	1368	1369	1370	1371	1372	1373	1374	1375
254	1376	1377	1378	1379	1380	1381	1382	1383
255	1384	1385	1386	1387	1388	1389	1390	1391
256	1392	1393	1394	1395	1396	1397	1398	1399
257	1400	1401	1402	1403	1404	1405	1406	1407
260	1408	1409	1410	1411	1412	1413	1414	1415
261	1416	1417	1418	1419	1420	1421	1422	1423
262	1424	1425	1426	1427	1428	1429	1430	1431
263	1432	1433	1434	1435	1436	1437	1438	1439
264	1440	1441	1442	1443	1444	1445	1446	1447
265	1448	1449	1450	1451	1452	1453	1454	1455
266	1456	1457	1458	1459	1460	1461	1462	1463
267	1464	1465	1466	1467	1468	1469	1470	1471
270	1472	1473	1474	1475	1476	1477	1478	1479
271	1480	1481	1482	1483	1484	1485	1486	1487
272	1488	1489	1490	1491	1492	1493	1494	1495
273	1496	1497	1498	1499	1500	1501	1502	1503
274	1504	1505	1506	1507	1508	1509	1510	1511
275	1512	1513	1514	1515	1516	1517	1518	1519
276	1520	1521	1522	1523	1524	1525	1526	1527
277	1528	1529	1530	1531	1532	1533	1534	1535

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Table 2-2
Octal-Decimal Conversion (Continued)

OCTAL	0	1	2	3	4	5	6	7
300	1536	1537	1538	1539	1540	1541	1542	1543
301	1544	1545	1546	1547	1548	1549	1550	1551
302	1552	1553	1554	1555	1556	1557	1558	1559
303	1560	1561	1562	1563	1564	1565	1566	1567
304	1568	1569	1570	1571	1572	1573	1574	1575
305	1576	1577	1578	1579	1580	1581	1582	1583
306	1584	1585	1586	1587	1588	1589	1590	1591
307	1592	1593	1594	1595	1596	1597	1598	1599
310	1600	1601	1602	1603	1604	1605	1606	1607
311	1608	1609	1610	1611	1612	1613	1614	1615
312	1616	1617	1618	1619	1620	1621	1622	1623
313	1624	1625	1626	1627	1628	1629	1630	1631
314	1632	1633	1634	1635	1636	1637	1638	1639
315	1640	1641	1642	1643	1644	1645	1646	1647
316	1648	1649	1650	1651	1652	1653	1654	1655
317	1656	1657	1658	1659	1660	1661	1662	1663
320	1664	1665	1666	1667	1668	1669	1670	1671
321	1672	1673	1674	1675	1676	1677	1678	1679
322	1680	1681	1682	1683	1684	1685	1686	1687
323	1688	1689	1690	1691	1692	1693	1694	1695
324	1696	1697	1698	1699	1700	1701	1702	1703
325	1704	1705	1706	1707	1708	1709	1710	1711
326	1712	1713	1714	1715	1716	1717	1718	1719
327	1720	1721	1722	1723	1724	1725	1726	1727
330	1728	1729	1730	1731	1732	1733	1734	1735
331	1736	1737	1738	1739	1740	1741	1742	1743
332	1744	1745	1746	1747	1748	1749	1750	1751
333	1752	1753	1754	1755	1756	1757	1758	1759
334	1760	1761	1762	1763	1764	1765	1766	1767
335	1768	1769	1770	1771	1772	1773	1774	1775
336	1776	1777	1778	1779	1780	1781	1782	1783
337	1784	1785	1786	1787	1788	1789	1790	1791

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Table 2-2
Octal-Decimal Conversion (Continued)

OCTAL	0	1	2	3	4	5	6	7
340	1792	1793	1794	1795	1796	1797	1798	1799
341	1800	1801	1802	1803	1804	1805	1806	1807
342	1808	1809	1810	1811	1812	1813	1814	1815
343	1816	1817	1818	1819	1820	1821	1822	1823
344	1824	1825	1826	1827	1828	1829	1830	1831
345	1832	1833	1834	1835	1836	1837	1838	1839
346	1840	1841	1842	1843	1844	1845	1846	1847
347	1848	1849	1850	1851	1852	1853	1854	1855
350	1856	1857	1858	1859	1860	1861	1862	1863
351	1864	1865	1866	1867	1868	1869	1870	1871
352	1872	1873	1874	1875	1876	1877	1878	1879
353	1880	1881	1882	1883	1884	1885	1886	1887
354	1888	1889	1890	1891	1892	1893	1894	1895
355	1896	1897	1898	1899	1900	1901	1902	1903
356	1904	1905	1906	1907	1908	1909	1910	1911
357	1912	1913	1914	1915	1916	1917	1918	1919
360	1920	1921	1922	1923	1924	1925	1926	1927
361	1928	1929	1930	1931	1932	1933	1934	1935
362	1936	1937	1938	1939	1940	1941	1942	1943
363	1944	1945	1946	1947	1948	1949	1950	1951
364	1952	1953	1954	1955	1956	1957	1958	1959
365	1960	1961	1962	1963	1964	1965	1966	1967
366	1968	1969	1970	1971	1972	1973	1974	1975
367	1976	1977	1978	1979	1980	1981	1982	1983
370	1984	1985	1986	1987	1988	1989	1990	1991
371	1992	1993	1994	1995	1996	1997	1998	1999
372	2000	2001	2002	2003	2004	2005	2006	2007
373	2008	2009	2010	2011	2012	2013	2014	2015
374	2016	2017	2018	2019	2020	2021	2022	2023
375	2024	2025	2026	2027	2028	2029	2030	2031
376	2032	2033	2034	2035	2036	2037	2038	2039
377	2040	2041	2042	2043	2044	2045	2046	2047

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Table 2-2
Octal-Decimal Conversion (Continued)

OCTAL	0	1	2	3	4	5	6	7
400	2048	2049	2050	2051	2052	2053	2054	2055
401	2056	2057	2058	2059	2060	2061	2062	2063
402	2064	2065	2066	2067	2068	2069	2070	2071
403	2072	2073	2074	2075	2076	2077	2078	2079
404	2080	2081	2082	2083	2084	2085	2086	2087
405	2088	2089	2090	2091	2092	2093	2094	2095
406	2096	2097	2098	2099	2100	2101	2102	2103
407	2104	2105	2106	2107	2108	2109	2110	2111
410	2112	2113	2114	2115	2116	2117	2118	2119
411	2120	2121	2122	2123	2124	2125	2126	2127
412	2128	2129	2130	2131	2132	2133	2134	2135
413	2136	2137	2138	2139	2140	2141	2142	2143
414	2144	2145	2146	2147	2148	2149	2150	2151
415	2152	2153	2154	2155	2156	2157	2158	2159
416	2160	2161	2162	2163	2164	2165	2166	2167
417	2168	2169	2170	2171	2172	2173	2174	2175
420	2176	2177	2178	2179	2180	2181	2182	2183
421	2184	2185	2186	2187	2188	2189	2190	2191
422	2192	2193	2194	2195	2196	2197	2198	2199
423	2200	2201	2202	2203	2204	2205	2206	2207
424	2208	2209	2210	2211	2212	2213	2214	2215
425	2216	2217	2218	2219	2220	2221	2222	2223
426	2224	2225	2226	2227	2228	2229	2230	2231
427	2232	2233	2234	2235	2236	2237	2238	2239
430	2240	2241	2242	2243	2244	2245	2246	2247
431	2248	2249	2250	2251	2252	2253	2254	2255
432	2256	2257	2258	2259	2260	2261	2262	2263
433	2264	2265	2266	2267	2268	2269	2270	2271
434	2272	2273	2274	2275	2276	2277	2278	2279
435	2280	2281	2282	2283	2284	2285	2286	2287
436	2288	2289	2290	2291	2292	2293	2294	2295
437	2296	2297	2298	2299	2300	2301	2302	2303

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Table 2-2
Octal-Decimal Conversion (Continued)

OCTAL	0	1	2	3	4	5	6	7
440	2304	2305	2306	2307	2308	2309	2310	2311
441	2312	2313	2314	2315	2316	2317	2318	2319
442	2320	2321	2322	2323	2324	2325	2326	2327
443	2328	2329	2330	2331	2332	2333	2334	2335
444	2336	2337	2338	2339	2340	2341	2342	2343
445	2344	2345	2346	2347	2348	2349	2350	2351
446	2352	2353	2354	2355	2356	2357	2358	2359
447	2360	2361	2362	2363	2364	2365	2366	2367
450	2368	2369	2370	2371	2372	2373	2374	2375
451	2376	2377	2378	2379	2380	2381	2382	2383
452	2384	2385	2386	2387	2388	2389	2390	2391
453	2392	2393	2394	2395	2396	2397	2398	2399
454	2400	2401	2402	2403	2404	2405	2406	2407
455	2408	2409	2410	2411	2412	2413	2414	2415
456	2416	2417	2418	2419	2420	2421	2422	2423
457	2424	2425	2426	2427	2428	2429	2430	2431
460	2432	2433	2434	2435	2436	2437	2438	2439
461	2440	2441	2442	2443	2444	2445	2446	2447
462	2448	2449	2450	2451	2452	2453	2454	2455
463	2456	2457	2458	2459	2460	2461	2462	2463
464	2464	2465	2466	2467	2468	2469	2470	2471
465	2472	2473	2474	2475	2476	2477	2478	2479
466	2480	2481	2482	2483	2484	2485	2486	2487
467	2488	2489	2490	2491	2492	2493	2494	2495
470	2496	2497	2498	2499	2500	2501	2502	2503
471	2504	2505	2506	2507	2508	2509	2510	2511
472	2512	2513	2514	2515	2516	2517	2518	2519
473	2520	2521	2522	2523	2524	2525	2526	2527
474	2528	2529	2530	2531	2532	2533	2534	2535
475	2536	2537	2538	2539	2540	2541	2542	2543
476	2544	2545	2546	2547	2548	2549	2550	2551
477	2552	2553	2554	2555	2556	2557	2558	2559

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Table 2-2
Octal-Decimal Conversion (Continued)

OCTAL	0	1	2	3	4	5	6	7
500	2560	2561	2562	2563	2564	2565	2566	2567
501	2568	2569	2570	2571	2572	2573	2574	2575
502	2576	2577	2578	2579	2580	2581	2582	2583
503	2584	2585	2586	2587	2588	2589	2590	2591
504	2592	2593	2594	2595	2596	2597	2598	2599
505	2600	2601	2602	2603	2604	2605	2606	2607
506	2608	2609	2610	2611	2612	2613	2614	2615
507	2616	2617	2618	2619	2620	2621	2622	2623
510	2624	2625	2626	2627	2628	2629	2630	2631
511	2632	2633	2634	2635	2636	2637	2638	2639
512	2640	2641	2642	2643	2644	2645	2646	2647
513	2648	2649	2650	2651	2652	2653	2654	2655
514	2656	2657	2658	2659	2660	2661	2662	2663
515	2664	2665	2666	2667	2668	2669	2670	2671
516	2672	2673	2674	2675	2676	2677	2678	2679
517	2680	2681	2682	2683	2684	2685	2686	2687
520	2688	2689	2690	2691	2692	2693	2694	2695
521	2696	2697	2698	2699	2700	2701	2702	2703
522	2704	2705	2706	2707	2708	2709	2710	2711
523	2712	2713	2714	2715	2716	2717	2718	2719
524	2720	2721	2722	2723	2724	2725	2726	2727
525	2728	2729	2730	2731	2732	2733	2734	2735
526	2736	2737	2738	2739	2740	2741	2742	2743
527	2744	2745	2746	2747	2748	2749	2750	2751
530	2752	2753	2754	2755	2756	2757	2758	2759
531	2760	2761	2762	2763	2764	2765	2766	2767
532	2768	2769	2770	2771	2772	2773	2774	2775
533	2776	2777	2778	2779	2780	2781	2782	2783
534	2784	2785	2786	2787	2788	2789	2790	2791
535	2792	2793	2794	2795	2796	2797	2798	2799
536	2800	2801	2802	2803	2804	2805	2806	2807
537	2808	2809	2810	2811	2812	2813	2814	2815

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Table 2-2
Octal-Decimal Conversion (Continued)

OCTAL	0	1	2	3	4	5	6	7
540	2816	2817	2818	2819	2820	2821	2822	2823
541	2824	2825	2826	2827	2828	2829	2830	2831
542	2832	2833	2834	2835	2836	2837	2838	2839
543	2840	2841	2842	2843	2844	2845	2846	2847
544	2848	2849	2850	2851	2852	2853	2854	2855
545	2856	2857	2858	2859	2860	2861	2862	2863
546	2864	2865	2866	2867	2868	2869	2870	2871
547	2872	2873	2874	2875	2876	2877	2878	2879
550	2880	2881	2882	2883	2884	2885	2886	2887
551	2888	2889	2890	2891	2892	2893	2894	2895
552	2896	2897	2898	2899	2900	2901	2902	2903
553	2904	2905	2906	2907	2908	2909	2910	2911
554	2912	2913	2914	2915	2916	2917	2918	2919
555	2920	2921	2922	2923	2924	2925	2926	2927
556	2928	2929	2930	2931	2932	2933	2934	2935
557	2936	2937	2938	2939	2940	2941	2942	2943
560	2944	2945	2946	2947	2948	2949	2950	2951
561	2952	2953	2954	2955	2956	2957	2958	2959
562	2960	2961	2962	2963	2964	2965	2966	2967
563	2968	2969	2970	2971	2972	2973	2974	2975
564	2976	2977	2978	2979	2980	2981	2982	2983
565	2984	2985	2986	2987	2988	2989	2990	2991
566	2992	2993	2994	2995	2996	2997	2998	2999
567	3000	3001	3002	3003	3004	3005	3006	3007
570	3008	3009	3010	3011	3012	3013	3014	3015
571	3016	3017	3018	3019	3020	3021	3022	3023
572	3024	3025	3026	3027	3028	3029	3030	3031
573	3032	3033	3034	3035	3036	3037	3038	3039
574	3040	3041	3042	3043	3044	3045	3046	3047
575	3048	3049	3050	3051	3052	3053	3054	3055
576	3056	3057	3058	3059	3060	3061	3062	3063
577	3064	3065	3066	3067	3068	3069	3070	3071

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Table 2-2
Octal-Decimal Conversion (Continued)

OCTAL	0	1	2	3	4	5	6	7
600	3072	3073	3074	3075	3076	3077	3078	3079
601	3080	3081	3082	3083	3084	3085	3086	3087
602	3088	3089	3090	3091	3092	3093	3094	3095
603	3096	3097	3098	3099	3100	3101	3102	3103
604	3104	3105	3106	3107	3108	3109	3110	3111
605	3112	3113	3114	3115	3116	3117	3118	3119
606	3120	3121	3122	3123	3124	3125	3126	3127
607	3128	3129	3130	3131	3132	3133	3134	3135
610	3136	3137	3138	3139	3140	3141	3142	3143
611	3144	3145	3146	3147	3148	3149	3150	3151
612	3152	3153	3154	3155	3156	3157	3158	3159
613	3160	3161	3162	3163	3164	3165	3166	3167
614	3168	3169	3170	3171	3172	3173	3174	3175
615	3176	3177	3178	3179	3180	3181	3182	3183
616	3184	3185	3186	3187	3188	3189	3190	3191
617	3192	3193	3194	3195	3196	3197	3198	3199
620	3200	3201	3202	3203	3204	3205	3206	3207
621	3208	3209	3210	3211	3212	3213	3214	3215
622	3216	3217	3218	3219	3220	3221	3222	3223
623	3224	3225	3226	3227	3228	3229	3230	3231
624	3232	3233	3234	3235	3236	3237	3238	3239
625	3240	3241	3242	3243	3244	3245	3246	3247
626	3248	3249	3250	3251	3252	3253	3254	3255
627	3256	3257	3258	3259	3260	3261	3262	3263
630	3264	3265	3266	3267	3268	3269	3270	3271
631	3272	3273	3274	3275	3276	3277	3278	3279
632	3280	3281	3282	3283	3284	3285	3286	3287
633	3288	3289	3290	3291	3292	3293	3294	3295
634	3296	3297	3298	3299	3300	3301	3302	3303
635	3304	3305	3306	3307	3308	3309	3310	3311
636	3312	3313	3314	3315	3316	3317	3318	3319
637	3320	3321	3322	3323	3324	3325	3326	3327

DECIMAL

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Table 2-2
Octal-Decimal Conversion (Continued)

OCTAL	0	1	2	3	4	5	6	7
640	3328	3329	3330	3331	3332	3333	3334	3335
641	3336	3337	3338	3339	3340	3341	3342	3343
642	3344	3345	3346	3347	3348	3349	3350	3351
643	3352	3353	3354	3355	3356	3357	3358	3359
644	3360	3361	3362	3363	3364	3365	3366	3367
645	3368	3369	3370	3371	3372	3373	3374	3375
646	3376	3377	3378	3379	3380	3381	3382	3383
647	3384	3385	3386	3387	3388	3389	3390	3391
650	3392	3393	3394	3395	3396	3397	3398	3399
651	3400	3401	3402	3403	3404	3405	3406	3407
652	3408	3409	3410	3411	3412	3413	3414	3415
653	3416	3417	3418	3419	3420	3421	3422	3423
654	3424	3425	3426	3427	3428	3429	3430	3431
655	3432	3433	3434	3435	3436	3437	3438	3439
656	3440	3441	3442	3443	3444	3445	3446	3447
657	3448	3449	3450	3451	3452	3453	3454	3455
660	3456	3457	3458	3459	3460	3461	3462	3463
661	3464	3465	3466	3467	3468	3469	3470	3471
662	3472	3473	3474	3475	3476	3477	3478	3479
663	3480	3481	3482	3483	3484	3485	3486	3487
664	3488	3489	3490	3491	3492	3493	3494	3495
665	3496	3497	3498	3499	3500	3501	3502	3503
666	3504	3505	3506	3507	3508	3509	3510	3511
667	3512	3513	3514	3515	3516	3517	3518	3519
670	3520	3521	3522	3523	3524	3525	3526	3527
671	3528	3529	3530	3531	3532	3533	3534	3535
672	3536	3537	3538	3539	3540	3541	3542	3543
673	3544	3545	3546	3547	3548	3549	3550	3551
674	3552	3553	3554	3555	3556	3557	3558	3559
675	3560	3561	3562	3563	3564	3565	3566	3567
676	3568	3569	3570	3571	3572	3573	3574	3575
677	3576	3577	3578	3579	3580	3581	3582	3583

DECIMAL

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Table 2-2
Octal-Decimal Conversion (Continued)

OCTAL	0	1	2	3	4	5	6	7
700	3584	3585	3586	3587	3588	3589	3590	3591
701	3592	3593	3594	3595	3596	3597	3598	3599
702	3600	3601	3602	3603	3604	3605	3606	3607
703	3608	3609	3610	3611	3612	3613	3614	3615
704	3616	3617	3618	3619	3620	3621	3622	3623
705	3624	3625	3626	3627	3628	3629	3630	3631
706	3632	3633	3634	3635	3636	3637	3638	3639
707	3640	3641	3642	3643	3644	3645	3646	3647
710	3648	3649	3650	3651	3652	3653	3654	3655
711	3656	3657	3658	3659	3660	3661	3662	3663
712	3664	3665	3666	3667	3668	3669	3670	3671
713	3672	3673	3674	3675	3676	3677	3678	3679
714	3680	3681	3682	3683	3684	3685	3686	3687
715	3688	3689	3690	3691	3692	3693	3694	3695
716	3696	3697	3698	3699	3700	3701	3702	3703
717	3704	3705	3706	3707	3708	3709	3710	3711
720	3712	3713	3714	3715	3716	3717	3718	3719
721	3720	3721	3722	3723	3724	3725	3726	3727
722	3728	3729	3730	3731	3732	3733	3734	3735
723	3736	3737	3738	3739	3740	3741	3742	3743
724	3744	3745	3746	3747	3748	3749	3750	3751
725	3752	3753	3754	3755	3756	3757	3758	3759
726	3760	3761	3762	3763	3764	3765	3766	3767
727	3768	3769	3770	3771	3772	3773	3774	3775
730	3776	3777	3778	3779	3780	3781	3782	3783
731	3784	3785	3786	3787	3788	3789	3790	3791
732	3792	3793	3794	3795	3796	3797	3798	3799
733	3800	3801	3802	3803	3804	3805	3806	3807
734	3808	3809	3810	3811	3812	3813	3814	3815
735	3816	3817	3818	3819	3820	3821	3822	3823
736	3824	3825	3826	3827	3828	3829	3830	3831
737	3832	3833	3834	3835	3836	3837	3838	3839

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Table 2-2
Octal-Decimal Conversion (Continued)

OCTAL	0	1	2	3	4	5	6	7
740	3840	3841	3842	3843	3844	3845	3846	3847
741	3848	3849	3850	3851	3852	3853	3854	3855
742	3856	3857	3858	3859	3860	3861	3862	3863
743	3864	3865	3866	3867	3868	3869	3870	3871
744	3872	3873	3874	3875	3876	3877	3878	3879
745	3880	3881	3882	3883	3884	3885	3886	3887
746	3888	3889	3890	3891	3892	3893	3894	3895
747	3896	3897	3898	3899	3900	3901	3902	3903
750	3904	3905	3906	3907	3908	3909	3910	3911
751	3912	3913	3914	3915	3916	3917	3918	3919
752	3920	3921	3922	3923	3924	3925	3926	3927
753	3928	3929	3930	3931	3932	3933	3934	3935
754	3936	3937	3938	3939	3940	3941	3942	3943
755	3944	3945	3946	3947	3948	3949	3950	3951
756	3952	3953	3954	3955	3956	3957	3958	3959
757	3960	3961	3962	3963	3964	3965	3966	3967
760	3968	3969	3970	3971	3972	3973	3974	3975
761	3976	3977	3978	3979	3980	3981	3982	3983
762	3984	3985	3986	3987	3988	3989	3990	3991
763	3992	3993	3994	3995	3996	3997	3998	3999
764	4000	4001	4002	4003	4004	4005	4006	4007
765	4008	4009	4010	4011	4012	4013	4014	4015
766	4016	4017	4018	4019	4020	4021	4022	4023
767	4024	4025	4026	4027	4028	4029	4030	4031
770	4032	4033	4034	4035	4036	4037	4038	4039
771	4040	4041	4042	4043	4044	4045	4046	4047
772	4048	4049	4050	4051	4052	4053	4054	4055
773	4056	4057	4058	4059	4060	4061	4062	4063
774	4064	4065	4066	4067	4068	4069	4070	4071
775	4072	4073	4074	4075	4076	4077	4078	4079
776	4080	4081	4082	4083	4084	4085	4086	4087
777	4088	4089	4090	4091	4092	4093	4094	4095

DECIMAL

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2.5.3 Binary-Octal-Decimal-Hexadecimal Conversions

Both input and output messages use values in binary (base 2), octal (base 8), decimal (base 10) and hexadecimal (base 16). Please use the following table to help convert numbers to the needed base type.

Table 2-3
Binary-Octal-Decimal-Hexadecimal Conversion

BINARY	OCTAL	DECIMAL	HEXA- DECIMAL	BINARY	OCTAL	DECIMAL	HEXA- DECIMAL
Base 2	Base 8	Base 10	Base 16	Base 2	Base 8	Base 10	Base 16
00000000	0	0	0	00100000	40	32	20
00000001	1	1	1	00100001	41	33	21
00000010	2	2	2	00100010	42	34	22
00000011	3	3	3	00100011	43	35	23
00000100	4	4	4	00100100	44	36	24
00000101	5	5	5	00100101	45	37	25
00000110	6	6	6	00100110	46	38	26
00000111	7	7	7	00100111	47	39	27
00001000	10	8	8	00101000	50	40	28
00001001	11	9	9	00101001	51	41	29
00001010	12	10	A	00101010	52	42	2A
00001011	13	11	B	00101011	53	43	2B
00001100	14	12	C	00101100	54	44	2C
00001101	15	13	D	00101101	55	45	2D
00001110	16	14	E	00101110	56	46	2E
00001111	17	15	F	00101111	57	47	2F
00010000	20	16	10	00110000	60	48	30
00010001	21	17	11	00110001	61	49	31
00010010	22	18	12	00110010	62	50	32
00010011	23	19	13	00110011	63	51	33
00010100	24	20	14	00110100	64	52	34
00010101	25	21	15	00110101	65	53	35
00010110	26	22	16	00110110	66	54	36
00010111	27	23	17	00110111	67	55	37
00011000	30	24	18	00111000	70	56	38
00011001	31	25	19	00111001	71	57	39
00011010	32	26	1A	00111010	72	58	3A
00011011	33	27	1B	00111011	73	59	3B
00011100	34	28	1C	00111100	74	60	3C
00011101	35	29	1D	00111101	75	61	3D
00011110	36	30	1E	00111110	76	62	3E
00011111	37	31	1F	00111111	77	63	3F

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Table 2-3
Binary-Octal-Decimal-Hexadecimal Conversion (continued)

BINARY	OCTAL	DECIMAL	HEXA- DECIMAL	BINARY	OCTAL	DECIMAL	HEXA- DECIMAL
Base 2	Base 8	Base 10	Base 16	Base 2	Base 8	Base 10	Base 16
01000000	100	64	40	01100000	140	96	60
01000001	101	65	41	01100001	141	97	61
01000010	102	66	42	01100010	142	98	62
01000011	103	67	43	01100011	143	99	63
01000100	104	68	44	01100100	144	100	64
01000101	105	69	45	01100101	145	101	65
01000110	106	70	46	01100110	146	102	66
01000111	107	71	47	01100111	147	103	67
01001000	110	72	48	01101000	150	104	68
01001001	111	73	49	01101001	151	105	69
01001010	112	74	4A	01101010	152	106	6A
01001011	113	75	4B	01101011	153	107	6B
01001100	114	76	4C	01101100	154	108	6C
01001101	115	77	4D	01101101	155	109	6D
01001110	116	78	4E	01101110	156	110	6E
01001111	117	79	4F	01101111	157	111	6F
01010000	120	80	50	01110000	160	112	70
01010001	121	81	51	01110001	161	113	71
01010010	122	82	52	01110010	162	114	72
01010011	123	83	53	01110011	163	115	73
01010100	124	84	54	01110100	164	116	74
01010101	125	85	55	01110101	165	117	75
01010110	126	86	56	01110110	166	118	76
01010111	127	87	57	01110111	167	119	77
01011000	130	88	58	01111000	170	120	78
01011001	131	89	59	01111001	171	121	79
01011010	132	90	5A	01111010	172	122	7A
01011011	133	91	5B	01111011	173	123	7B
01011100	134	92	5C	01111100	174	124	7C
01011101	135	93	5D	01111101	175	125	7D
01011110	136	94	5E	01111110	176	126	7E
01011111	137	95	5F	01111111	177	127	7F

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Table 2-3
Binary-Octal-Decimal-Hexadecimal Conversion (continued)

BINARY	OCTAL	DECIMAL	HEXA- DECIMAL	BINARY	OCTAL	DECIMAL	HEXA- DECIMAL
Base 2	Base 8	Base 10	Base 16	Base 2	Base 8	Base 10	Base 16
10000000	200	128	80	10100000	240	160	A0
10000001	201	129	81	10100001	241	161	A1
10000010	202	130	82	10100010	242	162	A2
10000011	203	131	83	10100011	243	163	A3
10000100	204	132	84	10100100	244	164	A4
10000101	205	133	85	10100101	245	165	A5
10000110	206	134	86	10100110	246	166	A6
10000111	207	135	87	10100111	247	167	A7
10001000	210	136	88	10101000	250	168	A8
10001001	211	137	89	10101001	251	169	A9
10001010	212	138	8A	10101010	252	170	AA
10001011	213	139	8B	10101011	253	171	AB
10001100	214	140	8C	10101100	254	172	AC
10001101	215	141	8D	10101101	255	173	AD
10001110	216	142	8E	10101110	256	174	AE
10001111	217	143	8F	10101111	257	175	AF
10010000	220	144	90	10110000	260	176	B0
10010001	221	145	91	10110001	261	177	B1
10010010	222	146	92	10110010	262	178	B2
10010011	223	147	93	10110011	263	179	B3
10010100	224	148	94	10110100	264	180	B4
10010101	225	149	95	10110101	265	181	B5
10010110	226	150	96	10110110	266	182	B6
10010111	227	151	97	10110111	267	183	B7
10011000	230	152	98	10111000	270	184	B8
10011001	231	153	99	10111001	271	185	B9
10011010	232	154	9A	10111010	272	186	BA
10011011	233	155	9B	10111011	273	187	BB
10011100	234	156	9C	10111100	274	188	BC
10011101	235	157	9D	10111101	275	189	BD
10011110	236	158	9E	10111110	276	190	BE
10011111	237	159	9F	10111111	277	191	BF

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Table 2-3
Binary-Octal-Decimal-Hexadecimal Conversion (continued)

BINARY	OCTAL	DECIMAL	HEXA- DECIMAL	BINARY	OCTAL	DECIMAL	HEXA- DECIMAL
Base 2	Base 8	Base 10	Base 16	Base 2	Base 8	Base 10	Base 16
11000000	300	192	C0	11100000	340	224	E0
11000001	301	193	C1	11100001	341	225	E1
11000010	302	194	C2	11100010	342	226	E2
11000011	303	195	C3	11100011	343	227	E3
11000100	304	196	C4	11100100	344	228	E4
11000101	305	197	C5	11100101	345	229	E5
11000110	306	198	C6	11100110	346	230	E6
11000111	307	199	C7	11100111	347	231	E7
11001000	310	200	C8	11101000	350	232	E8
11001001	311	201	C9	11101001	351	233	E9
11001010	312	202	CA	11101010	352	234	EA
11001011	313	203	CB	11101011	353	235	EB
11001100	314	204	CC	11101100	354	236	EC
11001101	315	205	CD	11101101	355	237	ED
11001110	316	206	CE	11101110	356	238	EE
11001111	317	207	CF	11101111	357	239	EF
11010000	320	208	D0	11110000	360	240	F0
11010001	321	209	D1	11110001	361	241	F1
11010010	322	210	D2	11110010	362	242	F2
11010011	323	211	D3	11110011	363	243	F3
11010100	324	212	D4	11110100	364	244	F4
11010101	325	213	D5	11110101	365	245	F5
11010110	326	214	D6	11110110	366	246	F6
11010111	327	215	D7	11110111	367	247	F7
11011000	330	216	D8	11111000	370	248	F8
11011001	331	217	D9	11111001	371	249	F9
11011010	332	218	DA	11111010	372	250	FA
11011011	333	219	DB	11111011	373	251	FB
11011100	334	220	DC	11111100	374	252	FC
11011101	335	221	DD	11111101	375	253	FD
11011110	336	222	DE	11111110	376	254	FE
11011111	337	223	DF	11111111	377	255	FF

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2.5.4 Acronyms and Mnemonics

Acronyms and mnemonics are used throughout the input and output documents. Some commonly used acronyms and mnemonics are defined in Table 2-4.

Table 2-4
Acronyms and Mnemonics

2DSA	- 2 direct services automatic number identification base
2LAC	- 2 line number application for consumers
A1B	- any 1B core memory
AAP	- announcement administration processor
AB	- accounting block
ABDN	- abandon
ABM	- accounting block matcher
ABR	- auxiliary buffer register
ABS	- alarm battery supply
AC	- alternating current
ACCESA	- access tandem
ACD	- automatic call distributor
ACG	- automatic call gap
ACI	- AT&T communications interface
ACI	- AT&T customer interface
ACI	- account code information
ACK	- acknowledge
ACP	- action control point
ACR	- auxiliary call register
ACT	- active
ACT	- automatic test control
ACUERR	- automatic call unit failure
ACV	- access charge verification
AD1	- additional data field 1
AD2	- additional data field 2
AD3	- additional data field 3
AD	- additional data
ADA	- AT&T network connection dial-around
ADC	- acceptable digit count
ADCOMM	- common auxiliary unit data
ADCR	- alternate destination call redirection
ADDR	- address
ADG	- automatic distribution group
ADL	- AT&T digital link
ADR	- (Virtual) address
ADS	- automatic number identification delivery service
ADS	- auxiliary data system
ADSI	- automatic number identification delivery service index

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Table 2-4
Acronyms and Mnemonics

AG	- alarm grouping
AID	- alarm indication signals daily
AIN	- advanced intelligent network
AIN T	- autonomous interrupt
AIS	- alarm indication signal
ALA	- adjunct logical address
ALA/OSN	- adjunct logical address / operations support network
ALC	- A-link controller
ALEV	- A-level
ALFEXR0	- A-link formatter exercise register 0
ALFEXR1	- A-link formatter exercise register 1
ALIT	- automatic line insulation test
AMA	- automatic message accounting
ANC	- AT&T network connection
ANCR	- AT&T network call redirection
ANFHT	- automatic number identification failure action final handling treatment
ANI	- automatic number identification
ANN	- announcement
ANNU M	- announcement number
ANS	- answer
ANSI	- American National Standards Institute
ANSR	- answer
ANT	- alternate number translations
AOOC	- automatic out of chain
AORL	- alternate and/or overflow
APDMI	- attached processor diagnostic message interface
API	- attached processor interface
APMH	- attached processor message handler
APMH CNI	- attached processor message handler common network interface
APMSG	- attached processor message
APN	- action point numbering
APN	- action point numbering plan
APS	- ACCUNET® packet service
APS	- attached processor system
APUB	- autonomous peripheral unit bus
APUF	- autonomous peripheral unit failure
APUT	- autonomous peripheral unit trouble
AR	- audible ringing
ARDB	- auxiliary routing data block
ASCII	- American standard code for information interchange
ASCIT	- AT&T service / call identification type
ASM	- announcement systems manager
ASN	- AT&T switched network
ASR	- automatic speech recognition

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Table 2-4
Acronyms and Mnemonics (Continued)

ASTN	- alternate signaling transport network
ASTN	- individual alternate signaling transport network
ASW	- all seems well
ASWEPU	- peripheral unit all seems well error summary
ASWF	- all seems well failure
AT	- alarm transfer
ATA	- activate trunk audit
ATAP	- access tandem area plain old telephone service
ATC	- all tests completed
ATC	- automatic test control
ATD	- automatic test dispatcher
ATME	- automatic trunk maintenance equipment
ATP	- AT&T trigger platform
ATP	- access transport
ATP	- all tests pass
ATS	- alarm transfer system
ATSGHC	- adjunct trunk subgroup head cell
AU	- auxiliary unit
AUB	- auxiliary unit bus
AUDR	- arithmetic unit data register
AUDS	- audit system program
AUDST	- audit state
AUI	- auxiliary unit interface
AUT	- automatic
AUX	- auxiliary
AVD	- application variable data
AVL	- availability
B	- buffer
B/I	- block / integrity
BB	- billing block
BBC	- broadband capability
BBDIG	- blue box digits
BCD	- binary coded decimal
BCIC	- basic carrier ID code
BEF	- band elimination filter
BFTIS	- backward failure treatment integrated services digital network user part
BFTN	- base traffic number
BFTNI	- backward failure treatment not integrated services digital network user part
BIMM	- busy idle memory map
BIN	- binary format
BINK	- binary K
BL	- base level
BL	- building

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Table 2-4
Acronyms and Mnemonics (Continued)

BLN	- byte length
BLEV	- B-level
BLK	- block
BLM	- base level maintenance
BMAM	- buffer memory address map
BMP	- base miscellaneous point
BN	- billing number
BOC	- Bell Operating Company
BOF	- buffer overflow
BOS	- bit oriented signaling
BPS	- bits per second
BRKREC	- break received
BRL	- billing record length
BRRT	- backup round-robin routing table
BSTN	- base traffic number
BTFN	- base traffic number
BTL	- Bell Telephone Laboratories
BTLF	- behavioral trouble locating procedures
BV	- billing validation
BV	- bipolar violation
BVR	- bipolar violation rate
CAD	- circuit administration
CAD	- circuit administration disabled
CAD	- circuit assigned digital
CAI	- call assembly index
CALLDATA	- call data
CALLTYP	- call type
CALM	- common alarm
CAMA	- centralized automatic message accounting
CAMA-ONI	- centralized automatic message accounting - operation number identification
CANI	- customer automatic number identification
CAPPN	- cut through application number
CAR	- carrier
CAR	- current address register
CARD	- credit card digits
CAREA	- control area
CAROT	- centralized automatic reporting on trunks
CARRF	- carrier failure
CATLAS	- centralized automatic trouble locating and analysis system
CATP	- conditional all tests passed
CB	- control bus
CBC	- call by call service selection
CBNPR	- calling party number / billing default presentation restriction indicator

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Table 2-4
Acronyms and Mnemonics (Continued)

CC	- central control
CC	- central controller
CC	- country code
CCD	- country code
CCD	- country code digits
CCF	- concentrated calling feature
CCFR	- central control failure results
CCFR	- central control fault recovery
CCFR	- central control fault recognition
CCIS	- common channel interoffice signaling
CCIS2WRE	- common channel interoffice signaling 2Wire
CCIS6	- common channel interoffice signaling 6
CCISCR	- common channel interoffice signaling critical register
CCITT	- common channel signaling system
CCITT	- consultative committee on international telephone & telegraph
CCITT5	- CCITT common channel signaling system number 5
CCITT6	- CCITT common channel signaling system number 6
CCITT7	- CCITT common channel signaling system number 7
CCK	- continuity check
CCRF	- carrier completion rate feature
CCS	- central control standby
CCS	- common channel signaling
CCS7	- common channel signaling system 7
CCS7	- common channel signaling version 7
CCT	- continuity check transceiver
CCU	- central control unit
CD	- continuation data
CD	- continue data
CDB	- customer data block
CDBI	- customer data block index
CDR	- call detail recording
CDR	- channel data register
CDR	- customer data response
CDSU	- custom data services unit
CEB	- coded enable bus
CESR	- control error source register
CESR	- controller error source register
CF	- carrier failure
CFA	- carrier failure alarm
CGA	- carrier group alarm
CHI	- call handling instruction
CHNEG	- channel negotiation
CHOVRN	- character overrun
CI	- caller interaction

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Table 2-4
Acronyms and Mnemonics (Continued)

CI	- carrier interconnect
CI	- clock interrogate
CIA	- control bus and image administration
CIC	- caller identification code
CIC	- carrier identification code
CIC	- circuit identification code
CID	- carrier identification
CIN	- change in network
CIN	- circuit identification name
CIN	- circuit identification number
CINC	- circuit identification name code
CINC	- circuit identification number code
CINLEN	- circuit identification number length
CIP	- carrier identification parameter
CKT	- circuit
CLE	- clock error
CLEV	- C-level
CLEVAC	- active central control register
CLEVST	- standby central control register
CLF	- clear forward
CLID	- calling line identification
CLIDS	- controller or client d source
CLIP	- calling line identification presentation
LLI	- common language location identifier
CMS	- change management
CMS	- change management system
CMS	- circuit maintenance
CMS	- circuit maintenance system
CMS	- circuit multiplication system
CNFGSTAT	- configuration status
CNI	- common network interface
CNIBLM	- common network interface base level error word
CNIEWD	- common network interface error information word
CNT	- called number trigger
CNTL	- control
CODSC	- customer provided equipment outgoing disconnect
COMMLEV	- common level data
CONT	- controller
CONTR	- controller
CONV	- Conversant®
CONV	- conversion
CORR	- correcting
COS	- class of service
CP	- central processor

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Table 2-4
Acronyms and Mnemonics (Continued)

CPA	- common platform adjunct
CPA	- calling party address
CPBS	- control parity b source
CPD	- central pulse distributor
CPD	- control pulse distributor
CPDB	- central pulse distributor bus
CPDIG	- calling party digits
CPE	- customer provided equipment
CPF	- character parity failure
CPFLEV	- central - pulse distributor f-level
CPN	- calling party number
CPOS	- control position
CPPA	- calling party pays airtime
CR	- call register
CR	- cluster region
CR	- critical
CRAM	- control-bus random access memory
CRB	- customer routing block
CRBI	- customer routing block index
CRC	- cyclic redundancy check
CRC-6	- cyclic redundancy check
CREG	- critical register
CRM	- clear request message
CRT	- cathode ray tube
CRTSI	- cost reduced time slot interchange
CS	- call store
CS	- nonsecure call store
CSB	- call store bus
CSB	- clock select and buffer
CSC	- circuit selection capabilities
CSC	- circuit selection capability
CSCI	- circuit selection capability index
CSD	- controlled slip seconds daily
CSDC	- circuit switched digital capability
CSFRID	- call store identification data
CSFRPG	- D-level software failure results
CSFRTR	- call store test results
CSI	- carrier selection information
CSMS	- consumer services business service management system
CSP	- controller signal processor
CSR	- carrier specific routing
CSRAF	- common systems recorded announcement frame
CSRSDX	- carrier screening subsequent digit index
CSS	- call store semi conductor

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Table 2-4
Acronyms and Mnemonics (Continued)

CSS	- call store secure
CSS	- controlled slip second
CT	- center tape
CT	- cluster type
CTLTP	- connectivity trouble location procedure
CTRA	- connected to recorded announcement
CTS	- clear to send
CTS	- common tone supply
CTX2	- centrex 2
CTYPE	- client type
CU	- control unit
CVD	- coding violations daily
D3U	- digital signal 3 unit
D3U	- digital signal level 3 unit
D3U	- digital signal level 3 interface unit
D3UCTL	- digital signal level 3 controller
D3UESR	- digital signal level 3 error source register
D3UEXR	- digital signal level 3 exercise register
D3USTAT	- digital signal level 3 hardware status
D3USTATUS	- digital signal level 3 software status
DADC	- direct access data channel
DANI	- direct access data channel automatic number identification
DARN	- dial around
DAT	- demand analysis
DATS	- demand analysis state
DB	- database
DBI	- data block indexes
DOV	- digital buffer overflow pest
DBT	- diagnostic buffer table
DC	- direct connect
DCIC	- domestic carrier ID code
DCIS	- destination common channel signaling system
DCNT	- digit count
DDB	- disk descriptor block
DDD	- direct distance dialing
DDI	- direct data insert
DDI	- direct dial in
DDT	- digital data trunk
DEAC	- deactivate
DEC	- decimal format
DESEP	- destination separation
DEST	- destination
DETL	- detailed

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Table 2-4
Acronyms and Mnemonics (Continued)

DEV	- dedicated egress voice
DF	- disk file
DF	- duplex fail
DFN	- destination file number
DG	- digroup
DGALM	- digroup alarm
DGN	- diagnose or diagnostic
DGO	- digroup out of service
DGRF	- digroup report function data
DGSTAT	- digroup status
DHL	- depth heavily loaded
DIAL	- diagnostic language
DIC	- digital interface controller
DIF	- digital interface frame
DIF-E1	- digital interface frame export 1
DIF-E1(D)	- digital interface domestic frame
DIG	- digit
DIG	- digits
DIGTYP	- digit types
DIU	- digital interface unit
DKAD	- disk address
DKAD	- disk administration
DKADI	- disk administration interface program
DLC	- data link controller
DLC	- dynamic load control
DLEV	- D-level
DLN	- data link node
DLN	- data link number
DLN	- direct link node
DMA	- direct memory access
DMI	- 3B DMERT interface
DN	- dialed number
DNHR	- dynamic non hierarchical routing
DNHRICM	- dynamic non hierarchical routing incoming class mark
DNHROCM	- dynamic non hierarchical routing outgoing class mark
DNP	- dialed number preferred
DNST	- dialed number service type
DNUM	- destination number
DNUP	- duplex no-output pulse
DOC	- dynamic overload control
DOCRN	- dynamic overload control receive number
DOCT	- dynamic overload control transmitter
DOFP	- disable outgoing fraud prevention
DOM	- domain

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Table 2-4
Acronyms and Mnemonics (Continued)

DOMI	- domain incoming
DOWNC	- down chain
DP	- dial pulse
DPC	- destination point code
DPF	- data parity failure
DPSTOP	- dial pulse stop
DRAR	- digital radio avoidance routing
DRB	- disk request block
DRCC	- default routing control code
DRO	- delay reduction option
DRSV	- depth reserved
DRTC	- data rate transport capability
DS1	- digital signal level 1
DS3	- digital signal 3
DS3	- digital signal level 3
DSA	- disabled
DSD	- direct services dialing
DSDC	- direct services dialing capability
DST	- diagnostic strategy
DSTAT	- domestic status
DSTT	- direct signaling translation test
DT	- digroup terminal
DTAC	- direct test access connection
DTAT	- digital test access trunk
DTCR	- dedicated time slot interchange connection register
DTMF	- dual tone multifrequency
DTSE	- disables the time slot exchange
DTTU	- digital trunk test unit
DTU	- digroup terminal unit
DU	- data unit
DUART	- dual asynchronous receiver transmitter
DUC	- data unit controller
DUFR	- data unit fault recovery
DUPT	- dial up port
DUS	- data unit selector
DUSREG	- data unit selector registers
E	- enable
E&M	- ear and mouth
E1	- export 1
EA	- equal access
EAC	- error analysis control
EAC	- expanded authorization code
EAEO	- equal access end office

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Table 2-4
Acronyms and Mnemonics (Continued)

EAI	- emergency action interface
EAR	- emergency alternate routing
EAS	- equal access signaling
EAS	- equal access signaling state
ECD	- equipment configuration data
ECDL	- enhanced common channel interoffice signaling data link
ECLI	- echo canceller line interface
ECOS	- end-to-end class of service
ECS	- extended call store
ED	- engineered data
ELEV	- E-level
ELS	- electronic loop segregation
ELT	- emergency load transfer
EOF	- end of file
EOLN	- end office local nodal
EOS	- extended operating system
EOT	- end of tape
EPEC	- emergency program environment control
EPEC	- emergency program environmental configuration
EPH	- execution pipeline history
EPLX	- ESS TM programming language extended
EPS	- enables the protection switch
EQL	- equipment location
EQPTLOC	- equipment location
EQT	- enables quiet tone
ER	- emergency restart
ERAP	- error analysis program
ERAT	- error analysis
ERI	- egress route indicator
ERPI	- extended routing pattern identity
ERPISET	- extended routing pattern identity set
ERRC	- error counter
ERSP	- error stop
ERSTP	- error stop
ES	- echo suppressor
ES	- end switch
ES	- errored seconds
ESCR	- enhancements for special CIC routing
ESD	- errored seconds daily
ESF	- extended superframing
ESI	- echo suppressor index
ESI	- egress switch indicator
ESM	- enables the select mode
ESM	- external sanity monitor

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Table 2-4
Acronyms and Mnemonics (Continued)

ESN	- E-store number
ESN	- echo suppressor number
ESR	- error source register
ESR	- error summary register
EST	- echo suppressor terminal
ESU	- echo suppressor unit
ESU	- error source unit
ET	- error threshold
EXC	- execute
EXCRAM	- executive buffer random access memory
EXEC	- execute
EXSMM	- cross-connect SYNDROBUS mismatch
EXUMM	- cross-connect update bus mismatch
FA	- flash A
FAI	- foreign administration identity
FAX	- facsimile
FB	- flash B
FBH	- framing bit high
FBICTL	- FBI status and control
FBL	- framing bit low
FBS	- far building subdivision
FC	- fan controller
FCHAN	- far end channel
FCIC	- first circuit identification code
FD	- forced data
FD	- forced digit
FDPLX	- full duplex
FE	- far end
FEALN	- far end AT&T local network
FEHIGH	- frame error high
FEHIGH	- frame error high count
FELATA	- far end local access transport area
FELOW	- frame error low
FELOW	- frame error low count
FEN	- far end network
FENCLASS	- far end network class
FENID	- far end network identification
FENN	- far end network
FENPA	- far end numbering plan area
FEOFC	- far end office
FERA	- failure error analysis
FERA	- fault error analysis
FESC6	- far end 6-Digit screening

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Table 2-4
Acronyms and Mnemonics (Continued)

FETL	- far end test line
FHANN	- final handling announcement
FHC	- final handling code
FHCODE	- final handling code
FHI	- final handling announcement
FHT	- final handling treatment
FIA	- feature indicator all
FIR	- feature indicator request
FLEV	- F-level
FLN	- floor location number
FLN	- frame location number
FMI	- file manager interface
FNCTSUBS	- functional subroutines
FNS	- fan system
FNUM	- file number
FPDT	- feature processing data type
FPR	- facsimile preferred routing
FPWRF	- force power failure
FR	- fault recovery
FRDATA	- full rate data
FRDI	- frame request and diagnostic interface
FRZ	- frozen state
FS	- file store
FS	- file system
FS	- functional schematic
FSCP0	- file system copy 0
FSCP1	- file system copy 1
FSECD	- file system error correction data
FSIT	- foreign subscriber identifying telephone
FSP	- four state pass
FSSTAT	- file system status
FSSTAT	- file system status failure report data
FSUNIQUE	- unique file system
FTFN	- first traffic number
FTS	- first time slot
FVSR	- forced via switch routing
GAF	- gate all toward the facility
GAS	- gate all toward switch
GBT	- general buffer table
GCP	- gate control pulse
GCP	- generate control pulse
GCP	- generated control pulse
GEN	- general registers

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Table 2-4
Acronyms and Mnemonics (Continued)

GEN	- generic
GEOSEP	- geographical traffic separation class
GETS	- government emergency telecommunications service
GI	- group interrogate
GLEV	- G-level
GNS	- go / no go screening
GNSC	- go / no go screening class
GP	- group
GRAM	- global random access memory
GRESR	- global random access memory error source register
GRP	- group
GSDN	- global software defined network
GSDNPHSE	- global software defined network phase
GTH	- growth
GTT	- global title translation
GULP	- general utility program
GULP	- generic utility program
GW	- gateway
H	- high
HAW	- high and wet
HBDG	- head block diode group
HICAP	- high capacity calling
HIST	- trouble history
HLD	- hold
HNPA	- home numbering plan area
HTR	- hard to reach
HT	- headtable
HWL	- high and wet list
HWT	- high and wet timing
I	- inbound
I	- input
I/O	- input / output
IA	- ineffective attempt
IADC	- integrated access direct connect
IAID	- internal (4ESS TM) announcement identity
IAM	- initial address message
IAOFC	- ineffective attempt office
IAOFCNT	- ineffective attempt office counting
IATRAP	- ineffective attempt trap
IATSG	- ineffective attempt trunk subgroup
IB	- inward wide area telecommunications service billing
IBNS	- international billed number screening

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Table 2-4
Acronyms and Mnemonics (Continued)

IBO	- input buffer overflow
IBU	- in-band unit
IBUCTL	- in-band unit control
IBUCTL	- in-band unit controller
IBUESR	- in-band unit error source register
IBUEXR	- in-band unit exercise register
IBUSTAT	- in-band unit hardware status register
IBUSTAT	- in-band unit hardware status
IBUSTATUS	- in-band unit software status
IC	- instruction control
IC	- inter local access transport area carrier
IC	- interexchange carrier
IC	- international carrier
ICB	- input control block
ICD	- international call data
ICDR	- international call detailed recording
ICIC	- international carrier ID code
ICT	- incoming trunk
ID	- identification
IDB	- inward wide area telecommunications service data base
IDDD	- international direct distance dialing
IDMM	- identification tag mismatch
IDTS	- incoming dial tone start
IFB	- interface bus
IFFR	- interface bus fault recovery
IFHCODE	- input final handling code
IGFET	- insulated gate field effect transistor
IGN	- ignore
II	- information digit
IM	- input message
IMR	- inhibit maintenance request
INC	- international carrier
INDX	- index
INFO-1	- information-1
INH	- inhibit
INI	- inhibit normal interrupt
INIT	- initialization
INS	- in service
INSEP	- incoming separation
INSEP	- incoming traffic separation class
INSEPR	- input service provider
INTL	- international
INTO	- international originating call
INTT	- international transit

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Table 2-4
Acronyms and Mnemonics (Continued)

INUP	- international integrated services digital network user part
INVCCD	- invalid channel command
INVINT	- invalid interrupt
INVINT	- invalid interrupt internal register
INVK	- invoke
INWATS	- inward wide area telecommunications service
IO	- input / output
IO	- inter-office
IOC	- international operator center
IOCP	- input / output control program
IOF	- input / output frame
IOMP	- input / output microprocessor
IOMP	- input / output unit microprocessor communities
IOOFD	- input / output operational failure data
IOP	- input / output processor
IOPF	- input / output processor frame
IOSTAT	- input / output status
IOUC	- input / output unit channel
IOUC	- input / output unit controller
IOUCS	- input/ output controller / selector
IOUS	- input / output unit selector
IP	- in progress
IP	- initialization processor
IP	- internal protocol
IPCC	- individual per call control
IPD	- interprocessor data
IPM	- impulses per minute
IPM	- interruptions per minute
IPUB	- interface peripheral unit bus
IREG	- internal register
ISC	- incoming signaling characteristics
ISC	- intelligent serial controller
ISC	- international switching center
ISDN	- integrated services digital network
ISL	- intermediate switch list
ISTAT	- international status
ISTP	- international signal transfer point
ISTP	- international traffic point
ISUP	- integrated services digital network user part
ITC	- incoming traffic counter
ITC	- incoming trunk class
ITC	- incoming trunk subgroup class
ITUP	- international telephone user part
IW	- input word

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Table 2-4
Acronyms and Mnemonics (Continued)

IWZ1	- international world zone 1
IXC	- interexchange carrier
JCB	- job control buffer
JLEV	- J-level
KBPS	- kilobits per second
KLEV	- K-level
KRPI	- key routing pattern index
L	- low
LA	- load adjust
LACID	- link access circuit identifier
LACID	- link access identifier
LACID1	- link 1 access identifier
LACID2	- link 2 access identifier
LAF	- loop all toward the facility
LAM	- leave-a-message
LAN	- local area network
LANI	- local automatic number identification
LAS	- loop all toward the switch
LATA	- local access transport area
LBS	- unloop bit stream
LCA	- local alarm
LCA	- local carrier alarm
LCI	- local call intercept
LD	- language digit
LDI	- logical device identification
LDS	- long distance service
LEC	- local exchange carrier
LEC	- local exchange company
LFCN	- low frequency exerciser controller
LIB	- library program
LIBSYS	- library system
LIM	- link integrity monitor
LINKTYPE	- type of link
LIU	- line interface unit
LKO	- lockout
LLHC	- link list head cell
LLRAM	- last look store random access memory
LLSADR	- last look store address
LLSADR	- write last look address
LNP	- local number portability
LODBUF	- load buffer

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Table 2-4
Acronyms and Mnemonics (Continued)

LOM	- listen only mode
LPA	- low paper alarm
LRAM	- local random access memory
LRGN	- local exchange routing guide number
LRN	- local routing number
LSA	- local subframing alarm
LSFHT	- local access transport area final handling treatment
LSMTX	- local access transport area state screening matrix
LSNC	- large scale nailup
LSP	- link state packet
LSP	- load set period
LSST	- local access transport area / state screening state
LTF	- loop trunk toward facility
LTS	- loop trunk toward switch
LV	- level
LVL	- level
LVS	- local variable stack
LVS	- local variable stock
MAC	- machine administration center
MAC	- memory administration center
MACCM	- machine administration center control memory
MACP	- maintenance control program
MAINT	- maintenance
MAN	- manual
MAPN	- master application number
MAPRT	- map rate table
MAR	- mass announcement register
MAR	- mass announcement system register
MARG	- margin
MARP	- maintenance restart program
MAS	- mass announcement service
MAS	- mass announcement service frame
MAS	- mass announcement system
MAU	- mass announcement unit
MB	- maintenance buffer
MB	- maintenance busy
MBPS	- megabits per second
MBPTR	- maintenance buffer pointers
MC	- maintenance center
MC	- maintenance console
MC	- measurement class
MCC	- master control complex
MCFR	- master control complex fault recovery

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Table 2-4
Acronyms and Mnemonics (Continued)

MCFR	- master control complex and utility processor fault recovery
MCG	- major category
MCT	- multiple carrier treatment
MDN	- miscellaneous distribution number
MDR	- message detail recording
MEGC	- MEGACOM® service
MEM	- member
MEMN	- member number
MF	- multifrequency
MFC	- multifrequency code / compeller
MFC	- multifrequency compelled
MFN	- maintenance file number
MFNUM	- maintenance file number
MGC	- magic number control
MHD	- moving head disk
MI	- maintenance interject
MI	- member interrogate
MI	- modular interface
MICON	- maintenance control
MICON	- maintenance interrupt control
MIP	- multifunctional interface processor
MJ	- major
ML	- maintenance load
MM	- maintenance matcher
MML	- man machine language
MML	- matrix maintenance limit
MN	- minor
MNC	- magic number control
MOC	- maintenance operations center
MOC	- master operations center
MOCC	- master operations center control
MOIA	- modified interrupt address
MORR	- multiple or redundant request
MP	- main program
MP	- maintenance processor
MP	- monitor
MPE	- messages per entry
MPESR	- maintenance processor error source register
MPF	- memory parity failure
MPI	- miscellaneous program index
MR	- maintenance request
MRA	- modify recovery action
MRAM	- micro-store instruction random access memory
MRII	- matched restriction information indicator

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Table 2-4
Acronyms and Mnemonics (Continued)

MRNUM	- maintenance record number
MRT	- multiple routing
MRT	- multiple routing treatment
MRTI	- multiple routing treatment index
MSC	- measurement sub class
MSI	- market segment index
MSK	- mask
MSN	- M-store number
MSN	- miscellaneous scan point number
MSN	- miscellaneous scanner number
MSP	- multifaceted signal processor
MSTAT	- mass announcement system status table
MT	- maintenance
MTC	- maintenance
MTC	- maintenance channel
MTCE	- maintenance
MTHG	- member type hardware generation
MTP	- message transfer part
MTP	- message transfer point
MTS	- multiple treatment screening
MTSC	- multiple treatment screening class
MTSCI	- multiple treatment screening class index
MTX	- matrix
MUI	- master control complex utility interface
MULTACT	- multiple activate
MUP	- master control complex and utility processor
MUPAUD	- master control complex and utility processor audit
MUPOS	- master control complex and utility processor operating system
MW	- milliwatt
N/A	- not applicable
NAC	- non call associated temporary signaling connection anomaly code
NACC	- non call associated temporary signaling connection anomaly code category
NAI	- network access interruption
NAIA	- node attempted illegal access
NANP	- North American numbering plan
NBS	- internal building subdivision
NBS	- near building subdivision
NC	- network clock
NC	- not communicating
NCA	- no circuit available
NCA	- non-call associated
NCA-TSC	- non call associated temporary signaling connection
NCAT	- non call associated temporary signaling connection

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Table 2-4
Acronyms and Mnemonics (Continued)

NCATANOM	- non call associated temporary signaling connection anomaly
NCATSC	- non call associated temporary signaling connection
NCD	- network call denial
NCG	- noncorrecting
NCLK	- network clock
NCP	- network control point
NCSU	- network clock synchronization unit
NDB	- number services routing data block
NE	- near end
NEIPAV	- non-emergency initial address message (IAM) message transfer part (MTP) American National Standards Institute (ANSI) priority level value
NEMOS	- network management operations support system
NEOTR	- near operational test
NESAC	- national electronic switching assistance center
NET	- network
NETCLK	- network clock
NI	- network interconnect
NIS	- network implementation services
NIU	- network interface unit
NLK	- unlinked
NM	- network management
NMC	- network management center
NMOC	- network management center
NMSG	- number of messages
NN1	- national number part 1
NN1	- national number, first part
NN2	- national number part 2
NN2	- national number, second part
NNDR	- node to node data register
NOC	- network operation center
NOCTS	- no clear to send
NORM	- normal
NP	- non preferred
NPA	- numbering plan area
NPAG	- numbering plan area announcement group
NPANXX	- numbering plan area and exchange number
NPARINH	- numbering plan area reconstruction inhibit
NPT	- numbering plan type
NPTA	- number pooling target architecture
NRN	- network routing number
NRNDB	- network routing and numbering database
NS800	- number services 800
NSCX	- network services complex
NSD	- no start dial

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Table 2-4
Acronyms and Mnemonics (Continued)

NSN	- national switch number
NSN	- network switch number
NSNAME	- network switch name
NTC	- national trunk congestion
NTPI	- non trunk program index
NTR	- no tests run
NTR	- number of trunks reserved
NUMPL	- numbering plan
NVID	- national vendor identification
NVIDN	- national vendor identification number
NWDS	- number of words
NWM	- network management
NX	- exchange
NXX	- exchange number
NXX	- office code
O	- output
O/S	- out of service
OA	- office alarm
OA & M	- operations administration & maintenance
OAS	- originating AT&T switch
OBAT	- operator bridge access interoffice trunk circuit
OBO	- output buffer overflow
OC	- on condition
OCTCP	- originating carrier and terminating country pair
ODA	- office data
ODA	- office data(base) assembler
OFC	- office
OGT	- outgoing trunk
OLCIG	- originating local call intercept group
OLCIGI	- originating local call intercept group index
OLI	- originating line identity
OLI	- originating line information
OLIN	- off line program
OLIN	- off line status
OM	- output message
OMR	- output message register
ONAC	- operational network administration center
ONI	- operator number identification
ONPA	- originating numbering plan area
OOC	- out of chain
OOF	- out of frame
OOFC	- originating office code
OOS	- out of service

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Table 2-4
Acronyms and Mnemonics (Continued)

OOSI	- out of service ignore
OP	- operator
OPC	- originating point code
OPER	- operational
OPER	- operator
OPR	- operational
ORIG	- origination
ORNU	- order number
OS	- out of service
OSC	- outgoing signaling characteristic
OSCSI	- overflow circuit selection capability index
OSDATA	- on site data
OSDNK	- global software defined network key customer
OSN	- operations support network
OSOR	- on site operations report
OSPS	- operator service position system
OSPSID	- operator service position system identification
OSS	- operating support system
OTAN	- octal trunk appearance number
OTC	- outgoing traffic counter
OTMTN	- operational terminating test number
OTMTT	- operational terminating test type
OTSTN	- operational through switch test number
OTSTT	- operational through switch test type
OUTWATS	- outward wide area telephone service
OVLN	- overload
OVRD	- override
OW	- output word
OWATS	- outgoing wide area telephone service
P	- preferred
PABORT	- protocol abort
PALL	- print all
PAS	- public announcement
PAS	- public announcement service
PAS	- public announcement system
PATLP	- pattern analysis trouble location procedure
PAV	- preassigned account value
PBC	- peripheral bus computer
PBFR	- peripheral bus fault recognition
PBX	- private branch exchange
PBXAW	- private branch exchange answer withheld
PBXESGD	- private branch exchange expect station group
PC	- peripheral controller

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Table 2-4
Acronyms and Mnemonics (Continued)

PC	- processor configuration
PC	- program control
PCC	- per call control
PCCD	- pseudo country code
PCD	- power control distribution
PCD	- power conversion and distributing
PCF	- point code format
PCM	- pulse code modulation
PCP	- positive call processing
PCRV	- processor configuration recovery
PCS	- power control switch
PC	- point code
PDA	- parameter data
PDG	- poll digit
PDS	- page descriptor shell
PDS	- program documentation standard
PECC	- program engineering control center
PEST	- programmable error source trigger
PGM	- program
PHF	- path hunt failure
PHP	- poll high priority
PIC	- peripheral interface controller
PIC	- priority interrupt controller
PID	- processor identification
PIR	- port isolation register
PKG	- package
PLP	- poll low priority
PLS	- pulsed line signaling
PLU	- positive look up
PM	- performance monitoring
PMD	- point of maximum definition
PMJ	- power major
PMN	- power minor
PMOS	- peripheral maintenance operating system
PMOSTBLE	- peripheral maintenance operating system stack tables
PNLCT	- prohibit no-loopback continuity check test
PNT	- print
PNT	- print no test
POTS	- plain old telephone service
PP	- port processor
PP	- processor peripheral
PPI	- processor peripheral interface
PPM	- periodic pulse metering
PREF	- preference

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Table 2-4
Acronyms and Mnemonics (Continued)

PRI	- presentation restriction indicator
PRI	- primary rate interface
PRIM	- prime
PRL	- P-register - lower
PRM	- P-register - upper
PROTOERROR	- protocol error
PRRT	- primary round-robin routing table
PRT	- proportional routing
PRT	- proportional routing type
PRTI	- partition
PS	- program store
PS	- protection switch
PSATP	- prohibit sending all tests pass information
PSB	- program store bus
PSBN	- prohibit sending billing number
PSC	- protection switch client
PSCCBCO	- protection switch client control bus cutoff
PSCPCMCO	- protection switch client pulse code modulated cutoff
PSCPCMCO	- protection switch client pulse code modulation cutoff
PSCPEST	- protection switch client error pest
PSCPN	- prohibit sending calling party number
PSES	- prohibit service evaluation
PSFRID	- program store identification
PSFRTR	- program store test results
PSMO	- permanent segmentation directory mode of operation
PSN	- previously stored number
PSN	- protection switch
PSOLI	- prohibit sending originating line identity information
PSPC	- primary signaling point code
PSS	- program store secure
PSS	- program store semi conductor
PSS	- program support system
PSTN	- public switched telephone network
PSUUI	- prohibit sending user to user information
PSW	- processor status word
PSW	- protection switch
PSZ	- poll seizure
PTSRPS	- P-bit trunk status rate pointer store
PTSS	- P-bit trunk status store
PU	- peripheral unit
PUAB	- peripheral unit answer bus
PUB	- peripheral unit bus
PUC	- peripheral unit controller
PUCF	- peripheral unit controller frame

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Table 2-4
Acronyms and Mnemonics (Continued)

PUEX	- peripheral unit exercise
PUF	- peripheral unit failure
PULP	- peripheral utility program
PWR	- power
PWRMON	- power monitor
QPF	- query processing function
QRDS	- quantum routing data system
QRYTYPE	- question being asked
QTFN	- quantity of traffic numbers
QTFN	- quantity traffic numbers
QTRK	- quantity of consecutive trunks
RA	- recorded announcement
RA	- route advance
RACF	- recorded announcement channel frame
RACHAN	- recorded announcement channel
RAM	- random access memory
RBA	- recent change rollback
RC	- recent change
RCAS	- recent change administration system
RCFORM	- recent change form
RCMA	- recent change memory administration
RCMP	- recent change message processing
RCMU	- recent change message update
RCNHIST	- recent history
RCRB	- recent change rollback
RCS	- routine class schedule
RCUERR	- automatic call unit failure
RCV	- receiver
RCV	- recent change verify
RCVD	- received
RCVR	- receiver
RDB	- routing data block
RDBFHT	- routing data block final handling treatment
RDBI	- routing data block index
RDC	- red special circuit
REACH	- remote adjunct call handling
REC	- receive
REG	- register
REG	- regular
RES	- reserved
REV	- reverse
REX	- routine exercise

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Table 2-4
Acronyms and Mnemonics (Continued)

RFA	- ring forward allowed
RFE	- removed far end
RFMP	- ring forward miscellaneous
RLG	- release guard
RLS	- release
RMA	- remote
RMA	- remote alarm
RMSD	- remote measurement system digital
RMRT	- round trip delay time
RMT	- remote terminal output
RNE	- removed near end
RNSN	- routing network switch number
RO	- read only
ROM	- read only memory
ROP	- read only printer
ROS	- request out of service
ROTL	- remote office test line
RPI	- routing pattern identity
RPI	- routing pattern index
RR	- recording register
RRM	- routing request message
RSA	- remote subframe alarm
RSF	- ring service failure
RSFHT	- route selection index final handling treatment
RSI	- route selection index
RSIDF	- route selection index default
RSM	- reset status memory
RST	- restore
RSW	- receiver seems well
RT	- ringing and tone
RT	- ringing and tone plant
RTNG	- routing
RTNR	- real time network routing
RTSI	- receive time slot interchange
RTSM	- receive time slot memory
RUAS	- remote utility active system
RW	- read / write
SA	- switched access
SADC	- service access data channel
SADC	- special access data channel
SADC	- system audit of disks
SADK	- system audit disk
SAFER	- split access flexible egress routing

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Table 2-4
Acronyms and Mnemonics (Continued)

SAMCNT	- sample count
SAPN	- slave application number
SAS	- stop and switch
SAST	- system audit of stores from tape system audit of stores using tape
SAST	- system audit of stores using tape
SAST	- tape audit
SAT	- satellite
SAWS	- system audit of writable stores
SAWS	- writable store audit program
SAWSFILE	- system audit and writable stores audit file
SBY	- stand by
SC	- system clock
SCA	- save current address register
SCA	- see current address
SCAB	- scanner answer bus
SCAR	- stable call accumulation register
SCC	- service circuit center
SCC	- service circuit controller
SCC	- switching control center
SCCP	- signaling connection control part
SCCS	- source code control system
SCCS	- switching control center system
SCFR	- system clock critical register
SCG	- sub-category
SCGA	- software carrier group alarm
SCINS	- selective clear interrupt source register
SCLK	- system clock
SCP	- scan matrix pack
SCP	- service circuit pack
SCP	- service control point
SCP	- signaling control point
SCS	- service circuit system
SCU	- service circuit unit
SCUFS	- scanner control unit failure summary
SD	- scan and signal distributor
SD	- schematic drawing
SD	- segmentation directory
SD	- signal distributor
SDA	- saved data address
SDC	- service degrading condition
SDF	- shared directory function
SDFR	- scan and signal distributor fault recovery
SDI	- switched digital international
SDINDEX	- subsequent digit routing index

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Table 2-4
Acronyms and Mnemonics (Continued)

SDM	- signal distributor matrix
SDM	- space division module
SDN	- software defined network
SDN	- switched digital network
SDNA	- software defined network access
SDNK	- software defined network key customer
SDP	- signal distributor applique pack
SDS	- switch digital service
SDS	- switched digital services
SDX	- subsequent digit
SDX	- subsequent digit index
SEC	- services echo canceller
SED	- severely errored seconds daily
SEF	- severely errored frame
SEGINIT	- segment initialization
SERPF	- serial parity failure
SES	- severely errored second
SF	- superframing
SFI	- switch fabric interface
SFN	- source file number
SGD	- semi global data
SHDWMBPTR	- shadow maintenance buffer pointer
SI	- screening indicator
SI	- service identity
SIAQ	- send info analyzed query
SIC	- service indicator code
SIC	- software integrity control
SICO	- software integrity control program
SICO	- switch / system integrity controller
SICQ	- send info collected query
SID	- service identification
SIGLK	- signaling link
SII	- service identity index
SIINAME	- service identity index name
SIM	- system integrity monitor
SIMB	- system integrity monitor on base level
SIMRTSTS	- software integrity monitor program tests
SINDEX	- access charge verification sampling rate index
SINT	- supplementary interrupt
SKPBY	- skip busy
SKPBY	- skip, busy
SL	- signaling link
SLC	- signaling link complement
SLK	- signaling link

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Table 2-4
Acronyms and Mnemonics (Continued)

SLKN	- signaling link number
SMCC	- switching maintenance control complex
SMO	- segmentation directory mode of operation
SO	- switching office
SOI	- start of input
SP	- scan point
SP	- service processor
SP	- signal processor
SP	- signaling processor
SP	- summary process
SPA	- spare A
SPB	- spare B
SPC	- signal processor echo canceler
SPC	- signaling and permuting circuit
SPC	- signaling point code
SPC	- switching and permuting controller
SPC	- switching and permuting circuit
SPC0	- signal processing controller 0
SPCS	- stored program control system
SPESR	- signal processor error source register
SPF	- signal processor failure
SPIR	- signaling processor internal register
SPR	- spare EasyReach®
SPS	- signal processing system
SPSI	- service processor service identity
SPSTS	- signal processor state translator store
SPTSS	- signal processor trunk status store
SPU	- signal processor unit
SPU	- signal processing unit
SPUCTL	- signal processing unit controller
SPUESR	- signal processing unit error source register
SPUEXR	- signal processing unit exercise register
SPUSTAT	- signal processing unit hardware status
SPUSTATUS	- signal processing unit software status
SR	- system recovery
SR	- system reinitialization
SREC	- secondary record
SREC1	- secondary record channel
SRES	- search results
SRES	- search results number
SRI	- supplemental routing information
SRVC	- service
SSD	- scan and signal distributor
SSN	- subsystem network

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Table 2-4
Acronyms and Mnemonics (Continued)

SSN	- subsystem number
SSN	- survivable signaling network
SSP	- service switch point
SSP	- service switching point
SSPC	- secondary signaling point code
SSS	- switch identification
SSSG	- action point numbering plan announcement group
SST	- signaling service type
SSTS	- service test system
ST	- service test
ST	- state
ST1	- subsequent digit index type
ST2	- subsequent digit index type
STAT	- status
STATR	- status register
STC	- single trunk customer
STD	- standard
STDP	- standard plus
STF	- some tests failed
STF-BOF	- some test failed and buffer overflowed
STP	- signaling transfer point
STP	- some tests passed
STS	- service test system
SU	- signal unit
SU	- switch unit
SUAP	- system not attached processor system
SUB HT	- sub-headtable
SUBT	- synchronized unsupervised burst tone
SUPL	- system update library program
SUTMN	- subunit type & member number
SVC	- service circuit
SVCT	- service circuit test
SVCT	- service circuit type
SVOGT	- outgoing trunk state vector
SVR	- select verify
SW	- switch
SXS	- step by step
SYM	- symbol
SYN	- synchronous
SYNC	- synchronous
SYSRCONT	- system recovery control
SYSRCSPS	- system recovery call store program store
SYUP	- system update
SYUP	- system update program

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Table 2-4
Acronyms and Mnemonics (Continued)

T&L	- terminate and leave
TAC	- terminal access circuit
TAC	- terminal access controller
TAG	- trunk assignment generation
TAN	- trunk appearance number
TANTOTAN	- trunk appearance number to trunk appearance number
TAR	- transition address register
TAS	- tape administration system
TASI	- time assignment speech interpolation
TASI-E-DLC	- time assigned speech interpolation - E - dynamic load control
TASKID	- task identification
TAT	- test access trunk
TAT	- trunk access test
TB	- traffic buffer
TB	- transaction block
TB	- trouble bit
TBMN	- trunk block member number
TBN	- trunk block number
TBN	- true billing number
TBS	- trunk block status
TC	- transport capability
TCA	- telephone company administration
TCA	- test control area
TCA	- trunk control area
TCAP	- transaction capability application part
TCB	- task control block
TCM	- traveling class mark
TDA	- translation data
TDA	- translation data assembler
TDAS	- traffic data administration system
TDASMC	- traffic data administration system measurement class
TDCU	- traffic data collection unit
TDCU	- traffic data concentrator unit
TDEST	- type of destination
TDIU	- type of digital interface unit
TDN	- time division network
TDN	- trunk distributor number
TEC	- terminal equipment center
TEC	- test equipment control terminal process
TER	- terminal
TER	- terminal echo receiver
TERA	- trunk error analysis
TERAWTSG	- trunk error analysis worst trunk subgroup
TERM	- terminal

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Table 2-4
Acronyms and Mnemonics (Continued)

TESTNO	- test number
TFA	- traffic allowed
TFAI	- termination foreign administration identity
TFG	- type of feature group
TFN	- traffic number
TFNB	- traffic number block
TFP	- transfer prohibited
TFREE	- tollfree
TG	- trunk group
TGR	- terminal grouping
TGRF	- terminal grouping frame
TIC	- translation integrity check
TID	- transaction identification
TKMTC	- trunk maintenance
TL	- terminate and leave
TLCIG	- terminating local call intercept group
TLDB	- trouble location data base
TLP	- trouble location procedure
TLPFILE	- trouble location procedure file
TLPQUEUE	- trouble location procedure disk queue
TLPSUM	- trouble location procedure summary
TLTP	- trunk and line test position
TMR	- trunk maintenance register
TMS	- time multiplexed switch
TMSCR	- time multiplex switch critical register
TMSP	- time multiplexed switch pair
TN	- terminating notification
TNPA	- terminating numbering plan area
TNR	- transmit negative rail
TNR	- transmitted noise reduction
TM	- trunk maintenance
TNS	- transit network selection
TNUP	- trunk used for large scale nailup
TOB	- total office blocking
TOB1	- total office blocking rate 1
TOB2	- total office blocking rate 2
TOC	- trunk operations center
TOC	- trunk order code
TOD	- time of day
TOFC	- terminating office code
TOP	- task oriented practices
TOPAS	- testing operations provisioning administrative system
TOPIC	- toll peripheral configuration program
TORIG	- type of origin

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Table 2-4
Acronyms and Mnemonics (Continued)

TOS	- trunk out of service
TOS	- type of service
TOT	- type of trunk
TP	- test position
TPAD	- tape paging administration
TPC	- transport capability
TPI	- trunk program index
TPM	- traffic and plant measurement
TPM	- traffic plant measurement
TPOS	- test position
TPT	- test progress tone
TQU	- trunk query
TR	- trunk register
TRAM	- table random access memory
TRANS	- file system transient data
TRANSP	- transparent
TRAPN	- trap number
TRC	- timed routine coordinator
TRF	- traffic
TRIDX	- trunk reservation index
TRK	- trunk
TRNUM	- trouble report number
TRPF	- transmit parity failure
TSAA	- terminating switch access arrangement
TSC	- technical service capability
TSF	- total signal failure
TSG	- trunk subgroup
TSGBBC	- trunk subgroup broadband capability
TSGHC	- trunk subgroup head call
TSGHC	- trunk subgroup head cell
TSGHS	- trunk subgroup headcell trunk status
TSGN	- trunk subgroup number
TSGSTAT	- trunk subgroup status
TSI	- time slot interchange
TSICR	- time slot interchange frame critical registers
TSICR	- time slot interchange register
TSICTL	- time slot interchange control
TSIEXR0	- time slot interchange exercise register 0
TSIEXR1	- time slot interchange exercise register 1
TSIF	- time slot interchange frame
TSIMEMN	- time slot interchange member number
TSM	- time slot memory
TSMEM	- trunk status memory
TSN	- trunk scanner number

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Table 2-4
Acronyms and Mnemonics (Continued)

TSN-TBN	- trunk scanner number - trunk block number
TWRP	- tape write / read program
TSPS	- traffic service position system
TSS	- trunk status store
TST	- test (verb)
TST	- timed strategy
TST	- trunk scanner tag
TSTADR	- test address
TSTPAT	- test pattern
TSW	- transmitter seems well
TSW	- trunk scanner word
TSW	- trunk status word
TTF	- toll terminal frame
TTF	- toll termination frame
TTS	- terminating toll switch
TTSI	- terminating toll switch index
TTSI	- transit time slot interchange
TTSM	- transmit time slot memory
TTSNAME	- terminating toll switch name
TTY	- teletypewriter
TU	- tape unit
TU	- trunk unit
TUC	- tape unit controller
TUP	- telephone user part
TURNUPC	- turn up for control office trunk
TURNUPN	- turn up for noncontrol office trunk
TUT	- trunk under test
TV	- AT&T TrueVoice®
TVMASR	- televote master
TWRP	- tape writing program
U	- union
UABORT	- user abort
UAD	- unavailable seconds daily
UAS	- unavailable second
UAS	- utility active system
UAV	- unavailable
UCB	- unit control block
UCL	- unconditional
UDS	- unit data service
UFH	- use final handling
UGTT	- universal global title translation
UIFN	- universal international freephone number
UMEM	- utility memory

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Table 2-4
Acronyms and Mnemonics (Continued)

UMEM	- utility scratch memory
UMEM	- utility scratch memory indicator
UNA	- unassigned
UNAS	- unassigned
UNITNO	- unit number
UNLBUF	- unload buffer
UPA	- upper protect address
UPAD	- utility paging administration
UPD	- update
UPRG	- update disk address progress word
US	- utility system
USDS	- universal subscriber data structure
USDST	- universal subscriber data structure timer
USEC	- universal services echo canceller
USN	- U-Store number
USN	- universal scanner number
USTATUS	- unit status
USTATUS	- unit status register
UT	- unit type
UTILDS	- utility data set
UTL	- utilities
UTMN	- unit type and member number
UTMEM	- unit type member number
UTYN	- unit type name
UTYP	- unit type
UUD	- user to user data message
UUI	- user to user information
VALKEY	- validation key
VCA	- vacant code announcement
VCFR	- voiceband interface fault recovery
VCNT	- vacant code analysis
VCR	- voice path assurance cancellation rate
VDCAP	- voice / data capability
VF	- voice frequency
VFL	- voice frequency link
VIC	- voice interface controller
VIC	- voiceband interface controller
VIF	- voiceband interface frame
VIFCR	- voiceband interface frame critical register
VIU	- voiceband interface unit
VMOC	- voice message operations center
VPA	- voice path assurance
VSN	- volume serial number

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Table 2-4
Acronyms and Mnemonics (Continued)

VSS	- voice storage system
VSSID	- voice storage system identification
VT	- virtual terminal
VT	- virtual trunk
VTENG	- virtual terminal engineered
VTP	- virtual terminal protocol
W	- write
WANISID	- wide area telephone service automatic number identification / service identification
WATS	- wide area telecommunications service
WATS	- wide area telephone service
WATSBN	- wide area telephone service billing number
WPS	- words per second
WTT	- work task table
WZ1	- world zone
XA	- extended access
XADR	- extended address
XAPP	- access and print program
XC	- transceiver
XCPA	- transceiver pad adjustment
XCVR	- transceiver
XL4DRTC	- data rate transport capability
XM	- expanded memory
XMT	- transmit
XMTR	- transmitter
XPFR	- auxiliary processor fault recovery
XPWR	- miscellaneous power
XS	- extended non-secure call store
XSINDIR	- extended non-secure call store indirectness
XTC	- expanded time slot interchange controller
XTMTN	- transmission terminating test number
XTMTT	- transmission terminating test type
XTSI	- expanded time slot interchange
XTSTN	- transmission through switch test number
XTSTT	- transmission through switch test type
ZZ	- equal access digits

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SECTION 3
OUTPUT MESSAGE INDEX

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SECTION 3

OUTPUT MESSAGE INDEX

3.1 INTRODUCTION

Two indexes are contained in this section as an aid to selecting the 4ESS™ output messages in Part 2. The first index lists the action verbs used by the output messages and the volumes in which they appear. The second index is divided into five parts by volume (Volumes 1, 2, 3, 4 and 5), each listing the action verbs and their associated identification fields.

3.2 ACTION VERB BY VOLUME INDEX

Vol. 1	Vol. 2	Vol. 3	Vol. 4	Vol. 5
ALW	DUMP	EX(r-z)	REPT	RMV
ANALY	EX(a-q)	EXC		RST
AUD		IN		RTE
AUDIT		INH		RTR
CANCELLED		INIT		SCHED
CFR		LOAD		SET
CLR		MON		STOP
COPY		OP		SW
DGN		ORD		TEST
		PCRV		TRC
		RC		UPD
		RCCNL		VER
		RECOVERY		WTSG
		REPEAT		

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3.3 VOLUME 1 ALPHABETICAL INDEX

MESSAGE NAME	MESSAGE ID	START GENERIC ISSUE	
ALW:E2A	ALW:E2A	4E19	1
ALW:FNS	ALW:FNS	4E19	1
ALW:LIBMSG	ALW:LIBMSG	4E19	1
ALW:MUPAUD	ALW:MUPAUD	4E19	1.3
ALW:ONISUSP	ALW:ONISUSP	4E19	1
ALW:RC	ALW:RC	4E19	1
ALW:TUC	ALW:TUC	4E19 thru 4E21	1.3
ALW:USGMEAS	ALW:USGMEAS	4E19	1
ALW:UTIL	ALW:UTIL	4E19	1.1
ALW:UTILMSG	ALW:UTILMSG	4E19	1.1
ALW:VSSID	ALW:VSSID	4E19	1
ANALY:DIGROUP	ANALY:DIGROUP	4E19	1
ANALY:TLPFILE	ANALY:TLPF-ABO	4E19	1
ANALY:TLPFILE	ANALY:TLPF-NUL	4E19	1.4
ANALY:TLPFILE	ANALY:TLPF-SRH	4E22	1.4
ANALY:TLPFILE	ANALY:TLPF-SUM	4E19	1.4
ANALY:TLPFILE	ANALY:TLPF-SUS	4E22	1.4
ANALY:TLPFILE	ANALY:TLPF-TL1	4E19 thru 4E21	1.4
ANALY:TLPFILE	ANALY:TLPF-TL2	4E22	1.4
ANALY:TLPFILE	ANALY:TLPF-TL3	4E19	1.4
ANALY:TLPFILE	ANALY:TLPF-TL4	4E19 thru 4E21	1.4
AUD:	AUD:0	4E22	1.4
AUD:ERAPDATA	AUD:ERAPDATA	4E19	1
AUD:NUM	AUD:NUM	4E21	1.2
AUD:PUSTAT	AUD:PUSTAT	4E22	1.3
AUDIT AT a AUX	AUDIT:AT-AUX-CLIEN	4E21	1.4
AUDIT:SYSTEM-ERROR	AUDIT:SYS-ERR	4E19	1
AUDIT:SYSTEM-TROUBLE	AUDIT:SYS-TR	4E19	1
CANCELLED - WRONG	CANCELLED:WRONG	4E19	1
CFR:ALMGRP	CFR:ALMGRP	4E19	1
CFR:SIGLK	CFR:SIGLK-VFL	4E19	1
CLR:BP	CLR:BP-SCS	4E19	1
CLR:ERAPCOND	CLR:ERAPCOND	4E19	1
CLR:ERAPDATA	CLR:ERAPDATA	4E19	1
CLR:ERAPSRES	CLR:ERAPSRES	4E19	1
CLR:FNS	CLR:FNS	4E19	1
CLR:RCB	CLR:RCB	4E19	1
CLR:TLPQUEUE	CLR:TLPQUEUE	4E19	1
CLR:TRKSTAT	CLR:TRKSTAT	4E19	1.1
CLR:TSIBP	CLR:TSIBP	4E24R2	1.6

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MESSAGE NAME	MESSAGE ID	START GENERIC ISSUE	
CLR:UTIL	CLR:UTIL	4E19	1.1
CLR:UTILFLG	CLR:UTILFLG	4E21	1.2
COPY:A1B	COPY:A1B	4E22	1.3
COPY:CS	COPY:CS	4E22	1.3
COPY:CSS	COPY:CSS	4E22	1.3
COPY:FS	COPY:FS	4E22	1.3
COPY:OWBUF	COPY:OWBUF	4E19	1.1
COPY:PSS	COPY:PSS	4E22	1.3
COPY:aREG	COPY:REG	4E21	1.2
COPY:SCS	COPY:SCS	4E19	1
COPY:TAPE	COPY:TAPE	4E21 only	1.3
COPY:TSIFILE	COPY:TSIFILE	4E24	1.6
COPY:UMEM	COPY:UMEM	4E22	1.3
COPY:VFY;TAPE	COPY:VFY-TAPE	4E21 only	1.3
COPY:XS	COPY:XS	4E22	1.3
COPY:XTSI	COPY:XTSI	4E24R2	1.6
DGN:API	DGN:API	4E19	1
DGN:API	DGN:API-ILL	4E19	1
DGN:API	DGN:API-NOT	4E19	1
DGN:API	DGN:API-TERM	4E19	1
DGN:API	DGN:API-TEST	4E19	1
DGN:AUB	DGN:AUB	4E19	1
DGN:AUB	DGN:AUB-ILL	4E19	1
DGN:AUB	DGN:AUB-NOT	4E19	1
DGN:AUB	DGN:AUB-TERM	4E19	1
DGN:AUB	DGN:AUB-TEST	4E19	1
DGN:AUI	DGN:AUI	4E19	1
DGN:AUI	DGN:AUI-ILL	4E19	1
DGN:AUI	DGN:AUI-NOT	4E19	1
DGN:AUI	DGN:AUI-TERM	4E19	1
DGN:AUI	DGN:AUI-TEST	4E19	1
DGN:CC	DGN:CC	4E19	1
DGN:CC	DGN:CC-ILL	4E19	1
DGN:CC	DGN:CC-NOT	4E19	1
DGN:CC	DGN:CC-TERM	4E19	1
DGN:CC	DGN:CC-TEST	4E19	1.8
DGN:CS	DGN:CS	4E20	1.1
DGN:CS	DGN:CS-ILL	4E19	1
DGN:CS	DGN:CS-NOT	4E19	1
DGN:CS	DGN:CS-TERM	4E19	1

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MESSAGE NAME	MESSAGE ID	START GENERIC ISSUE	
DGN:CS	DGN:CS-TEST	4E19	1
DGN:CSB	DGN:CSB	4E20	1.2
DGN:CSB	DGN:CSB-ILL	4E19	1.2
DGN:CSB	DGN:CSB-NOT	4E19	1.2
DGN:CSB	DGN:CSB-TERM	4E19	1.2
DGN:CSB	DGN:CSB-TEST	4E19	1.2
DGN:DIF	DGN:DIF-ILL	4E19	1
DGN:DIF	DGN:DIF-MIS	4E19	1.1
DGN:DIF	DGN:DIF-NOT	4E19	1
DGN:DIF	DGN:DIF-PUB	4E19	1
DGN:DIF	DGN:DIF-TERM	4E19	1
DGN:DT	DGN:DT	4E19	1
DGN:DT	DGN:DT-ILL	4E19	1
DGN:DT	DGN:DT-NOT	4E19	1
DGN:DT	DGN:DT-TERM	4E19	1
DGN:DT	DGN:DT-TEST	4E19	1
DGN:EST	DGN:EST-ILL	4E19	1
DGN:EST	DGN:EST-MIS	4E19	1.1
DGN:EST	DGN:EST-NOT	4E19	1
DGN:EST	DGN:EST-PUB	4E19	1
DGN:EST	DGN:EST-TERM	4E19	1
DGN:IFB	DGN:IFB	4E19	1.2
DGN:IFB	DGN:IFB-ILL	4E19	1
DGN:IFB	DGN:IFB-NOT	4E19	1
DGN:IFB	DGN:IFB-TERM	4E19	1.2
DGN:IFB	DGN:IFB-TEST	4E19	1.2
DGN:IOUS	DGN:IOUS-BUS	4E19	1
DGN:IOUS	DGN:IOUS-ILL	4E19	1
DGN:IOUS	DGN:IOUS-NOT	4E19	1.1
DGN:IOUS	DGN:IOUS-TERM	4E19	1
DGN:IOUS	DGN:IOUS-TEST	4E19	1
DGN:MUP	DGN:MUP	4E19	1
DGN:MUP	DGN:MUP-ILL	4E19	1
DGN:MUP	DGN:MUP-NOT	4E19	1
DGN:MUP	DGN:MUP-TERM	4E19	1
DGN:MUP	DGN:MUP-TEST	4E19	1
DGN:NCLK	DGN:NCLK	4E19	1
DGN:NCLK	DGN:NCLK-ILL	4E19	1
DGN:NCLK	DGN:NCLK-NOT	4E19	1
DGN:NCLK	DGN:NCLK-PH	4E19	1

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Volume 1 Alphabetical Index (Continued)

MESSAGE NAME	MESSAGE ID	START	GENERIC ISSUE
DGN:NCLK	DGN:NCLK-TERM	4E19	1
DGN:PCD	DGN:PCD	4E19	1
DGN:PCD	DGN:PCD-ILL	4E19	1
DGN:PCD	DGN:PCD-NOT	4E19	1
DGN:PCD	DGN:PCD-TERM	4E19	1
DGN:PCD	DGN:PCD-TEST	4E19	1
DGN:PS	DGN:PS	4E20	1.1
DGN:PS	DGN:PS-ILL	4E19	1
DGN:PS	DGN:PS-NOT	4E19	1
DGN:PS	DGN:PS-TERM	4E19	1
DGN:PS	DGN:PS-TEST	4E19	1
DGN:PSB	DGN:PSB	4E20	1.2
DGN:PSB	DGN:PSB-ILL	4E19	1.2
DGN:PSB	DGN:PSB-NOT	4E19	1.2
DGN:PSB	DGN:PSB-TERM	4E19	1.2
DGN:PSB	DGN:PSB-TEST	4E19	1.2
DGN:PUB	DGN:PUB	4E19	1.1
DGN:PUB	DGN:PUB-ILL	4E19	1
DGN:PUB	DGN:PUB-NOT	4E19	1
DGN:PUB	DGN:PUB-PH	4E19	1.1
DGN:PUB	DGN:PUB-TERM	4E19	1
DGN:SCLK	DGN:SCLK	4E19	1.1
DGN:SCLK	DGN:SCLK-ILL	4E19	1
DGN:SCLK	DGN:SCLK-NOT	4E19	1
DGN:SCLK	DGN:SCLK-TERM	4E19	1
DGN:SCLK	DGN:SCLK-TEST	4E19	1.1
DGN:SCS	DGN:SCS-ILL	4E19	1
DGN:SCS	DGN:SCS-MIS	4E19	1.1
DGN:SCS	DGN:SCS-NOT	4E19	1
DGN:SCS	DGN:SCS-PUB	4E19	1
DGN:SCS	DGN:SCS-TERM	4E19	1
DGN:SFI	DGN:SFI-ILL	4E23 only	1.5
DGN:SFI	DGN:SFI-NOT	4E23 only	1.5
DGN:SFI	DGN:SFI-TERM	4E23 only	1.5
DGN:SFI	DGN:SFI-TEST	4E23 only	1.5
DGN:SP	DGN:SP-ILL	4E19	1
DGN:SP	DGN:SP-NOT	4E19	1
DGN:SP	DGN:SP-PUB	4E19	1.1
DGN:SP	DGN:SP-TERM	4E19	1
DGN:SP	DGN:SP-TEST	4E19	1.1

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MESSAGE NAME	MESSAGE ID	START GENERIC ISSUE	
DGN:SSD	DGN:SSD	4E19	1
DGN:SSD	DGN:SSD-ILL	4E19	1
DGN:SSD	DGN:SSD-NOT	4E19	1
DGN:SSD	DGN:SSD-TERM	4E19	1
DGN:SSD	DGN:SSD-TEST	4E19	1
DGN:TGR	DGN:TGR-ILL	4E19	1
DGN:TGR	DGN:TGR-INPROG	4E19	1
DGN:TGR	DGN:TGR-NOT	4E19	1
DGN:TGR	DGN:TGR-PH	4E19	1.1
DGN:TGR	DGN:TGR-PUB	4E19	1.1
DGN:TGR	DGN:TGR-TERM	4E19	1
DGN:TMSP	DGN:TMSP-CONTR	4E19	1.7
DGN:TMSP	DGN:TMSP-ILL	4E19	1
DGN:TMSP	DGN:TMSP-NOT	4E19	1
DGN:TMSP	DGN:TMSP-PH	4E19	1.1
DGN:TMSP	DGN:TMSP-PUB	4E19	1.1
DGN:TMSP	DGN:TMSP-TERM	4E19	1
DGN:TSI	DGN:TSI-ILL	4E21	1.3
DGN:TSI	DGN:TSI-NOT	4E21	1.3
DGN:TSI	DGN:TSI-PUB	4E21	1.3
DGN:TSI	DGN:TSI-TERM	4E21	1.3
DGN:TSI	DGN:TSI-TEST	4E19	1.3
DGN:TUC	DGN:TUC-ILL	4E19	1
DGN:TUC	DGN:TUC-NOT	4E19	1
DGN:TUC	DGN:TUC-TERM	4E19	1
DGN:TUC	DGN:TUC-TEST	4E19	1
DGN:VIF	DGN:VIF-FAULT	4E19	1
DGN:VIF	DGN:VIF-ILL	4E19	1
DGN:VIF	DGN:VIF-NOT	4E19	1
DGN:VIF	DGN:VIF-PUB	4E19	1
DGN:VIF	DGN:VIF-TERM	4E19	1
DGN:VIF	DGN:VIF-TEST	4E19	1
DGN:XPWR	DGN:XPWR	4E19	1
DGN:XPWR	DGN:XPWR-ILL	4E19	1
DGN:XPWR	DGN:XPWR-NOT	4E19	1
DGN:XPWR	DGN:XPWR-TERM	4E19	1
DGN:XPWR	DGN:XPWR-TEST	4E19	1

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MESSAGE NAME	MESSAGE ID	START GENERIC ISSUE	
DGN:XTSI	DGN:XTSI-ILL	4E24R2	1.6
DGN:XTSI	DGN:XTSI-NOT	4E24R2	1.6
DGN:XTSI	DGN:XTSI-PUB	4E24R2	1.6
DGN:XTSI	DGN:XTSI-TERM	4E24R2	1.6
DGN:XTSI	DGN:XTSI-TEST	4E24R2	1.6

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3.4 VOLUME 2 ALPHABETICAL INDEX

MESSAGE NAME	MESSAGE ID	START GENERIC ISSUE	
DUMP:A1B	DUMP:A1B	4E21	1.2
DUMP:AU	DUMP:AU	4E20	1.1
DUMP:CC	DUMP:CC	4E21	1.2
DUMP:CS	DUMP:CS	4E21	1.2
DUMP:CSS	DUMP:CSS	4E21	1.2
DUMP:DIF	DUMP:DIF	4E19	1
DUMP:DIF	DUMP:DIF-BUF	4E19	1
DUMP:DIF	DUMP:DIF-CREG	4E19	1
DUMP:DIF	DUMP:DIF-DIU	4E19	1
DUMP:DIF	DUMP:DIF-EXCRAM	4E19	1
DUMP:DIF	DUMP:DIF-IREG	4E19	1
DUMP:DIF	DUMP:DIF-MAPRT	4E19	1
DUMP:DIF	DUMP:DIF-MEM	4E19	1
DUMP:DIF	DUMP:DIF-PTSRPS	4E19	1
DUMP:DIF	DUMP:DIF-PTSS	4E19	1
DUMP:DIF	DUMP:DIF-SPSTS	4E19	1
DUMP:DIF	DUMP:DIF-SPTSS	4E19	1
DUMP:DIF	DUMP:DIF-TBIT	4E19	1
DUMP:DISK	DUMP:DISK-SCS	4E19	1
DUMP:DT	DUMP:DT-CREG	4E19	1
DUMP:DT	DUMP:DT-IREG	4E19	1
DUMP:EST	DUMP:EST-CREG	4E19	1
DUMP:EST	DUMP:EST-ESU	4E19	1
DUMP:EST	DUMP:EST-MEM	4E19	1
DUMP:EST	DUMP:EST-TSMEM	4E19	1
DUMP:FS	DUMP:FS	4E21	1.2
DUMP:IOUS	DUMP:IOUS	4E19	1
DUMP:LIBSYS	DUMP:LIBSYS	4E19	1
DUMP:LIBSYS,CLIENT	DUMP:LIBSYS-CL	4E19	1
DUMP:MCC	DUMP:MCC-CREG	4E19	1
DUMP:MCC	DUMP:MCC-MTX	4E19	1
DUMP:MEMORY	DUMP:MEMORY-SCS	4E19	1
DUMP:MUP	DUMP:MUP	4E22	1.3
DUMP:NCLK	DUMP:NCLK	4E19	1
DUMP:PSS	DUMP:PSS	4E21	1.2
DUMP:SCLK	DUMP:SCLK-M	4E19	1
DUMP:SCLK	DUMP:SCLK-NCSU	4E19	1
DUMP:SCS	DUMP:SCS-IREG	4E19	1
DUMP:SP	DUMP:SP-BUF	4E19	1
DUMP:SP	DUMP:SP-CREG	4E19	1

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Volume 2 Alphabetical Index (Continued)

MESSAGE NAME	MESSAGE ID	START GENERIC ISSUE	
DUMP:SP	DUMP:SP-IREG	4E19	1
DUMP:SP	DUMP:SP-MAT	4E19	1
DUMP:SP	DUMP:SP-MEM	4E19	1
DUMP:TAPE	DUMP:TAPE	4E20 thru 4E21	1.4
DUMP:TGR	DUMP:TGR-CREG	4E19	1
DUMP:TGR	DUMP:TGR-IREG	4E19	1
DUMP:TGR	DUMP:TGR-MEM	4E19	1
DUMP:TMSP	DUMP:TMSP-CONT	4E19	1
DUMP:TMSP	DUMP:TMSP-CREG	4E19	1
DUMP:TMSP	DUMP:TMSP-MEM	4E19	1
DUMP:TSI	DUMP:TSI-CREG	4E19	1
DUMP:TSI	DUMP:TSI-CREG-X	4E21 thru 4E23	1.6
DUMP:TSI	DUMP:TSI-HI	4E19	1
DUMP:TSI	DUMP:TSI-MEM	4E19	1
DUMP:TSI	DUMP:TSI-SPC	4E19	1
DUMP:TSIFILE	DUMP:TSIFILE	4E21	1.6
DUMP:TSIMEM	DUMP:TSIMEM	4E24R2	1.6
DUMP:UMEM	DUMP:UMEM	4E20	1.1
DUMP:VIF	DUMP:VIF-CREG	4E19	1
DUMP:VIF	DUMP:VIF-IREG	4E19	1
DUMP:VIF	DUMP:VIF-MEM	4E19	1
DUMP:XS	DUMP:XS	4E21	1.2
DUMP:XTSI	DUMP:XTSI-CREG	4E24R2	1.6
DUMP:XTSI	DUMP:XTSI-D3U	4E24	1.6
DUMP:XTSI	DUMP:XTSI-IBU	4E24R2	1.6
DUMP:XTSI	DUMP:XTSI-IREG	4E24R2	1.6
DUMP:XTSI	DUMP:XTSI-SPU	4E24	1.6
EX:API	EX:API	4E19	1
EX:API	EX:API-ADDR	4E19	1
EX:API	EX:API-ILL	4E19	1
EX:API	EX:API-LOOP	4E19	1
EX:API	EX:API-NOT	4E19	1
EX:API	EX:API-SUSP	4E19	1
EX:API	EX:API-TERM	4E19	1
EX:API	EX:API-TEST	4E19	1
EX:AUB	EX:AUB	4E19	1
EX:AUB	EX:AUB-ADDR	4E19	1
EX:AUB	EX:AUB-ILL	4E19	1
EX:AUB	EX:AUB-LOOP	4E19	1
EX:AUB	EX:AUB-NOT	4E19	1

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MESSAGE NAME	MESSAGE ID	START GENERIC ISSUE	
EX:AUB	EX:AUB-SUSP	4E19	1
EX:AUB	EX:AUB-TERM	4E19	1
EX:AUB	EX:AUB-TEST	4E19	1
EX:AUI	EX:AUI	4E19	1
EX:AUI	EX:AUI-ADDR	4E19	1
EX:AUI	EX:AUI-ILL	4E19	1
EX:AUI	EX:AUI-LOOP	4E19	1
EX:AUI	EX:AUI-NOT	4E19	1
EX:AUI	EX:AUI-SUSP	4E19	1
EX:AUI	EX:AUI-TERM	4E19	1
EX:AUI	EX:AUI-TEST	4E19	1
EX:CC	EX:CC	4E19	1
EX:CC	EX:CC-ADDR	4E19	1
EX:CC	EX:CC-ILL	4E19	1
EX:CC	EX:CC-LOOP	4E19	1
EX:CC	EX:CC-NOT	4E19	1
EX:CC	EX:CC-SUSP	4E19	1
EX:CC	EX:CC-TERM	4E19	1
EX:CC	EX:CC-TEST	4E19	1.8
EX:CMSLINK	EX:CMSLINK	4E19	1
EX:CS	EX:CS	4E19	1
EX:CS	EX:CS-ADDR	4E19	1
EX:CS	EX:CS-ILL	4E19	1
EX:CS	EX:CS-LOOP	4E19	1
EX:CS	EX:CS-NOT	4E19	1
EX:CS	EX:CS-SUSP	4E19	1
EX:CS	EX:CS-TERM	4E19	1
EX:CS	EX:CS-TEST	4E19	1
EX:CSB	EX:CSB	4E19	1.2
EX:CSB	EX:CSB-ADDR	4E19	1.2
EX:CSB	EX:CSB-ILL	4E19	1.2
EX:CSB	EX:CSB-LOOP	4E19	1.2
EX:CSB	EX:CSB-NOT	4E19	1.2
EX:CSB	EX:CSB-SUSP	4E19	1.2
EX:CSB	EX:CSB-TERM	4E19	1.2
EX:CSB	EX:CSB-TEST	4E19	1.2
EX:DIF	EX:DIF	4E19	1.1
EX:DIF	EX:DIF-ADDR	4E19	1
EX:DIF	EX:DIF-ILL	4E19	1
EX:DIF	EX:DIF-LOOP	4E19	1

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MESSAGE NAME	MESSAGE ID	START GENERIC ISSUE	
EX:DIF	EX:DIF-NOT	4E19	1
EX:DIF	EX:DIF-SUSP	4E19	1
EX:DIF	EX:DIF-TERM	4E19	1
EX:DIF	EX:DIF-TEST	4E19	1
EX:DT	EX:DT	4E19	1
EX:DT	EX:DT-ADDR	4E19	1
EX:DT	EX:DT-ILL	4E19	1
EX:DT	EX:DT-LOOP	4E19	1
EX:DT-NOT	EX:DT-NOT	4E19	1
EX:DT	EX:DT-SUSP	4E19	1
EX:DT	EX:DT-TERM	4E19	1
EX:DT	EX:DT-TEST	4E19	1
EX:EST	EX:EST-ADDR	4E19	1
EX:EST	EX:EST-ILL	4E19	1
EX:EST	EX:EST-LOOP	4E19	1
EX:EST	EX:EST-NOT	4E19	1
EX:EST	EX:EST-PUB	4E19	1.1
EX:EST	EX:EST-SUSP	4E19	1
EX:EST	EX:EST-TERM	4E19	1
EX:EST	EX:EST-TEST	4E19	1.1
EX:IFB	EX:IFB	4E19	1
EX:IFB	EX:IFB-ADDR	4E19	1
EX:IFB	EX:IFB-ILL	4E19	1
EX:IFB	EX:IFB-LOOP	4E19	1
EX:IFB	EX:IFB-NOT	4E19	1
EX:IFB	EX:IFB-SUSP	4E19	1
EX:IFB	EX:IFB-TERM	4E19	1
EX:IFB	EX:IFB-TEST	4E19	1
EX:IOUS	EX:IOUS	4E19	1
EX:IOUS	EX:IOUS-ADDR	4E19	1
EX:IOUS	EX:IOUS-ILL	4E19	1
EX:IOUS	EX:IOUS-LOOP	4E19	1
EX:IOUS	EX:IOUS-NOT	4E19	1
EX:IOUS	EX:IOUS-SUSP	4E19	1
EX:IOUS	EX:IOUS-TERM	4E19	1.1
EX:IOUS	EX:IOUS-TEST	4E19	1
EX:LIBSYS	EX:LIBSYS	4E19	1
EX:MUP	EX:MUP	4E19	1
EX:MUP	EX:MUP-ADDR	4E19	1
EX:MUP	EX:MUP-ILL	4E19	1

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MESSAGE NAME	MESSAGE ID	START	GENERIC ISSUE
EX:MUP	EX:MUP-LOOP	4E19	1
EX:MUP	EX:MUP-NOT	4E19	1
EX:MUP	EX:MUP-SUSP	4E19	1
EX:MUP	EX:MUP-TERM	4E19	1
EX:MUP	EX:MUP-TEST	4E19	1
EX:NCLK	EX:NCLK	4E19	1
EX:NCLK	EX:NCLK-ADDR	4E19	1
EX:NCLK	EX:NCLK-ILL	4E19	1
EX:NCLK	EX:NCLK-LOOP	4E19	1
EX:NCLK	EX:NCLK-NOT	4E19	1
EX:NCLK	EX:NCLK-SUSP	4E19	1
EX:NCLK	EX:NCLK-TERM	4E19	1.1
EX:NCLK	EX:NCLK-TEST	4E19	1
EX:PCD	EX:PCD	4E19	1
EX:PCD	EX:PCD-ADDR	4E19	1
EX:PCD	EX:PCD-ILL	4E19	1
EX:PCD	EX:PCD-LOOP	4E19	1
EX:PCD	EX:PCD-NOT	4E19	1
EX:PCD	EX:PCD-SUSP	4E19	1
EX:PCD	EX:PCD-TERM	4E19	1
EX:PCD	EX:PCD-TEST	4E19	1
EX:PS	EX:PS	4E19	1
EX:PS	EX:PS-ADDR	4E19	1
EX:PS	EX:PS-ILL	4E19	1
EX:PS	EX:PS-LOOP	4E19	1
EX:PS	EX:PS-NOT	4E19	1
EX:PS	EX:PS-SUSP	4E19	1
EX:PS	EX:PS-TERM	4E19	1
EX:PS	EX:PS-TEST	4E19	1
EX:PSB	EX:PSB	4E19	1.2
EX:PSB	EX:PSB-ADDR	4E19	1.2
EX:PSB	EX:PSB-ILL	4E19	1.2
EX:PSB	EX:PSB-LOOP	4E19	1.2
EX:PSB	EX:PSB-NOT	4E19	1.2
EX:PSB	EX:PSB-SUSP	4E19	1.2
EX:PSB	EX:PSB-TERM	4E19	1.2
EX:PSB	EX:PSB-TEST	4E19	1.2
EX:PUB	EX:PUB	4E19	1.1
EX:PUB	EX:PUB-ADDR	4E19	1
EX:PUB	EX:PUB-ILL	4E19	1

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Volume 2 Alphabetical Index (Continued)

MESSAGE NAME	MESSAGE ID	START GENERIC ISSUE	
EX:PUB	EX:PUB-LOOP	4E19	1
EX:PUB	EX:PUB-NOT	4E19	1
EX:PUB	EX:PUB-SUSP	4E19	1
EX:PUB	EX:PUB-TERM	4E19	1.1
EX:PUB	EX:PUB-TEST	4E19	1.1

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3.5 VOLUME 3 ALPHABETICAL INDEX

MESSAGE NAME	MESSAGE ID	START GENERIC ISSUE	
EX:SCLK	EX:SCLK	4E19	1.1
EX:SCLK	EX:SCLK-ADDR	4E19	1
EX:SCLK	EX:SCLK-ILL	4E19	1
EX:SCLK	EX:SCLK-LOOP	4E19	1
EX:SCLK	EX:SCLK-NOT	4E19	1
EX:SCLK	EX:SCLK-SUSP	4E19	1
EX:SCLK	EX:SCLK-TERM	4E19	1.1
EX:SCLK	EX:SCLK-TEST	4E19	1.1
EX:SCS	EX:SCS	4E19	1.1
EX:SCS	EX:SCS-ADDR	4E19	1
EX:SCS	EX:SCS-ILL	4E19	1
EX:SCS	EX:SCS-LOOP	4E19	1
EX:SCS	EX:SCS-NOT	4E19	1
EX:SCS	EX:SCS-SUSP	4E19	1
EX:SCS	EX:SCS-TERM	4E19	1
EX:SCS	EX:SCS-TEST	4E19	1
EX:SP	EX:SP-ADDR	4E19	1
EX:SP	EX:SP-ILL	4E19	1
EX:SP	EX:SP-LOOP	4E19	1
EX:SP	EX:SP-NOT	4E19	1
EX:SP	EX:SP-PUB	4E19	1.1
EX:SP	EX:SP-SUSP	4E19	1
EX:SP	EX:SP-TERM	4E19	1.1
EX:SP	EX:SP-TEST	4E19	1.1
EX:SSD	EX:SSD	4E19	1
EX:SSD	EX:SSD-ADDR	4E19	1
EX:SSD	EX:SSD-ILL	4E19	1
EX:SSD	EX:SSD-LOOP	4E19	1
EX:SSD	EX:SSD-NOT	4E19	1
EX:SSD	EX:SSD-SUSP	4E19	1
EX:SSD	EX:SSD-TERM	4E19	1
EX:SSD	EX:SSD-TEST	4E19	1
EX:TGR	EX:TGR-ADDR	4E19	1
EX:TGR	EX:TGR-ILL	4E19	1
EX:TGR	EX:TGR-LOOP	4E19	1
EX:TGR	EX:TGR-NOT	4E19	1
EX:TGR	EX:TGR-PUB	4E19	1.1
EX:TGR	EX:TGR-SUSP	4E19	1
EX:TGR	EX:TGR-TERM	4E19	1.1
EX:TGR	EX:TGR-TEST	4E19	1.1

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Volume 3 Alphabetical Index (Continued)

MESSAGE NAME	MESSAGE ID	START GENERIC ISSUE	
EX:TMSP	EX:TMSP-ADDR	4E19	1
EX:TMSP	EX:TMSP-CONTR	4E19	1
EX:TMSP	EX:TMSP-ILL	4E19	1
EX:TMSP	EX:TMSP-LOOP	4E19	1
EX:TMSP	EX:TMSP-NOT	4E19	1
EX:TMSP	EX:TMSP-PUB	4E19	1.1
EX:TMSP	EX:TMSP-SUSP	4E19	1
EX:TMSP	EX:TMSP-TERM	4E19	1.1
EX:TMSP	EX:TMSP-TEST	4E19	1.1
EX:TSI	EX:TSI-ADDR	4E21	1.3
EX:TSI	EX:TSI-ILL	4E21	1.3
EX:TSI	EX:TSI-LOOP	4E21	1.3
EX:TSI	EX:TSI-NOT	4E21	1.3
EX:TSI	EX:TSI-PUB	4E21	1.3
EX:TSI	EX:TSI-SUSP	4E21	1.3
EX:TSI	EX:TSI-TERM	4E21	1.3
EX:TSI	EX:TSI-TEST	4E19	1.3
EX:VIF	EX:VIF	4E19	1
EX:VIF	EX:VIF-ILL	4E19	1
EX:VIF	EX:VIF-NOT	4E19	1
EX:VIF	EX:VIF-PUB	4E19	1
EX:VIF	EX:VIF-SUSP	4E19	1
EX:VIF	EX:VIF-TERM	4E19	1.1
EX:VIF	EX:VIF-TEST	4E19	1
EX:XPWR	EX:XPWR	4E19	1
EX:XPWR	EX:XPWR-ADDR	4E19	1
EX:XPWR	EX:XPWR-ILL	4E19	1
EX:XPWR	EX:XPWR-LOOP	4E19	1
EX:XPWR	EX:XPWR-NOT	4E19	1
EX:XPWR	EX:XPWR-SUSP	4E19	1
EX:XPWR	EX:XPWR-TERM	4E19	1
EX:XPWR	EX:XPWR-TEST	4E19	1
EX:XTSI	EX:XTSI-ADDR	4E24R2	1.6
EX:XTSI	EX:XTSI-ILL	4E24R2	1.6
EX:XTSI	EX:XTSI-LOOP	4E24R2	1.6
EX:XTSI	EX:XTSI-NOT	4E24R2	1.6
EX:XTSI	EX:XTSI-PUB	4E24R2	1.6
EX:XTSI	EX:XTSI-SUSP	4E24R2	1.6
EX:XTSI	EX:XTSI-TERM	4E24R2	1.6
EX:XTSI	EX:XTSI-TEST	4E24R2	1.6

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Volume 3 Alphabetical Index (Continued)

MESSAGE NAME	MESSAGE ID	START GENERIC ISSUE	
EXC:UTILDS	EXC:UTILDS	4E19	1.1
IN:CGALIST	IN:CGALIST	4E19	1
IN:ERAPCOND	IN:ERAPCOND	4E19	1
IN:OWBUF	IN:OWBUF	4E21	1.2
IN:UTILDS	IN:UTILDS	4E19	1.1
INH:E2A	INH:E2A	4E19	1
INH:LIBMSG	INH:LIBMSG	4E19	1
INH:MUPAUD	INH:MUPAUD	4E19	1.3
INH:RC	INH:RC	4E19	1
INH:SP	INH:SP	4E19	1
INH:TUC	INH:TUC	4E19 thru 4E21	1.3
INH:USGMEAS	INH:USGMEAS	4E19	1
INH:UTIL	INH:UTIL	4E19	1.1
INH:UTILMSG	INH:UTILMSG	4E19	1.1
INH:VSSID	INH:VSSID	4E19	1
INIT:ALM	INIT:ALM	4E19	1
INIT:DGSTAT	INIT:DGSTAT	4E21R4	1.3
INIT:LIBSYS	INIT:LIBSYS	4E22	1.3
INIT:PMSTAT	INIT:PMSTAT	4E22	1.3
INIT:SCS	INIT:SCS	4E19	1.1
INIT:TLPQUEUE	INIT:TLPQUEUE	4E19	1
LOAD:A1B	LOAD:A1B	4E21	1.2
LOAD:CC	LOAD:CC	4E19	1.1
LOAD:CS	LOAD:CS	4E21	1.2
LOAD:CSS	LOAD:CSS	4E21	1.2
LOAD:DISK	LOAD:DISK-SCS	4E19	1
LOAD:EST	LOAD:EST-CREG	4E19	1
LOAD:EST	LOAD:EST-ESU	4E19	1
LOAD:EST	LOAD:EST-LLMEM	4E19	1
LOAD:LIBSYS	LOAD:LIBSYS	4E22	1.4
LOAD:MCC	LOAD:MCC	4E19	1
LOAD:MEMORY	LOAD:MEMORY-SCS	4E19	1
LOAD:MUP	LOAD:MUP	4E22	1.3
LOAD:NCLK	LOAD:NCLK	4E19	1
LOAD:PSS	LOAD:PSS	4E21	1.2
LOAD:aREG	LOAD:REG	4E19	1.1
LOAD:SCLK	LOAD:SCLK-NCSU	4E19	1
LOAD:SP	LOAD:SP-ABORT	4E19	1
LOAD:SP	LOAD:SP-CYCLE	4E19	1
LOAD:SP	LOAD:SP-IREG	4E19	1

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Volume 3 Alphabetical Index (Continued)

MESSAGE NAME	MESSAGE ID	START	GENERIC ISSUE
LOAD:SP	LOAD:SP-MEM	4E19	1
LOAD:SP	LOAD:SP-TDN	4E19	1
LOAD:TMSP	LOAD:TMSP-CREG	4E19	1
LOAD:TMSP	LOAD:TMSP-IREG	4E19	1
LOAD:TMSP	LOAD:TMSP-MEM	4E19	1
LOAD:TSI	LOAD:TSI-CREG	4E19	1.3
LOAD:TSI	LOAD:TSI-MEM	4E19	1
LOAD:TSIFILE	LOAD:TSIFILE	4E21	1.3
LOAD:TSIMEM	LOAD:TSIMEM	4E24R2	1.6
LOAD:UMEM	LOAD:UMEM	4E19	1.1
LOAD:VIF	LOAD:VIF	4E19	1
LOAD:XS	LOAD:XS	4E21	1.2
LOAD:XTSI	LOAD:XTSI-D3U	4E21	1.6
LOAD:XTSI IBU	LOAD:XTSI-IBU	4E24R2	1.6
LOAD:XTSI	LOAD:XTSI-IREG	4E21	1.6
LOAD:XTSI	LOAD:XTSI-SPU	4E22	1.6
MON:	MON:0	4E19	1
MON:IAOFC	MON:IAOFC	4E19	1
MON:IATSGCNT	MON:IATSGCNT	4E19	1
MON:MCCREPT	MON:MCCREPT	4E19	1
MON:NCATANOM	MON:NCATANOM	4E19	1
MON:SUTRAP	MON:SUTRAP	4E19	1
OP:ALMSTAT	OP:ALMSTAT	4E19	1
OP:AUTOMATIC NETWORK	OP:ANMC	4E19	1
OP:ANNSTAT	OP:ANNSTAT	4E19	1
OP:APS 0	OP:APS-0	4E19	1
OP:APSTATUS	OP:APSTATUS	4E19	1
OP:AUDSTAT	OP:AUDSTAT	4E19	1.3
OP:BANDSTAT	OP:BANDSTAT	4E19	1
OP:BP	OP:BP-SCS	4E19	1
OP:CCSTATUS	OP:CCSTATUS	4E20	1.1
OP:CGA	OP:CGA	4E19	1
OP:CGALIST	OP:CGALIST	4E19	1
OP:CHAN	OP:CHAN	4E19	1
OP:CHANDATA	OP:CHANDATA	4E27	1.9
OP:CSSTATUS	OP:CSSTATUS	4E21	1.2
OP:DCONN	OP:DCONN	4E19	1
OP:DGSTAT	OP:DGSTAT	4E21	1.3
OP:DTAC	OP:DTAC	4E21	1.2
OP:DUSTATUS	OP:DUSTATUS	4E19	1

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Volume 3 Alphabetical Index (Continued)

MESSAGE NAME	MESSAGE ID	START	GENERIC ISSUE
OP:ERAP ABORTED	OP:ERAP-ABORT	4E19	1
OP:ERAPCOND	OP:ERAPCOND	4E19	1
OP:ERAPCOND;SUM	OP:ERAPCOND-SM	4E19	1
OP:ERAPDATA	OP:ERAPDATA	4E19	1
OP:ERAPDATA ABORTED	OP:ERAPDATA-AB	4E19	1
OP:ERAPSRES	OP:ERAPSRES	4E19	1
OP:ERAPSRES;COND	OP:ERAPSRES-CO	4E19	1
OP:ERAPSRES;SUM	OP:ERAPSRES-SM	4E19	1
OP:ERAPSUM	OP:ERAPSUM	4E19	1
OP:ERAPSUM;DETL	OP:ERAPSUM-DETL	4E19	1
OP:FERAHIST	OP:FERAHIST	4E19	1
OP:FHCSTAT	OP:FHCSTAT	4E19	1
OP:IFBSTAT	OP:IFBSTAT	4E19	1
OP:INHINT	OP:INHINT	4E19	1
OP:IODSC	OP:IODSC	4E19	1
OP:LCHAN	OP:LCHAN	4E19	1
OP:LIBSTAT	OP:LIBSTAT	4E22	1.4
OP:MACLI	OP:MACLI	4E20	1.1
OP:MEASREPT	OP:MEASREPT	4E19	1
OP:MEASREPT	OP:MEASREPT-MS	4E19	1
OP:MEASREPT	OP:MEASREPT-SP	4E19	1
OP:MEASREPT	OP:MEASREPT-TS	4E19	1
OP:MEASTSI	OP:MEASTSI	4E19	1
OP:MANUAL NETWORK	OP:MNMC	4E19	1
OP:MONTAB	OP:MONTAB	4E19	1
OP:MONTAB	OP:MONTAB-EMPTY	4E19	1
OP:MSGRCDF,FS	OP:MSGRCDF	4E19	1
OP:MSGRCDF,FS	OP:MSGRCDF-FS	4E19	1
OP:MUPAUD	OP:MUPAUD	4E19	1.3
OP:MUPSTAT	OP:MUPSTAT	4E20	1.1
OP:NCATANOM	OP:NCATANOM	4E19	1
OP:NCSU	OP:NCSU-AARSBO	4E19	1
OP:NCSU	OP:NCSU-AIA	4E19	1
OP:NCSU	OP:NCSU-ALTOUT	4E19	1
OP:NCSU	OP:NCSU-NRE	4E19	1
OP:NCSU	OP:NCSU-RAASBO	4E19	1
OP:NCSU	OP:NCSU-REGOUT	4E19	1
OP:NCSU	OP:NCSU-ROASBY	4E19	1
OP:NCSU	OP:NCSU-RSOAAO	4E19	1
OP:NCSU	OP:NCSU-STNORM	4E19	1

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Volume 3 Alphabetical Index (Continued)

MESSAGE NAME	MESSAGE ID	START GENERIC ISSUE	
OP:NCSU	OP:NCSU-UNEQPT	4E19	1
OP:NTWKTAB	OP:NTWKTAB	4E19	1
OP:OA	OP:OA	4E19	1
OP:OOSUNITS	OP:OOSUNITS	4E19	1.1
OP:ORNU COMPLETED	OP:ORNU-COMPLET	4E19	1
OP:OVERLOAD	OP:OVERLOAD	4E19	1.3
OP:PERIFINH	OP:PERIFINH	4E22	1.3
OP:PHSEHST	OP:PHSEHST	4E19	1
OP:PMOS	OP:PMOS	4E24R2	1.6
OP:PMSTAT	OP:PMSTAT	4E22	1.3
OP:PSSTATUS	OP:PSSTATUS	4E21	1.2
OP:RASTAT	OP:RASTAT	4E19	1
OP:RCBORNU	OP:RCBORNU	4E19	1
OP:RCBSPACE	OP:RCBSPACE	4E19	1
OP:RCRORNU MSG STOPPED	OP:RCRORNU	4E19	1
OP:RCRORNU	OP:RCRORNU-ROL	4E19	1
OP:RINGMNTR	OP:RINGMNTR	4E19	1
OP:RTSTAT	OP:RTSTAT	4E19	1
OP:SCHAN	OP:SCHAN	4E19R3	1.8
OP:SCRN	OP:SCRN	4E19	1.4
OP:SDC	OP:SDC	4E24R2	1.6
OP:SDC (APS SERVICE DEGRADING CONDITIONS)	OP:SDC-APS	4E19	1
OP:SDEXMLST	OP:SDEXMLST	4E19	1
OP:SDLST	OP:SDLST	4E19	1.8
OP:SDYGRP	OP:SDYGRP	4E19	1
OP:SECTORS	OP:SECTORS	4E19	1
OP:SFISTAT	OP:SFISTAT	4E23 only	1.5
OP:SLCSTAT	OP:SLCSTAT	4E19	1
OP:SLKSTAT	OP:SLKSTAT-1	4E19	1
OP:SLKSTAT	OP:SLKSTAT-2	4E19	1
OP:SOAK	OP:SOAK	4E19	1
OP:SSN	OP:SSN-CBO	4E19	1
OP:SSN	OP:SSN-DTI	4E19	1
OP:SSN	OP:SSN-ESM	4E19	1
OP:SSN	OP:SSN-HCE	4E19	1
OP:SSN	OP:SSN-IPC	4E19	1
OP:SSN	OP:SSN-ISN	4E19	1
OP:SSN	OP:SSN-LCE	4E19	1
OP:SSN	OP:SSN-LINKSTAT	4E19	1

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Volume 3 Alphabetical Index (Continued)

MESSAGE NAME	MESSAGE ID	START GENERIC ISSUE	
OP:SSN	OP:SSN-RT	4E19	1
OP:SSN	OP:SSN-RVT	4E19	1
OP:SSN	OP:SSN-SAL	4E19	1
OP:SSN	OP:SSN-SAU	4E19	1
OP:SSN	OP:SSN-SLKSTAT	4E19	1
OP:SSN	OP:SSN-STAT	4E19	1
OP:SSN	OP:SSN-TST	4E19	1
OP:SVCSTAT	OP:SVCSTAT	4E19	1.1
OP:SYNCLIST	OP:SYNCLIST	4E20	1.3
OP:TANTOTAN	OP:TANTOTAN	4E19	1
OP:TERAWTSG	OP:TERAWTSG	4E19	1
OP:TLPQUEUE	OP:TLPQUEUE	4E22	1.4
OP:TONESTAT	OP:TONESTAT	4E19	1
OP:TRAPSTAT	OP:TRAPSTAT	4E19	1
OP:TRKHOLD	OP:TRKHOLD	4E19	1
OP:TRKSTAT	OP:TRKSTAT	4E19	1.7
OP:TSGHC	OP:TSGHC	4E24	1.5
OP:TSGHC,CIN a;LINK	OP:TSGHC-LINK	4E19	1
OP:TSGSTAT;DETL	OP:TSGSTAT-DTL	4E19	1
OP:TSGSTAT;SUM	OP:TSGSTAT-SUM	4E19	1
OP:TSIBP	OP:TSIBP	4E24R2	1.6
OP:UTILDS	OP:UTILDS-1	4E19	1
OP:UTILDS	OP:UTILDS-2	4E19	1
OP:UTILMTCH	OP:UTILMTCH	4E21	1.2
OP:UTLDSTAB	OP:UTLDSTAB	4E19	1
OP:VCNT	OP:VCNT-THRESH	4E19	1
OP:VCNT	OP:VCNT-WORST	4E19	1
OP:XALM	OP:XALM	4E21	1.3
OP:XPWRSTAT	OP:XPWRSTAT	4E19	1
ORD:	ORD:0	4E19	1
ORD:DS1LOOP	ORD:DS1LOOP	4E22	1.3
ORD:DS3LOOP	ORD:DS3LOOP	4E22	1.6
ORD:ES	ORD:ES	4E19	1
ORD:{SCAN SD TBITS}	ORD:F	4E19	1
ORD:RF	ORD:RF	4E19	1
ORD:TANTOTAN	ORD:TANTOTAN	4E19	1
ORD:TL	ORD:TL	4E19	1
ORD:VSS	ORD:VSS-RETRY	4E19	1
PCRV:	PCRV:0	4E21	1.2
RC:COMMENT	RC:COMMENT	4E19	1

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Volume 3 Alphabetical Index (Continued)

MESSAGE NAME	MESSAGE ID	START GENERIC ISSUE	
RC:IN PROGRESS	RC:IN-PROGRESS	4E19	1
RC:MESSAGE REJECTED	RC:MESSAGE-REJ	4E19	1
RC:MISC	RC:MISC	4E19	1
RC:ORNU	RC:ORNU	4E19	1
RC:ORNU a SUCCESSFULLY	RC:ORNU-ACCEPT	4E19	1
RC:ORNU a STOPPED:INTERNAL	RC:ORNU-INTERN	4E19	1
RC:ORNU a STOPPED:MESSAGE	RC:ORNU-MESSAG	4E19	1
RC:ORNU a REJECTED	RC:ORNU-REJ-AL	4E19	1
RC:ORNU a REJECTED FOR	RC:ORNU-REJ-FOR	4E19	1
RC:ORNU	RC:ORNU-REJ-INC	4E19	1
RC:ORNU a REJECTED	RC:ORNU-REJ-NO	4E19	1
RC:STOPPE	RC:STOPPED	4E19	1
RCCNL:RCBORNU	RCCNL:RCBORN-A	4E19	1
RCCNL:RCBORNU	RCCNL:RCBORN-S	4E19	1
RCCNL:ROLLBACK	RCCNL:RLBK-EMPT	4E19	1
RCCNL:ROLLBACK	RCCNL:RLBK-LKO	4E19	1
RCCNL:ROLLBACK	RCCNL:RLBK-MKEY	4E19	1
RCCNL:ROLLBACK	RCCNL:RLBK-REST	4E19	1
RCCNL:ROLLBACK	RCCNL:ROLLBACK	4E19	1
RECOVERY:SR	RECOVERY:SR	4E21	1.2
REPEAT LATER	REPEAT:LATER	4E19	1

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3.6 VOLUME 4 ALPHABETICAL INDEX

MESSAGE NAME	MESSAGE ID	START GENERIC ISSUE	
REPT:	REPT:0	4E27R2	1.8.1
REPT:(A-LEV)	REPT:A-LEV:0	4E27R2	1.8.1
REPT:(B-LEV)	REPT:B-LEV:0	4E27R2	1.8.1
REPT:(BLM)	REPT:BLM:0	4E27R2	1.8.1
REPT:(C-LEV)	REPT:C-LEV:0	4E27R2	1.8.1
REPT:(D-LEV)	REPT:D-LEV:0	4E27R2	1.8.1
REPT:(E-LEV)	REPT:E-LEV:0	4E27R2	1.8.1
REPT:(ERSTP)	REPT:ERSTP:0	4E27R2	1.8.1
REPT:(F-LEV)	REPT:F-LEV:0	4E27R2	1.8.1
REPT:(INT)	REPT:INT:0	4E27R2	1.8.1
REPT:(INTJ)	REPT:INTJ:0	4E27R2	1.8.1
REPT:(K-LEV)	REPT:K-LEV:0	4E27R2	1.8.1
REPT:1A FILE	REPT:1A-FILE	4E19	1
REPT:ABLE	REPT:ABLE	4E19	1
REPT:AC	REPT:AC-PWR-RM	4E19	1
REPT:AC	REPT:AC-PWR-RS	4E19	1
REPT:ACK TIMEOUT	REPT:ACK	4E19	1
REPT:ACT CC	REPT:ACT	4E19	1
REPT:ACV	REPT:ACV	4E19	1.3
REPT:ADS FUNCTION	REPT:ADS-ACTIV	4E19	1
REPT:ADS FUNCTION	REPT:ADS-DUPL	4E19	1
REPT:ADS FUNCTION	REPT:ADS-FUN-S	4E19 thru 4E21	1.4
REPT:ADS FUNCTION	REPT:ADS-FUN-ST	4E19	1
REPT:ADS PROCEDURAL ERROR	REPT:ADS-PROC	4E19	1
REPT:a ALARM	REPT:ALARM	4E19	1
REPT:a ALM	REPT:ALM	4E19	1
REPT:ALW	REPT:ALW	4E19	1
REPT:AMA and ICDR	REPT:AMA-ICDR-1A	4E19	1
REPT:AMA and ICDR RECORDING	REPT:AMA-ICDR-REC	4E19	1
REPT:AMA and ICDR TRANSFER	REPT:AMA-ICDR-TR	4E19	1
REPT:ANSWERED	REPT:ANSWERED	4E19	1
REPT:AOOC	REPT:AOOC	4E19	1
REPT:AOOC	REPT:AOOC-ROUT	4E19	1
REPT:APMSG	REPT:APMSG	4E19	1
REPT:APS	REPT:APS	4E19	1
REPT:ATP NODE	REPT:ATP-NODE	4E20	1.1
REPT:AUD ALM CUTOFF	REPT:AUD-CUTOFF	4E19	1
REPT:AUD ALM RSTD	REPT:AUD-RSTD	4E19	1
REPT:AUDIT	REPT:AUDIT	4E19	1
REPT:AUTO	REPT:AUTO	4E19	1

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Volume 4 Alphabetical Index (Continued)

MESSAGE NAME	MESSAGE ID	START GENERIC ISSUE	
REPT:BANDSTAT	REPT:BANDSTAT	4E19	1
REPT:BP	REPT:BP-SCS	4E19	1
REPT CALL FAILED TO	REPT:CALL	4E19	1
REPT:CALL	REPT:CALL-9	4E19	1
REPT:CALL FAILED BECAUSE	REPT:CALL-BECA	4E19	1
REPT:CALL	REPT:CALL-C	4E19	1
REPT:CALL FAILED	REPT:CALL-FAILED	4E19	1
REPT:CAMA	REPT:CAMA	4E19	1
REPT:CAMA TRK	REPT:CAMA-TRK	4E19	1
REPT:CANCEL OVERLOAD	REPT:CANCEL	4E19	1
REPT:CARRIER	REPT:CARRIER	4E19	1
REPT:CAT01	REPT:CAT01	4E19	1
REPT:CAT03	REPT:CAT03	4E19	1
REPT:CC	REPT:CC	4E19	1
REPT:CC a CLOCK	REPT:CC-CLOCK	4E19 only	1.2
REPT:CC EER	REPT:CC-EER	4E19	1
REPT:CC a PREFETCH	REPT:CC-PREFETCH	4E26	1.7
REPT:CCIS DOC	REPT:CCIS	4E19	1
REPT:CCISTRAP	REPT:CCISTRAP	4E19	1
REPT:CGA	REPT:CGA	4E19	1
REPT:CIN	REPT:CIN	4E22	1.3
REPT:CMAP	REPT:CMAP	4E19	1
REPT:CMS;CIN	REPT:CMS-CIN	4E19	1
REPT:CMS FAILURE	REPT:CMS-FAILU	4E19	1
REPT:CMS TROUBLE	REPT:CMS-TROUB	4E19	1
REPT:CODE	REPT:CODE	4E19	1
REPT:CS	REPT:CS	4E19	1
REPT:DEFENSIVE	REPT:DEFENSIVE	4E19	1
REPT:DEMOUNT	REPT:DEMOUNT	4E19	1
REPT:DGSTAT	REPT:DGSTAT-SL	4E19	1
REPT:DIAL UP PORT	REPT:DIAL-ABOR	4E19	1
REPT:DIAL UP PORT	REPT:DIAL-COMP	4E19	1
REPT:DIAL UP PORT	REPT:DIAL-FAIL	4E19	1
REPT:DIAL UP PORT	REPT:DIAL-INV	4E19	1
REPT:DIAL UP PORT	REPT:DIAL-MAIL	4E19	1
REPT:DIAL UP PORT	REPT:DIAL-STAR	4E19	1
REPT:DIAL UP PORT	REPT:DIAL-UP	4E19	1
REPT:DOC	REPT:DOC	4E19	1
REPT:DTFR INH	REPT:DTFR	4E19	1
REPT:E2A	REPT:E2A	4E19	1

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MESSAGE NAME	MESSAGE ID	START GENERIC ISSUE	
REPT:END	REPT:END	4E19	1
REPT:ERAP	REPT:ERAP	4E19	1
REPT:ERAT CONDITION	REPT:ERAT	4E19	1
REPT:ERROR IN TRANSLATING OUTPUT MESSAGE	REPT:ERROR	4E19	1
REPT:ERROR STOP	REPT:ERROR-STOP	4E19	1.3
REPT:EST	REPT:EST	4E19	1
REPT:a-EXCESSIVE BOOTSTRAPS	REPT:EXCS-BOOT	4E19	1
REPT:FAILURE	REPT:FAILURE	4E19	1
REPT:FAN AIR FLOW	REPT:FAN-AIR-FLOW	4E21	1.3
REPT:FAN AND FUSE ALARM	REPT:FAN-FUSEALRM	4E21	1.3
REPT:FAN SYSTEM TROUBLE	REPT:FAN-ST	4E19	1.3
REPT:FEAT_CHK	REPT:FEAT-CHK	4E19	1
REPT:FERA	REPT:FERA	4E19	1
REPT:FHCTHRESH	REPT:FHCTHRESH	4E19	1
REPT:FILE	REPT:FILE	4E19	1
REPT:FOR ATR	REPT:FOR-ATR	4E19	1
REPT:FUSE ALARM	REPT:FUSE-ALARM	4E21	1.3
REPT:GAP CONTROL	REPT:GAP-CNTRL	4E19	1
REPT:IAOFC	REPT:IAOFC	4E24	1.5
REPT:IATSG	REPT:IATSG	4E24	1.5
REPT:INFO1	REPT:INFO1	4E19	1
REPT:INVD ENTRY CC FR PROG	REPT:INVD	4E19	1
REPT:IOCP	REPT:IOCP	4E19	1
REPT:IOUS	REPT:IOUS	4E19	1
REPT:LCHAN	REPT:LCHAN-AT	4E19	1
REPT:LCHAN	REPT:LCHAN-AUDIT	4E19	1
REPT:LCHAN	REPT:LCHAN-ERR	4E19	1
REPT:LCHAN	REPT:LCHAN-TIME	4E19	1
REPT:LIB	REPT:LIB	4E19	1
REPT:MACLI	REPT:MACLI	4E19	1
REPT:MACLI-GUTL	REPT:MACLI-GUTL	4E23R3	1.4
REPT:MACP	REPT:MACP	4E19	1
REPT:MAN	REPT:MAN	4E19	1
REPT:MANUAL	REPT:MANUAL	4E19	1
REPT: MANUAL OVERRIDE	REPT:MANUAL-OR	4E19	1
REPT:MANUAL	REPT:MANUAL-OV	4E19	1
REPT:MCA DOC	REPT:MC	4E19	1
REPT:MC3 DOC LEVEL	REPT:MC3	4E19	1
REPT:MCC	REPT:MCC	4E20	1.1

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MESSAGE NAME	MESSAGE ID	START	GENERIC ISSUE
REPT:MCC WRITE	REPT:MCCWRITE	4E19	1
REPT:MUP DUPLEX FAILED	REPT:MDF	4E19	1
REPT:MEASREPT	REPT:MEASREPT	4E19	1
REPT:MSG	REPT:MSG	4E19	1
REPT:NCATANOM	REPT:NCATANOM	4E19	1
REPT:NCSU	REPT:NCSU-FAST	4E19	1
REPT:NCSU	REPT:NCSU-FREE	4E19	1
REPT:NCSU	REPT:NCSU-FRNT	4E19	1
REPT:NCSU	REPT:NCSU-HR	4E19	1
REPT:NCSU	REPT:NCSU-NCLK	4E19	1
REPT:NCSU	REPT:NCSU-OFCE	4E19	1
REPT:NCSU	REPT:NCSU-OSC	4E19	1
REPT:NCSU	REPT:NCSU-STBY	4E19	1
REPT:NETEX	REPT:NETEX	4E19	1
REPT:NM TBL	REPT:NM	4E19	1
REPT:NTC	REPT:NTC	4E19	1
REPT:OA	REPT:OA	4E19	1
REPT:OSOR	REPT:OSOR-STAT	4E19	1
REPT:OTAN	REPT:OTAN	4E22	1.3
REPT:OVER	REPT:OVER	4E19	1
REPT:OVER	REPT:OVER-BILL	4E19	1
REPT:OVL	REPT:OVL	4E19	1
REPT:PA	REPT:PA	4E19	1.3
REPT:PFLR	REPT:PFLR	4E19	1
REPT:PHASE INFORMATION	REPT:PHASE-INF	4E19	1
REPT: PHASE NOT	REPT:PHASE-NOT	4E19	1
REPT:PMOS	REPT:PMOS-LVS	4E19	1
REPT:PMOS	REPT:PMOS-TSKID	4E24R2	1.6
REPT:PMOS	REPT:PMOS-UTIL	4E19	1
REPT:POWER DOWN	REPT:POWER-DOWN	4E19	1
REPT:PROG	REPT:PROG	4E23R3	1.4
REPT:PROTOCOL HANDLER	REPT:PROT-HDLR	4E19	1
REPT:PS a FORCED OOS	REPT:PS-FRC	4E19	1
REPT:PUFR	REPT:PUFR	4E22	1.4
REPT:PULSE SCE EER NO CC SW	REPT:PULSE	4E19	1
REPT:PWR	REPT:PWR	4E19	1
REPT:RATE BASED REROUTE	REPT:RATE-BASE	4E19	1
REPT:RAW	REPT:RAW	4E19	1
REPT:RC ACTIVATION	REPT:RC-ACTIV	4E19	1
REPT:RC DUMP	REPT:RC-DUMP	4E19	1

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MESSAGE NAME	MESSAGE ID	START GENERIC ISSUE	
REPT:RC SYSTEM ERROR			
DETECTED	REPT:RC-ERROR	4E19	1
REPT:RC IB DUMP	REPT:RC-IB	4E19	1
REPT:RC INFORMATION	REPT:RC-INFO	4E19	1
REPT:RC MESSAGE PROCESSING			
STOPPED:INTERRUPT	REPT:RC-INTERR	4E19	1
REPT:RC MESSAGE PROCESSING			
STOPPED:AUDIT	REPT:RC-MESS-A	4E19	1
REPT:RC MESSAGE PROCESSING			
STOPPED:DISK	REPT:RC-MESS-P	4E19	1
REPT:RC MESSAGE STOPPED	REPT:RC-MESS-S	4E19	1
REPT:RC MESSAG	REPT:RC-MESSAG	4E19	1
REPT:RC ORNU	REPT:RC-ORNU	4E19	1
REPT:RC SYSTEM PRINT			
FAILURE	REPT:RC-PRINT	4E19	1
REPT:RC STOPPED	REPT:RC-STOP-LOCK	4E19	1
REPT:RC STOPPED	REPT:RC-STOPPED	4E19	1
REPT:RC SYSTEM	REPT:RC-SYSTEM	4E19	1
REPT:RC TST STATE MESSAGE	REPT:RC-TST	4E19	1
REPT:RC WARNING	REPT:RC-WARN-FAIL	4E19	1
REPT:RC WARNING	REPT:RC-WARNIN	4E19	1
REPT:RC WARNING	REPT:RC-WARNING	4E19	1
REPT:RCAS	REPT:RCAS	4E20	1.2
REPT:RCCNL	REPT:RCCNL-INIT	4E19	1
REPT:READY	REPT:READY	4E19	1
REPT:RING OVLD	REPT:RING-OVLDCD	4E19	1
REPT:RING OVLD	REPT:RING-OVLDIF	4E19	1
REPT:RING OVLD	REPT:RING-OVLDNR	4E19	1
REPT:RMSD2:ALM	REPT:RMSD2-ALM	4E19	1
REPT:RST	REPT:RST	4E19	1
REPT:SADK UNABLE	REPT:SADK-UNABLE	4E19	1
REPT:CHAN	REPT:CHAN-EST	4E19	1.1
REPT:CHAN	REPT:CHAN-FAIL	4E19	1.1
REPT:SCS	REPT:SCS	4E22	1.4
REPT:SDC	REPT:SDC	4E19	1
REPT:SDU	REPT:SDU	4E22	1.3
REPT:SINGLE DIP	REPT:SINGLE-DIP	4E19	1
REPT:SLC	REPT:SLC	4E19	1
REPT:SLC a INSECURE	REPT:SLC-INSEC	4E19	1
REPT:SLCSTAT	REPT:SLCSTAT	4E19	1

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MESSAGE NAME	MESSAGE ID	START GENERIC ISSUE	
REPT:SLKSTAT	REPT:SLKSTAT	4E19	1
REPT:SOAK	REPT:SOAK	4E20	1.1
REPT:STRMEX	REPT:STRMEX-INVAL	4E19 only	1
REPT:STRMEX	REPT:STRMEX-LOAD	4E19 only	1
REPT:STRMEX LOST	REPT:STRMEX-LOST	4E19 only	1
REPT:STRMEX STATUS	REPT:STRMEX-STAT	4E19 only	1
REPT:SVCSTAT	REPT:SVCSTAT	4E19	1.1
REPT:SYSTEM	REPT:SYST-PDT	4E19	1
REPT:SYSTEM RUNNING	REPT:SYST-RUN	4E19	1
REPT:SYSTEM TROUBLE	REPT:SYSTEM	4E19	1
REPT:SYSTEM TROUBLE: AUDIT UNABLE TO CORRECT	REPT:SYSTEM-TR	4E19	1
REPT:TAPE MUST	REPT:TAPE	4E19 thru 4E21	1.4
REPT:TAPE PAGING	REPT:TAPE-PAG	4E19 thru 4E21	1.4
REPT:TAS TAPE OPERATION	REPT:TAS	4E19 thru 4E21	1.4
REPT:TAS TAPE FUNCTION	REPT:TAS-TAPE	4E19 thru 4E21	1.4
REPT:TASI-E DLC ALARM	REPT:TASI-E-DL	4E19	1
REPT:TASI-E DYNAMIC LOAD CONTROL	REPT:TASI-E-DY	4E19	1
REPT:TBL	REPT:TBL-FLN	4E19	1
REPT:TBL	REPT:TBL-NMFR	4E19	1
REPT:TELEVOTE	REPT:TELEVOTE	4E19	1
REPT:TERMINAL ab BUFFER OVERFLOW	REPT:TERMINAL	4E19	1
REPT:THRESH	REPT:THRESH-TR	4E19	1
REPT:THRESHOLD EXCEEDED	REPT:THRESHOLD	4E19	1
REPT:TIMEOUT	REPT:TIMEOUT	4E19	1
REPT:TRAFFIC / PLANT	REPT:TRAFIC-PT	4E19	1
REPT:TROUBLE - EMERGENCY MODE ENTERED	REPT:TROUB	4E19	1
REPT:TROUBLE	REPT:TROUBLE	4E19	1
REPT:TSIBP	REPT:TSIBP	4E22	1.3
REPT:TSN	REPT:TSN	4E19	1
REPT:TUC	REPT:TUC-LOST	4E19 thru 4E21	1.4
REPT:TUC	REPT:TUC-RETRY	4E19 thru 4E21	1.4
REPT:TVMINIT	REPT:TVMINIT	4E19	1
REPT:UNABLE	REPT:UNABLE	4E19	1
REPT:UNEXPECTED	REPT:UNEXPECTED	4E19	1
REPT:UPAD	REPT:UPAD	4E19 only	1
REPT:UTIL	REPT:UTIL	4E21	1.2

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MESSAGE NAME	MESSAGE ID	START GENERIC ISSUE	
REPT:UTILITY	REPT:UTILITY	4E25	1.6
REPT:UTILITY	REPT:UTILITY-ISS	4E19	1
REPT:VCFR	REPT:VCFR	4E19	1
REPT:VCNT	REPT:VCNT-EXCD	4E19	1
REPT:VCNT	REPT:VCNT-THRE	4E19	1
REPT:VCNT	REPT:VCNT-WORS	4E19	1
REPT:VIF	REPT:VIF	4E19	1
REPT:VSSID	REPT:VSSID	4E19	1
REPT:XALM	REPT:XALM	4E21R4	1.3
REPT:XALM-REPORTING	REPT:XALM-REPORT	4E21R4	1.3
REPT:XPWR	REPT:XPWR	4E19	1
REPT:XTSI	REPT:XTSI	4E21	1.4

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MESSAGE NAME	MESSAGE ID	START GENERIC ISSUE	
RMV:API	RMV:API	4E19	1
RMV:AUB	RMV:AUB	4E19	1
RMV:AUI	RMV:AUI	4E19	1
RMV:CC	RMV:CC	4E19	1
RMV:CEB	RMV:CEB	4E19	1
RMV:CS	RMV:CS	4E20	1.1
RMV:CSB	RMV:CSB	4E20	1.1
RMV:DIF	RMV:DIF	4E19	1
RMV:DT	RMV:DT	4E19	1
RMV:IFB	RMV:IFB	4E19	1
RMV:IOUS	RMV:IOUS	4E19	1.1
RMV:a, MCODE	RMV:MCODE	4E19	1
RMV:MFS	RMV:MFS	4E19	1
RMV:MUP	RMV:MUP	4E19	1
RMV:NCLK	RMV:NCLK	4E19	1
RMV:PCD	RMV:PCD	4E19	1
RMV:PS	RMV:PS	4E20	1.1
RMV:PSB	RMV:PSB	4E20	1.1
RMV:PUB	RMV:PUB	4E19	1
RMV:RA	RMV:RA	4E19	1
RMV:SCLK	RMV:SCLK	4E19	1
RMV:SCS	RMV:SCS	4E20	1.2
RMV:SGLK	RMV:SGLK	4E19	1
RMV:SP	RMV:SP	4E19	1
RMV:SSD	RMV:SSD	4E19	1
RMV:TGR	RMV:TGR	4E19	1
RMV:TMS	RMV:TMSP	4E19	1
RMV:TONE	RMV:TONE	4E19	1
RMV:TSI	RMV:TSI	4E21	1.3
RMV:VIF	RMV:VIF	4E19	1
RMV:VSSID	RMV:VSSID	4E19	1
RMV:XPWR	RMV:XPWR	4E19	1
RMV:XTSI	RMV:XTSI	4E24R2	1.6
RPT:DIF	RPT:DIF	4E19	1.3
RPT:XTSI	RPT:XTSI-D3U	4E21	1.3
RST:API	RST:API	4E19	1
RST:AUB	RST:AUB	4E19	1
RST:AUI	RST:AUI	4E19	1

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MESSAGE NAME	MESSAGE ID	START GENERIC ISSUE	
RST:CC	RST:CC	4E19	1
RST:CS	RST:CS	4E20	1.1
RST:CSB	RST:CSB	4E20	1.1
RST:DIF	RST:DIF	4E19	1.1
RST:DT	RST:DT	4E19	1
RST:IFB	RST:IFB	4E20	1.4
RST:IOUS	RST:IOUS	4E19	1
RST:MFS	RST:MFS	4E19	1
RST:MUP	RST:MUP	4E19	1
RST:NCLK	RST:NCLK	4E19	1
RST:PCD	RST:PCD	4E19	1
RST:PS	RST:PS	4E20	1.1
RST:PSB	RST:PSB	4E20	1.1
RST:PUB	RST:PUB	4E19	1
RST:RA	RST:RA	4E19	1
RST:SCLK	RST:SCLK	4E19	1
RST:SCS	RST:SCS	4E20	1.2
RST:SIGLK	RST:SIGLK	4E19	1
RST:SP	RST:SP	4E19	1
RST:SSD	RST:SSD	4E19	1
RST:TGR	RST:TGR	4E19	1
RST:TMSP	RST:TMSP	4E19	1
RST:TONE	RST:TONE	4E19	1
RST:TSI	RST:TSI	4E21	1.3
RST:VIF	RST:VIF	4E19	1
RST:XPWR	RST:XPWR	4E19	1
RST:XTSI	RST:XTSI	4E24R2	1.6
RST:XTSI SCHEDULE	RST:XTSI-SCHEDUL	4E24R2	1.6
RTE:ALM FROM	RTE:ALM-FROM	4E19	1
RTE:TP	RTE:TP	4E19	1
RTR:ALM	RTR:ALM	4E19	1
RTR:a ALM b GRID	RTR:ALM-GRID	4E19	1
SCHED:MEASREPT	SCHED:MEASREPT	4E19	1
SCHED:TDASMC	SCHED:TDASMC	4E19	1
SET:{CS PS}	SET:0	4E19	1
SET:ANNSTAT	SET:ANNSTAT	4E19	1
SET:BP	SET:BP-SCS	4E19	1
SET:CAMATRFS	SET:CAMATRFS	4E19	1
SET:CONN	SET:CONN	4E19	1
SET:DCONN	SET:DCONN	4E19	1

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MESSAGE NAME	MESSAGE ID	START GENERIC ISSUE	
SET:DIGROUP	SET:DIGROUP	4E21R4	1.3
SET:DTAC	SET:DTAC	4E19	1
SET:SDSTAT	SET:SDSTAT	4E19	1.8
SET:TRKSTAT	SET:TRKSTAT	4E19	1.3
SET:TSGATC	SET:TSGATC	4E19	1
SET:TSGEAC	SET:TSGEAC	4E19	1
SET:TSIBP	SET:TSIBP	4E24R2	1.6
SET:TUC	SET:TUC	4E19 thru 4E21	1.3
STOP:CFR;ALMGRP	STOP:CFR-ALMGR	4E19	1
STOP:COPY	STOP:COPY	4E19	1
STOP:INIT	STOP:INIT	4E19	1
STOP:LIBSYS	STOP:LIBSYS	4E19	1
STOP:MON;DGSTAT	STOP:MON-DGSTT	4E19	1
STOP:OP	STOP:OP	4E19	1
STOP:OVRWRT	STOP:OVRWRT	4E19	1.1
STOP:RTE;ALM	STOP:RTE-ALM	4E19	1
SW:AMA	SW:AMA	4E19	1
SW:AMA NOT STARTED	SW:AMA-NOT	4E19	1
SW:APS	SW:APS	4E19	1
SW:AUI	SW:AUI	4E19	1
SW:CC	SW:CC	4E19	1
SW:DIF	SW:DIF	4E21	1.5
SW:MUP	SW:MUP	4E20	1.1
SW:PUB	SW:PUB	4E19	1
SW:RT	SW:RT	4E19	1
SW:SCLK	SW:SCLK	4E19	1
SW:SCS	SW:SCS	4E19	1
SW:TGR	SW:TGR	4E19	1
SW:VIF	SW:VIF	4E19	1
SW:XTSI	SW:XTSI	4E22	1.3
TEST:API	TEST:API	4E19	1
TEST:AUB	TEST:AUB	4E21	1.2
TEST:AUI	TEST:AUI	4E21	1.2
TEST:CC	TEST:CC	4E19	1
TEST:CC	TEST:CC-FAIL	4E19	1
TEST:COREUPD	TEST:COREUPD	4E19	1
TEST:DSIG;DAV	TEST:DSIG-DAV	4E19	1
TEST:DSIG;DSTT	TEST:DSIG-DSTT	4E19	1
TEST:DSIG;INWA	TEST:DSIG-INWA	4E19	1
TEST:DSIG;NCD	TEST:DSIG-NCD	4E19	1

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MESSAGE NAME	MESSAGE ID	START GENERIC ISSUE	
TEST:DSIG;NS800	TEST:DSIG-NS800	4E19	1.2
TEST:DUS	TEST:DUS	4E19	1
TEST:FNS	TEST:FNS	4E19	1.2
TEST:IFB	TEST:IFB	4E21	1.2
TEST:MUP	TEST:MUP	4E21	1.2
TEST:MUPAUD	TEST:MUPAUD	4E19	1.4
TEST:PUB	TEST:PUB	4E19	1
TEST:PUSYS	TEST:PUSYS	4E22	1.4
TEST:SFI	TEST:SFI	4E23 only	1.4
TEST:SIGLK	TEST:SIGLK	4E19	1
TEST:SSD	TEST:SSD	4E21	1.2
TEST:TCAPAIN	TEST:TCAPAIN	4E24	1.5
TEST:TCAPDSD	TEST:TCAPDSD	4E20	1.2
TEST:TRK	TEST:TRK	4E23R4	1.4
TRC:TRK	TRC:TRK	4E19	1.1
UPD:	UPD:0	4E19 thru 4E21	1.3
UPD:COMMIT	UPD:COMMIT	4E19	1
UPD:CORE	UPD:CORE	4E19	1
UPD:ERAP FSDATA	UPD:ERAP	4E19	1
UPD:FS	UPD:FS	4E21	1.4
UPD:FS BACKUP	UPD:FS-BACKUP	4E19	1
UPD:LIBSYS	UPD:LIBSYS	4E19 thru 4E21	1.3
UPD:SCS	UPD:SCS	4E19	1
UPD:UTILDS	UPD:UTILDS	4E19	1.1
UPD:XTSI	UPD:XTSI	4E24R2	1.6
VER:ABSOLUTE	VER:ABSOLUTE	4E21	1.2
VER:ADSLINK;OPT(ADSI)	VER:ADSLINK	4E19	1.6
VER:AIN;OPT(LIST)	VER:AIN-LIST	4E22	1.4
VER:ALLRDB	VER:ALLRDB	4E22	1.4
VER:CAMASCRN;OPT(LCIBPAT)	VER:CAMASCRN	4E19	1.6
VER:CAMASCRN;OPT(UNAREA)	VER:CAMASCRN-A	4E19	1.6
VER:CAMASCRN;OPT(OLCIGI)	VER:CAMASCRN-C	4E19	1.6
VER:CAMASCRN;OPT(UNAOFC)	VER:CAMASCRN-F	4E19	1.6
VER:CAMASCRN;OPT(OOFCG)	VER:CAMASCRN-G	4E19	1.6
VER:CDB	VER:CDB	4E19	1.6
VER:CDB:ANI	VER:CDB-ANI	4E19	1
VER:CDB;OPT(UNA)	VER:CDB-UNA	4E19	1.6
VER:CODEGRP	VER:CDGRP-CCDCON	4E19	1.6
VER:CODEGRP;OPT(DIG3)	VER:CODEGRP-03	4E23R3	1.6
VER:CODEGRP;OPT(DIG6)	VER:CODEGRP-06	4E23R3	1.6

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MESSAGE NAME	MESSAGE ID	START GENERIC ISSUE	
VER:CODEGRP;OPT(DIG9)	VER:CODEGRP-09	4E23R3	1.6
VER:CODEGRP;OPT(DIG12)	VER:CODEGRP-12	4E23R3	1.6
VER:CODEGRP;LIST;OPT(ALL)	VER:CODEGRP-ALL	4E19	1.6
VER:CODEGRP;OPT(CCD)	VER:CODEGRP-CC	4E19	1.6
VER:CODEGRP;OPT(CCDCONV)	VER:CODEGRP-CCD	4E24	1.7
VER:CODEGRP;OPT(CCDA	VER:CODEGRP-CCDA	4E19	1.6
VER:CODEGRP;LIST;OPT(DIG3)	VER:CODEGRP-D03	4E19	1.6
VER:CODEGRP;LIST;OPT(DIG6)	VER:CODEGRP-D06	4E19	1.6
VER:CODEGRP;LIST;OPT(DIG9)	VER:CODEGRP-D09	4E19	1.6
VER:CODEGRP;LIST;OPT(DIG12)	VER:CODEGRP-D12	4E19	1.6
VER:CODEGRP;OPT(DIGTYP)	VER:CODEGRP-DIGT	4E21	1.7
VER:CODEGRP;OPT(EAR)	VER:CODEGRP-EAR	4E19	1.6
VER:CODEGRP;LIST;OPT(INTL)	VER:CODEGRP-INTL	4E19	1.6
VER:CODEGRP;OPT(LD)	VER:CODEGRP-LD	4E19	1.6
VER:CODEGRP;LIST;OPT(PLU)	VER:CODEGRP-LPLU	4E19R2	1.6
VER:CODEGRP;LIST;OPT(SDX)	VER:CODEGRP-LSDX	4E19	1.6
VER:CODEGRP;OPT(MCT)	VER:CODEGRP-MCT	4E24	1.6
VER:CODEGRP;OPT(MRT)	VER:CODEGRP-MRT	4E19	1.8
VER:CODEGRP;OPT(NN1)	VER:CODEGRP-N1	4E19	1.6
VER:CODEGRP;OPT(NN2)	VER:CODEGRP-N2	4E19	1.6
VER:CODEGRP;OPT(PLU)	VER:CODEGRP-PLU	4E19R2	1.6
VER:CODEGRP;OPT(PRTI)	VER:CODEGRP-PRTI	4E19	1.6
VER:CODEGRP;OPT(SDX)	VER:CODEGRP-SDX	4E19	1.6
VER:CODEGRP;OPT(SDX,UNA)	VER:CODEGRP-SDXU	4E19	1.6
VER:CODEGRP;LIST;OPT(STDP)	VER:CODEGRP-STDP	4E23R4	1.4
VER:CODEGRP;OPT(TYPE)	VER:CODEGRP-TYPE	4E23R3	1.6
VER:CPA	VER:CPA-ALA	4E19	1
VER:CPA	VER:CPA-CANI	4E26	1.7
VER:CPA:FIR	VER:CPA-CANI-FIR	4E20	1.2
VER:CPA:L	VER:CPA-CANI-L	4E19	1.2
VER:CPA	VER:CPA-DATA	4E26	1.7
VER:CPA	VER:CPA-DNUM	4E19 - 4E25R4	1.7
VER:CRB	VER:CRB	4E19	1.6
VER:CRB;OPT(CDBI)	VER:CRB-CDBI	4E19	1.6
VER:CRB;OPT(UNA)	VER:CRB-UNA	4E19	1.6
VER:CRB;OPT(LIST)	VER:CRBLIST-TAN	4E19	1.6
VER:DESPLIST;OPT(DIG456)	VER:DESPLIST-456	4E19	1
VER:DESPLIST;OPT(DIG789)	VER:DESPLIST-789	4E19	1
VER:DESPLIST;OPT(DIG3)	VER:DESPLIST-D3	4E19	1
VER:DESPLIST;OPT(DIG6)	VER:DESPLIST-D6	4E19	1

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VER:DESPLIST;OPT(DIG9)	VER:DESPLIST-D9	4E19	1
VER:DESPLIST;OPT(DIG12)	VER:DESPLIST-D12	4E19	1
VER:DIALUP	VER:DIALUP	4E19	1.6
VER:DNHRMISC	VER:DNHRMISC	4E19	1
VER:DPC	VER:DPC	4E19	1.6
VER:EA;OPT(CID)	VER:EA-CID	4E19	1.6
VER:EA;OPT(CONV)	VER:EA-CONV	4E19	1.6
VER:EA;OPT(FUNC,IIDIGITS)	VER:EA-F-IIDIGIT	4E23	1.6
VER:EA;OPT(FUNC,OLI)	VER:EA-FUNC-OLI	4E23	1.6
VER:EA;OPT(IPPD)	VER:EA-IPPD	4E24R3	1.6
VER:EA;OPT(NX)	VER:EA-NX	4E19	1.6
VER:EA;OPT(OPPD)	VER:EA-OPPD	4E24R3	1.6
VER:EA;OPT(SII)	VER:EA-SII	4E19	1.6
VER:EA;OPT(ZZ)	VER:EA-ZZ	4E19	1.6
VER:ECOS;OPT(AORL)	VER:ECOS-AORL	4E23	1.4
VER:ECOS;OPT(AREALIST)	VER:ECOS-AREALIS	4E20	1.6
VER:ECOS;OPT(SIICSC)	VER:ECOS-SIICSC	4E20	1.2
VER:ENG-MEMORY	VER:ENG-MEMORY	4E19	1
VER:[ERROR]	VER:ERROR	4E19	1
VER:FEN	VER:FEN	4E19	1.6
VER:GETS;OPT(ANN)	VER:GETS-ANN	4E21R3	1.6
VER:GETS;OPT(SAT)	VER:GETS-SAT	4E19	1.1
VER:GT;OPT(UGTT)	VER:GT-UGTT	4E19	1
VER:IDAM	VER:IDAM	4E19	1
VER:IDAMLIST	VER:IDAMLIST	4E19	1
VER:INSPLIST	VER:INSPLIST	4E19	1
VER:LATASTAT;OPT(AREAS)	VER:LATASTAT-ARE	4E19 thru 4E21	1.6
VER:LATASTAT;OPT(MATRIX)	VER:LATASTAT-MAT	4E19 thru 4E21	1.6
VER:MEASREPT	VER:MEASREPT	4E19	1
VER:MEMORY	VER:MEMORY	4E19	1
VER:MEMORY;OPT(EM)	VER:MEMORY-EM	4E24	1.5
VER:MISC;OPT(AINITM)	VER:MISC-AINITM	4E23R3	1.6
VER:MISC:FHT AINTRIG	VER:MISC-AINTRIG	4E19	1.3
VER:MISC;OPT(AMA)	VER:MISC-AMA	4E19	1.6
VER:MISC;OPT(ANN)	VER:MISC-ANN	4E19	1.6
VER:MISC;OPT(CHGSDX,UNA)	VER:MISC-CHGSDX	4E23R4	1.4
VER:MISC;OPT(CHGTSG,UNA)	VER:MISC-CHGTSG	4E23R4	1.4
VER:MISC:FHT RCECO4CVU	VER:MISC-FHT-RC	4E21	1.3
VER:MISC:FHT USDSPCSSN	VER:MISC-FHT-USD	4E21	1.6
VER:MISC:FHT EASYREACH	VER:MISC-FHTEASY	4E20	1.6

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VER:MISC:FHT IBNSROUTE	VER:MISC-FHTIBNS	4E20	1.2
VER:MISC;OPT(OCTCP)	VER:MISC-OCTCP	4E24	1.5
VER:MISC;OPT(ONOFF)	VER:MISC-ONOFF	4E21	1.3
VER:MISC;OPT(SUXTSI)	VER:MISC-SUXTSI	4E24	1.6
VER:MISC;OPT(TOS)	VER:MISC-TOS	4E19	1.6
VER:MISC;OPT(TRGASN)	VER:MISC-TRGASN	4E23R3	1.4
VER:MISC;OPT(XTSID3U)	VER:MISC-XTSID3U	4E24	1.5
VER:MSN	VER:MSN	4E19	1.6
VER:NAILUP	VER:NAILUP	4E19	1.6
VER:NDB;OPT(NDBI)	VER:NDB-NDBI	4E19	1.6
VER:NDB;OPT(NDBLIST)	VER:NDB-NDBLIST	4E19	1.6
VER:NPADPC;OPT(NPA)	VER:NPADPC	4E19	1.6
VER:OFFICE	VER:OFFICE	4E19	1
VER:PASANN;OPT(LIST)	VER:PASANN	4E19	1.6
VER:PASANN;OPT(ANN)	VER:PASANN-ANN	4E19	1.6
VER:PASCTHRU	VER:PASCTHRU	4E19	1.6
VER:PASTVOTE;OPT(MASTER)	VER:PASTVOTE-M	4E19	1.6
VER:PASTVOTE;OPT(SLAVE)	VER:PASTVOTE-S	4E19	1.6
VER:PCP	VER:PCP	4E20 - 4E25R4	1.7
VER:PCP;OPT(NPASPLIT)	VER:PCP-NPASPLIT	4E19	1.6
VER:PCP;OPT(RSII)	VER:PCP-RSII	4E19	1
VER:PCP;OPT(SCT)	VER:PCP-SCT	4E19	1.6
VER:RCFORM	VER:RCFORM	4E24	1.5
VER:RDB;OPT(INCHAIN)	VER:RDB-INCHAIN	4E19	1.6
VER:RDB;OPT(INTL)	VER:RDB-INTL	4E19	1.6
VER:RDB;OPT(LIST)	VER:RDB-LISTTH	4E19	1.6
VER:RDB;OPT(LIST)	VER:RDB-LISTTW	4E19	1.6
VER:RDB;OPT(RDBIGRP)	VER:RDB-RDBIGR	4E19	1.6
VER:RDB;OPT(UNA)	VER:RDB-UNA	4E19	1.6
VER:RDBLIST;OPT(ABC)	VER:RDBLIST-ABC	4E21R3	1.6
VER:RDBLIST;OPT(FHT)	VER:RDBLIST-FHT	4E21R3	1.6
VER:RDBLIST;OPT(TTSI)	VER:RDBLIST-TTSI	4E19	1.3
VER:RTGLIST	VER:RTGLIST	4E23	1.4
VER:RTNR;OPT(ISW)	VER:RTNR-ISW	4E19	1.6
VER:RTNR;OPT(MSI)	VER:RTNR-MSI	4E19	1
VER:RTNR;OPT(NSN)	VER:RTNR-NSN	4E19	1.6
VER:RTNR;OPT(RN)	VER:RTNR-RN	4E19	1.6
VER:RTNR;OPT(RPI)	VER:RTNR-RPI	4E19	1.6
VER:RTNR;OPT(SII)	VER:RTNR-SII	4E22	1.6
VER:RTNR;OPT(TSDT)	VER:RTNR-TSDT	4E19	1.6

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VER:RTNR;OPT(TSGUSE)	VER:RTNR-TSGUSE	4E19R3	1.6
VER:SCRN	VER:SCRN	4E19	1
VER:SCS	VER:SCS-FHT	4E19	1.6
VER:SERVICE;OPT(SRVC)	VER:SERVICE	4E22	1.6
VER:SPARE	VER:SPARE	4E21	1.2
VER:SPMTXPK	VER:SPMTXPK	4E19	1
VER:SSN;NSN	VER:SSN-NSN	4E19 thru 4E23	1.5
VER:STATICAB;OPT(XTSIAB)	VER:STAT-XTSIAB	4E22 thru 4E23	1.5
VER:SUBUTP;OPT(XTSIIBU)	VER:SUBUTP-XTSII	4E24	1.5
VER:TASI	VER:TASI	4E19	1
VER:TERMLIST	VER:TERMLIST	4E19	1
VER:TRK	VER:TRK	4E19	1.6
VER:TRK;OPT(CCITT5 / MISC)	VER:TRK-C5MISC	4E19	1.6
VER:TRK;OPT(CCITT5)	VER:TRK-CCITT5	4E19	1.6
VER:TRK;OPT(CCIS / CCITT6, MISC)	VER:TRK-CCMISC	4E19	1.6
VER:TRK;OPT(CCS)	VER:TRK-CCS	4E19	1.6
VER:TRK;OPT(CCS7)	VER:TRK-CCS7	4E19	1.6
VER:TRK;OPT(CUS_OOB)	VER:TRK-COOB	4E19	1.6
VER:TRK;OPT(D1 / D2)	VER:TRK-D1D2	4E19	1.6
VER:TRK;OPT(D_CHANNEL)	VER:TRK-DCHAN	4E19	1.6
VER:TRK;OPT(INTL.TSN)	VER:TRK-INTTSN	4E19	1.6
VER:TRK;OPT(ISDN)	VER:TRK-ISDN	4E19	1.6
VER:TRK;OPT(ISTP)	VER:TRK-ISTP	4E19	1
VER:TRK;OPT(MISC)	VER:TRK-MISC	4E19	1.6
VER:TRK;OPT(MISC)	VER:TRK-MISCES	4E19	1.6
VER:TRK;OPT(SCGA)	VER:TRK-SCGA	4E19	1.6
VER:TRK;OPT(TSN)	VER:TRK-TSN	4E19	1.6
VER:TRKNAME	VER:TRKNAME	4E22	1.3
VER:TSG;OPT(CICS)	VER:TSG-CICS	4E22	1.4
VER:TSG;OPT(IN1WAY)	VER:TSG-IN1WAY	4E26	1.8
VER:TSG;OPT(LIST)	VER:TSG-LIST	4E20R2	1.8
VER:TSG;OPT(NONMSG)	VER:TSG-NONMSG	4E19	1.6
VER:TSG;OPT(OUT1WAY)	VER:TSG-OUT1WAY	4E26	1.8
VER:TSG;OPT(RDBLIST)	VER:TSG-RDBLIST	4E19	1
VER:TSG;OPT(TRUNKS)	VER:TSG-TRUNKS	4E19	1.6
VER:TSG;OPT(TWOWAY)	VER:TSG-TWOWAY	4E26	1.7
VER:TSG;OPT(VFL)	VER:TSG-VFL	4E19	1.6
VER:TSI;OPT(WIDEBAND)	VER:TSI-WIDEBAND	4E19	1
VER:TTS	VER:TTS	4E19	1

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MESSAGE NAME	MESSAGE ID	START GENERIC ISSUE	
VER:TTS;OPT(TTSI)	VER:TTS-TTSI	4E19	1
VER:TTS;OPT(TTSNAME)	VER:TTS-TTSNAME	4E19	1
VER:TTSLIST;OPT(RDB)	VER:TTSLIST-RDB	4E19	1
VER:UTMN	VER:UTMN	4E21	1.4
VER:UTMN,OPT(ME)	VER:UTMN-ME	4E21	1.4
VER:UTMN;OPT(MISC)	VER:UTMN-MISC	4E21	1.4
VER:UTMN, OPT(SME)	VER:UTMN-SME	4E21	1.4
VER:UTYPE;OPT(SCSDATA)	VER:UTYPE-SCSDAT	4E22R4	1.6
VER:VFUNC;OPT(XTSISPU)	VER:VFUNC-XTSISP	4E22	1.3
WTSG FOR	WTSG:FOR	4E19	1

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ID ALW:E2A
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

ALW:E2A INPUT COMPL

2. REASON FOR OUTPUT

To indicate that the "CONT INH" key on the master control complex (MCC) panel has been operated, permitting E2A telemetry.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
MCCMS CCP
MCCMSCCR

Output Message
INH:E2A

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ID ALW:FNS
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

[1] ALW:FNS a b [c]
[d]

2. REASON FOR OUTPUT

This output message provides information on the completion status of the ALW:FNS input message. It will print one success code or one or more error messages to help the user determine the problem(s) with the Fan System (FNS).

NOTE: The results from a successful ALW: will state the ALW has **COMPLETED**. The results from an unsuccessful ALW: could be caused by the FNS becoming inhibited, the Scan And Signal Distributor (SSD) being Out-Of-Service (OOS), the ALW MACP job being aborted, or an incorrect response(s) from the FNS.

3. VARIABLE FIELD DEFINITIONS

- a The FNS frame number (0 or 1).
- b Results of an ALW:FNS input request:
COMPLETED
STOPPED
- c Optional. Only reported under one of the following conditions:
ALW FAIL
AUTONOMOUS FNS REPORT
FNS AUTOMATICALLY INHIBITED
FNS INVALID RESPONSE
FNS NOT RESPONDING
MACP JOB ABORTED
SSD OOS — Scan and signal distributor out-of-service.
- d Optional. If the ALW routine fails, specific debugging and error information will be displayed. This information will identify the general software location when the error occurred, and the status of the interface between the 1B and the FNS. The layout and content of this information is described in the following list.
AUX DATA Auxiliary data, identifies the debugging information.

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SUBTASK Followed by single decimal digit (0-3). This number indicates the location within software or the specific task being executed within the ALW routine when the error occurred.

SSDSTATES Followed by a twelve digit binary number in the form of eeeeeeeeefff, where e contains the value of the Signal Distributor (SD) bits and f is the scan points associated with the FNS when the error occurred.

SD Values

Bits		Meaning
1000	—	ALW:FNS Initialize the FNS, or inhibit the FNS
1001	—	TEST:FNS Report all fan system errors
1010	—	Report fan status
1100	—	Clear fan air filter from the FNS error stack
1101	—	Verify FNS sanity
1110	—	Continue reporting

Scan Values (1st four, reading right to left)

Bits		Meaning
0000	—	ALW fail
0001	—	Fan 1 error
0010	—	Fan 2 error
0011	—	Fan 3 error
0100	—	Fan 4 error
0101	—	Heartbeat (FNS sanity verified)
0110	—	Fan 5 error
0111	—	TEST:FNS in-progress
1000	—	Lower front temperature sensor error
1001	—	Lower rear temperature sensor error
1010	—	ALW All Tests Passed (ATP), or All Seems Well (ASW)
1011	—	Fan 6 error
1100	—	High frame temperature
1101	—	Replace air filter
1110	—	Not used
1111	—	FNS automatically inhibited

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Scan Values (2nd four, reading right to left)		
Bits		Meaning
0001	—	Heartbeat (FNS sanity verified)
0010	—	ASW
0000-0001, 0011-1111	—	Invalid states: fault detected and reported

4. ACTION TO BE TAKEN

NOTE: Whenever the FNS becomes automatically inhibited, the first action should be to re-initialize the FNS by entering the ALW:FNS input command. The fan controller would normally be replaced when the FNS becomes automatically inhibited, but it is possible the error situation which caused the FNS to become inhibited can be cleared by re-initializing the FNS and fan controller. If the FNS passes the initialization, the previous error will have been cleared and the FNS should operate normally. If the initialization fails and the FNS becomes re-inhibited, the fan controller should then be replaced. However, this should only be used as a last resort measure when the FNS will not maintain an in-service state and repetitively becomes inhibited no matter how many re-initializations are attempted.

NOTE: At times, more than one output message can be reported back to back. In these cases, the action for the last reported output message should be followed.

Refer to variable field definition letters.

For variable b:

If COMPLETED, do nothing. Initialization of the FNS worked successfully.

For variable c:

If ALW FAIL, see appropriate FNS INVALID RESPONSE action.

If AUTONOMOUS FNS REPORT, allow the system to process the new report. This should not take longer than 30 seconds, and a fan system report will be generated at completion. After the report is received, retry the ALW:FNS input command.

If FNS AUTOMATICALLY INHIBITED, there is a power supply problem to the fan controller, or the fan controller is bad and should be replaced.

If FNS INVALID RESPONSE, and the FNS was being initialized from an inhibited state, a request to inhibit the FNS will be submitted by the system. Replace the fan controller and retry the ALW:FNS input command.

If FNS INVALID RESPONSE, and the FNS was being initialized from an in-service state, a FNS sanity check will be submitted by the system. This check will take approximately 1.5 minutes to execute. If no subsequent fan system error messages are reported during the 1.5 minutes, retry the ALW:FNS input command.

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If FNS NOT RESPONDING, see appropriate FNS INVALID RESPONSE action.

If MACP JOB ABORTED, retry again.

If SSD 00S check the SSD status. Retry the ALW:FNS input command when the SSD is in-service.

5. REFERENCES

PIDENTs
FNFRBASE
MCCMEPS1

Input Messages
ALW:FNS
CLR:FNS
INH:FNS
TEST:FNS

Output Messages
CLR:FNS
REPT:FAN-ST
TEST:FNS

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ID ALW:LIBMSG
WORK CENTER.. MAC, MOC, NMOC, TEC,
 TOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

ALW:LIBMSG:CLIENT a COMPLETED

2. REASON FOR OUTPUT

To report that the auxiliary input facility for client a has been activated and auxiliary input messages may now be entered to this client.

3. VARIABLE FIELD DEFINITIONS

a Client number (0-7) assigned to a library program-task is now being executed.

4. ACTION TO BE TAKEN

Enter now the desired auxiliary input messages for client a on any of the channels selected on the ALW:LIBMSG input message.

5. REFERENCES

PIDENT
LIBRINPT

Practice 254-280-214, *Library Control Program*

Input Message
ALW:LIBMSG

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ID ALW:MUPAUD
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

- [1] ALW:MUPAUD MUP a COMPLETED BANK b c
- [2] ALW:MUPAUD MUP a STOPPED d
- [3] ALW:MUPAUD MUP a ABORTED

2. REASON FOR OUTPUT

To report the termination status of ALW:MUPAUD input message and/or any errors that were found during the execution of the ALW:MUPAUD command.

3. VARIABLE FIELD DEFINITIONS

- a Member number of the master control complex (MCC) and utility processor (MUP) (0 or 1).
- b MUP audit bank number (0 - 3).
- c Inhibit status in terms of a 32 bit binary bit map, where the 0 bit (rightmost bit) indicates the inhibit status of audit #1 of the bank b, and the 1st bit indicates the inhibit status of audit #2 of the bank b, and so on.

For each bit set, the corresponding audit is inhibited. For example, if audits #2 and #3 are inhibited (assume others are not inhibited), then the output will be as follows:

111111111111111111111111111111110110

NOTE: Bit 4 to bit 31 will always be 1 since the corresponding audits are not implemented.

- d Possible reasons for stop:
 - MUP OOS — MUP is out of service.
 - MUP/IFB COMMUNICATION ERROR — Failed to communicate with MUP.
 - MUPAUD ERROR — Error source is the MUP audit (MUPAUD) process.
 - MUPOS ERROR — Error source is the MUP operating system (MUPOS) process.

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TIME OUT ERROR — Failed to finish the job within the time limit.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

Input Messages
ALW:MUPAUD
INH:MUPAUD
OP:MUPAUD
STOP:MUPAUD
TEST:MUPAUD

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ID ALW:ONISUSP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

ALW:ONISUSP a

2. REASON FOR OUTPUT

To print when operator number identification (ONI) suspension is put into effect and when it is canceled. If it becomes necessary for all centralized automatic message accounting (CAMA) operators to abandon their positions, a key located at the CAMA positions is operated causing all CAMA-ONI calls to complete without a billing record being formed.

3. VARIABLE FIELD DEFINITIONS

a The status of ONI suspension:

 IN PROGRESS

 STOPPED

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
CAMA0000

Practice 234-180-110, *Call Processing Programs*

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ID ALW:RC
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

ALW:RC MSG, MOC RESTRICTION RMVD

2. REASON FOR OUTPUT

To report that recent changes (RCs) are now allowed from all recent change input channels. The master control complex (MCC) RC restrict key was released.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
RCMAMAIN

Translation Guide, 4ESSTM, TG-4

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ID ALW:USGMEAS
WORK CENTER.. MAC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

ALW:USGMEAS:TSI a SPC b c c c c

2. REASON FOR OUTPUT

To respond to an input message that allows the scanning of a time slot interchange (TSI) for usage measurements.

3. VARIABLE FIELD DEFINITIONS

- a TSI frame (00-63).
- b Switching and permuting controller (SPC) (0-1).
- c Disposition of the corresponding input message processing:
- ABORTED — Processing is not completed; memory may have been updated.
- COMPLETED — The TSI is on the list of TSIs for which usage measurements are being accumulated.
- NOT STARTED — Processing is not completed; no memory has been updated.
- NOT STARTED EIGHT PREVIOUSLY ASN — Processing cannot continue; list containing maximum of eight TSIs is full.
- NOT STARTED PREVIOUSLY ASN — Processing cannot continue; TSI is currently on the list of TSIs scanned for usage.
- NOT STARTED UNEQ — Processing cannot continue; TSI is found in a nonoperational state.

4. ACTION TO BE TAKEN

If the disposition of the input message is ABORTED, output the set of TSIs currently scanned for usage to determine what changes, if any, were made. See input message OP:MEASTSI.

5. REFERENCES

Translation Guide, 4ESSTM, TG-4, Division 10, Section 3a

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4ESS
OM-4B000-01

ALW:USGMEAS

Input Message
OP:MEASTSI

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ALW:USGMEAS-2

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ID ALW:UTIL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

ALW:UTIL COMPLETED

2. REASON FOR OUTPUT

To report the successful operation of the request to activate generic utility flags.

Active system generic utility flags have been activated. Utility system matchers have been set up, utility execute instructions have been placed, and G-level pest has been reset.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
GULPUTPP
GULPUTXP
GULRUTCR

Practice 234-301-003, *1B Processor Generic Utility Program (GULP) Application - Description*

PA-4A002-01, *4ESSTM User's Manual*, Generic Utility Section

SEE PROPRIETARY NOTICE ON COVER PAGE

ID ALW:UTILMSG
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

ALW:UTILMSG COMPLETED

2. REASON FOR OUTPUT

To report successful operation of the request to turn on collection of optional generic utility messages. Optional system messages will be printed.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
GULPUTPP
GULPUTXP
GULRUTCR

Practice 234-301-003, *1B Processor Generic Utility Program (GULP) Application - Description*

PA-4A002-01, *4ESSTM User's Manual*, Generic Utility Section

SEE PROPRIETARY NOTICE ON COVER PAGE

ID ALW:VSSID
WORK CENTER.. TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

ALW:VSSID a, SID b: {STBYACT|EXTUPD}
FAILURE REASON c

2. REASON FOR OUTPUT

To respond to the input message ALW:VSSID and to supply the reason that the input message was not acted on.

3. VARIABLE FIELD DEFINITIONS

a	Voice storage system (VSS) identification (VSSID).
b	Service identification (SID).
EXTUPD	External updates on VSS or direct producer types of announcements.
STBYACT	Activation delay of a standby announcement from a VSS, direct producer, manual recording, or barge-in type of announcement.
c	Reason for failure: ANN LOCKOUT — Announcement handling locked out. CB QR FAIL — Callback request fail. INVALID TYPE — Announcement is barge-in type. MISC ERROR — Audit problem, etc.

4. ACTION TO BE TAKEN

Correct error before retrying input message.

5. REFERENCES

PIDENTs
ANNHTTYM
TMAD0005

Input Message
ALW:VSSID

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ID ANALY:DIGROUP
WORK CENTER.. MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

ANALY:DIGROUP a:b c

2. REASON FOR OUTPUT

To print immediately in response to an ANALY:DIGROUP input message to indicate whether the digroup camp-on was started or denied. This message is also output when a manually requested digroup camp-on is terminated. The camp-on may have terminated normally, for example, if the required sample count has been reached. The camp-on may terminate abnormally, for example, when the digroup terminal unit (DTU) is taken out of service during the camp-on. If the camp-on terminates normally, then the bipolar violation rate (BVR) is output. For abnormal terminations, the reason for termination is output.

3. VARIABLE FIELD DEFINITIONS

- a The identity of the digroup. This is output in the same form as was specified on the input request. Possible identifiers are as follows:
- CIN — Circuit identification number (CIN) of a trunk in the digroup.
- DT,DTU,DG — The digroup terminal (DT), DTU, and digroup (DG) number of the digroup.
- OTAN — Octal trunk appearance number (TAN) of a trunk in the digroup.
- TAN — TSI-SP-PORT-CHANNEL TAN of trunk in the digroup:
- CHANNEL — A 3-digit decimal number indicating channel, range 000-127.
- PORT — A 1-digit decimal number indicating port of time slot interchange (TSI), range 0-6.
- SP — A 1-digit decimal number indicating signaling processor (SP) of TSI, range 0-1.
- TSI — A 2-digit decimal number indicating the time slot interchange (TSI) member number, range 0-63.
- TSN — SP-ROW-POINT TSN of trunk in the digroup:
- POINT — A 2-digit decimal number indicating the point in the row, range 00-15.
- ROW — A 3-digit decimal number indicating the row in the SP, range 000-255.

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- SP — A 2-digit decimal number indicating the SP member number, range 00-31.
- b Text indicating the disposition of the request:
- COMPLETED — The camp-on request has run to completion. Variable C gives the results.
- REJECTED — The ANALY:DIGROUP request has been rejected. Variable C gives the reason.
- STARTED — The digroup camp-on has been started. Another ANALY:DIGROUP message will be output when the camp-on stops.
- STOP COMPLETED — This is the response output to a teletypewriter (TTY) channel requesting a STOP:ANALY;DIGROUP. A message is also output to the TTY which originally started the camp-on.
- STOPPED — Camp-on has been stopped prior to normal completion. Variable C gives the reason.
- c Text and possible data giving more information about the results of the camp-on:
- BV MAINTENANCE THRESHOLD EXCEEDED, BVR x — Where x = BVR in units of 0.000001. The error rate exceeds the maintenance threshold.
- BV OOS REACHED — The bipolar violation out of service rate has been reached.
- BV RATE SATISFACTORY — The error rate is below the maintenance threshold.
- DG ALREADY CAMPED ON — Request for manual camp-on is already active.
- DG NOT CAMPED ON — The STOP:ANALY;DIGROUP request is for a digroup which is not camped on.
- DT IN MTCE — DT is in a maintenance state and cannot perform camp-on function.
- DTU OOS — DTU is out of service.
- MAN DG INIT REQ — Digroup status has been reinitialized by manual request via INIT:DGSTAT message.
- NON DTU TRUNK — Trunk identified is not on a DTU.
- NONOPERATIONAL UNIT — TSI port, DT, or DTU not operational.
- TIMEOUT — 20 to 25 minutes has elapsed since the camp-on was started, but the required sample count has not been reached.

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4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
DFRP
TMAD0005
TMAD0061

Practice 234-100-052, *Digital Facility Trunk Trouble Reporting*

Input Messages
ANALY:DIGROUP
INIT:DGSTAT
OP:DGSTAT
STOP:ANALY-DIG

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ID ANALY:TLPF-ABO
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

ANALY:TLPFILE [a[,b]] ABORTED
DATA
PD: c d

2. REASON FOR OUTPUT

To print whenever a trouble location procedure (TLP) related program abnormally terminates. Prints the aborting address and the maintenance control program (MACP) class number, program number and page number of the aborting program.

This information is required to locate the aborting program in the PIDENT documentation using the generic loader map.

Internal aborts (those not called by MACP due to interrupts or interjects) will also cause an associated audit to be printed to dump internal call store locations of special interest. See Section C.3 in PA-4A002-01.

3. VARIABLE FIELD DEFINITIONS

a, b	When present, a is the unit type - member number and b is the subunit type - submember number. When absent this indicates the associated TLP program was not performing a unit dependent function (for example, generating output in response to the input message OP:TLPQUEUE).
c	Aborting address in MACP paging area. The aborting program is defined by the next parameter.
d	Bits 7-0, program page number. Bits 15-7, MACP program number. Bits 23-16, MACP class number.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
DRPPASUB
DRPPSSUB
DRPSUPR

Practice 234-180-270, *Diagnostic Results Post-Processing Program - Description*
Practice 254-280-230, *Diagnostic Results Post - Processing Program*

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PA-4A002-01, *4ESSTM User's Manual*

Input Messages

ALW:TLP

CLR:TLPQUEUE

INH:TLP

OP:TLPQUEUE

Output Messages

CLR:TLPQUEUE

OP:TLPQUEUE

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ID ANALY:TLPF-NUL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

ANALY:TLPFILE: [a b[,c d]] NULL PACK LIST GENERATED
[TLPFILE e :] MFNUM f [ENTRY TIME g/h/i j:k:l]
NEQLS m

2. REASON FOR OUTPUT

The Trouble Location Procedure (TLP) search process could not find a sufficient match between the data in the associated unit data base and the data in the TLP Disk Queue (TLPQUEUE) file and therefore could not generate a list of suspected faulty equipment.

3. VARIABLE FIELD DEFINITIONS

a	Unit type
b	Member number
d	Subunit type
d	Subunit member number
e	The TLPQUEUE file number assigned when the TLP summary was enqueued.
f	The Error Analysis Program (ERAP) file number assigned to the summary data (see OP:ERAPDATA).
g/h/i j:k:l	The date and time the TLPQUEUE file was generated. It is used by the following output messages to link the messages to the time the summary data output message was printed.
m	The number of Equipment Locations (EQLs) printed by the TLP search program.

NOTE: Engineered Data (ED) TLP does not use the TLPFILE or ENTRY TIME fields.

4. ACTION TO BE TAKEN

A backup frame repair technique must be used. See Section C.3, Trouble Location Procedures, of PA-4A002-01.

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5. REFERENCES

PIDENTs
DRPPASUB
DRPPSSUB
DRPSUPR

Practice 234-010-215 *Trouble Location Procedure - Description*
Practice 254-280-230, *Diagnostic Results Post - Processing Program*

TOP(Task Oriented Practices) Documents:

Practice 234-151-006 *Master Control Complex and Processor Peripheral Interface Frame*
Practice 234-151-011 *Time Multiplexed Switching Frame*
Practice 234-151-013 *Network Clock Frame*
Practice 234-151-015 *Peripheral Unit Bus System*
Practice 234-151-022 *Time Slot Interchange System*
Practice 234-151-031 *Signal Processor 1 - Terminal Interface Equipment*
Practice 234-151-050 *Echo Suppressor Terminal*
Practice 234-351-004, *1B Processor Cabinet Trouble Clearing TOP*
Practice 254-251-010, *Auxiliary Data System*
Practice 254-251-020, *Input/Output Frame*

PA-4A002-01, 4ESSTM *User's Manual*, Section C.3, Trouble Location Procedures

Input Messages

ALW:TLP
CLR:TLPQUEUE
INH:TLP
OP:ERAPDATA
OP:TLPQUEUE

Output Messages

CLR:TLPQUEUE
OP:TLPQUEUE

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ID ANALY:TLPF-SRH
WORK CENTER.. MOC
GENERIC 4E22 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

ANALY:TLPFILE [a b[,c d]] TLPSRCH
TLPFILE e STARTED : MFNUM f
ENTRY TIME g/h/i j:k:l

2. REASON FOR OUTPUT

To print whenever the Trouble Location Procedure (TLP) search process selects the TLP Disk Queue (TLPQUEUE) file whose file number equals the TLPQUEUE file number assigned for processing. TLP files are selected from the TLPQUEUE based on a priority scheme (high priority first and first come first served). The message is generated immediately before the TLP search process begins to process the TLPQUEUE file selected.

3. VARIABLE FIELD DEFINITIONS

a	Unit type
b	Member number
c	Subunit type
d	Subunit member number
c	The TLPQUEUE file number assigned when the TLP summary data is enqueued in the TLPQUEUE. This file number uniquely defines the TLP summary data and is used by the following output messages to link the messages to this summary data message.
d	The Error Analysis Program (ERAP) file number assigned to the summary data (see the OP:ERAPDATA input message).
e/f/g h:i:j	The date and time the TLPQUEUE file was generated. It is used by the following output messages to link the messages to the time the summary data message was printed.

4. ACTION TO BE TAKEN

No direct action required; however the user should be alert to the fact that the suspected faulty equipment message will soon be printed unless abnormal conditions cause aborts, or the inhibiting of the TLP process.

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5. REFERENCES

PIDENTs
DRPPASUB
DRPPSSUB
DRPSUPR

Practice 234-180-270, *Diagnostic Results Post-Processing Program - Description*
Practice 234-280-230, *Trouble Location Procedure Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*, Section C.3, Trouble Location Procedures

Input Messages
ALW:TLP
CLR:TLPQUEUE
INH:TLP
OP:ERAPDATA
OP:TLPQUEUE

Output Messages
CLR:TLPQUEUE
OP:TLPQUEUE

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ID ANALY:TLPF-SUM
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

ANALY:TLPFILE: [a b[,c d]] SUMMARY DATA
[QUEUE ACCESS DENIED : DATA NOT RETAINED : CODE e]
[ALL PENDING TLP SEARCHES INHIBITED]
KEY: V1 V2 V3 V4 V5 V6
f : g h i j k l
[TLPFILE m COMPLETED :]
[ENTRY TIME n/o/p q:r:s]
MFNUM: t

2. REASON FOR OUTPUT

To print whenever:

- (a) an automatic diagnostic fails,
- (b) a manually requested diagnostic with the Trouble Location Procedure (TLP) option specified fails,

or

- (c) TLP summary data is manually generated using the ANALY:TLPFILE input message.

The output message prints the TLP summary data placed in the TLP Disk Queue (TLPQUEUE) to be used by the TLP search process to generate a suspected faulty equipment list.

The output message includes warning statements whenever the data could not be placed in the TLPQUEUE, and/or the TLP search process is inhibited.

When a TLPQUEUE file is successfully generated, the output message identifies the TLP file number assigned, the time, and date it was placed in the TLPQUEUE.

Independent of whether the TLPFILE is placed in the TLPQUEUE, the summary data is passed to the Error Analysis Program (ERAP) data base. ERAP generates the Trouble Location Procedure Summary (TLPSUM) record and assigns a Maintenance File Number (MFNUM) which is printed in this output message. This MFNUM can be used to retrieve the summary data using the OP:ERAPDATA input message.

3. VARIABLE FIELD DEFINITIONS

- a Unit type
- b Member number

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c	Subunit type								
d	Subunit member number								
e	An identifying code which indicates why the TLP summary data could not be retained in the TLPQUEUE: 1 — TLPQUEUE filled. 2 — TLPQUEUE is active. 4 — The particular unit is inhibited from enqueueing TLP summary data.								
f	TLP summary data type indicator ("key") also used when manually generating a TLPQUEUE file by the input message ANALY:TLPFILE. See Trouble Location Procedure Description 4ESS™ Switch, Practice 234-010-215, for the layout of the octal data words. The valid key codes are: <table> <tr><td>TD</td><td>CD</td></tr> <tr><td>BP</td><td>UD</td></tr> <tr><td>BL</td><td>PD</td></tr> <tr><td>PA</td><td>ED</td></tr> </table>	TD	CD	BP	UD	BL	PD	PA	ED
TD	CD								
BP	UD								
BL	PD								
PA	ED								
g	Octal data for V1 associated with the previous data type indicator.								
h	Octal data for V2 associated with the previous data type indicator.								
i	Octal data for V3 associated with the previous data type indicator.								
j	Octal data for V4 associated with the previous data type indicator.								
k	Octal data for V5 associated with the previous data type indicator.								
l	Octal data for V6 associated with the previous data type indicator.								
m	The TLPQUEUE file number assigned when the TLP summary data is enqueued in the TLPQUEUE. This file number uniquely defines the TLP summary data and is used by the following output messages to link the output messages to this summary data output message.								
n/o/p q:r:s	The date and time the TLPQUEUE file was generated. It is used by the following output messages to link the output messages to the time and the summary data output message was printed.								
t	ERAP file number assigned to the summary data (see OP:ERAPDATA).								

When the TLPQUEUE ACCESS DENIED phrase is included in the output message, the TLP File (TLPFILE) is not created; therefore the ENTRY TIME and TLPFILE COMPLETED phrases are not printed. Note however that the MFNUM is printed for this case.

4. ACTION TO BE TAKEN

When the output message includes the phrase ALL PENDING TLP SEARCHES INHIBITED indicating that the TLP search process is turned off; restart the search process using the ALW:TLP:SRCH input command.

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When the output message includes the phrase
QUEUE ACCESS DENIED : DATA NOT RETAINED : CODE e,
CODE e determines the action required:

- 1 — The full indication may be due to either too many files (15 max) or too much data. In either case, remove some files before adding any new ones. Remove files either by allowing the TLP search process to generate an equipment list (thus automatically removing the file), or else remove the files removed by using the CLR:TLPQUEUE input message.
- 2 — Run the TLPQUEUE verification routine twice using the ALW:TLP:SRCH input message.
- 4 — No action required if the unit should be inhibited. The unit may be allowed to enqueue the data using the ALW:TLP input message.

After clearing the reason which caused the TLP summary data to be lost, regenerate the TLP summary data. This can be done by either

- (a) requesting the diagnostic, or
- (b) manually inputting the data using the ANALY:TLPFILE input message.

5. REFERENCES

PIDENTs
DRPPASUB
DRPPSSUB
DRPSUPR

Practice 234-010-215 *Trouble Location Procedure - Description*

Practice 234-180-270, *Diagnostic Results Post-Processing Program - Description*

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TOP(Task Oriented Practices) Documents:

Practice 234-151-006 *Master Control Complex and Processor Peripheral Interface Frame*
Practice 234-151-011 *Time Multiplexed Switching Frame*
Practice 234-151-013 *Network Clock Frame*
Practice 234-151-015 *Peripheral Unit Bus System*
Practice 234-151-022 *Time Slot Interchange System*
Practice 234-151-031 *Signal Processor 1 - Terminal Interface Equipment*
Practice 234-151-050 *Echo Suppressor Terminal*
Practice 234-351-004, *1B Processor Cabinet Trouble Clearing TOP*
Practice 254-251-010, *Auxiliary Data System (DUS/TUC)*
Practice 254-251-020, *Input/Output Frame (IOUS)*

PA-4A002-01, 4ESSTM *User's Manual*, Section C.3, Trouble Location Procedures

Input Messages

ALW:TLP
ANALY:TLPFILE
CLR:TLPQUEUE
INH:TLP
OP:ERAPDATA
OP:TLPQUEUE

Output Messages

CLR:TLPQUEUE
OP:TLPQUEUE

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ID ANALY:TLPF-SUS
WORK CENTER.. MOC
GENERIC 4E22 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

ANALY:TLPFILE: [a[,b]] SUSPECTED FAULTY EQUIPMENT
[TLPFILE c :] [d] [ENTRY TIME e/f/g h:i:j]
MFNUM: k
EQPT LOC CODE [(FN)] NOTE WT FS SYM SD HELPER ID
[[l-]m[?]] n [(o)] [p][!]] q r s[M] t [u]]
.
[[l-]m[?]] n [(o)] [p][!]] q r s[M] t [u]]
NEQLS v
[FLN w [FRM x]]
[FLN y]

2. REASON FOR OUTPUT

To list the most likely faulty equipment locations. The output message identifies the unit and the Trouble Location Procedure File (TLPFILE) number which was used to generate the list. The locations are listed one per line with the most highly suspect locations first. The 1B Engineered Data (ED) Trouble Location Procedure (TLP) output is split into three parts: equipment in the unit under test, equipment not in the unit under test, and the set of TLP NOTES. Each part has an appropriate sub-title, see variable d.

3. VARIABLE FIELD DEFINITIONS

- a The unit type - member number.
- b The subunit type - submember number.
- c The TLP Disk Queue (TLPQUEUE) file number assigned if the TLP summary was enqueued for tape processing.
- d Message subtitle. These include:
IN UNIT UNDER TEST
NOT IN UNIT UNDER TEST
NOTES
- e/f/g h:i:j The date and time the TLPQUEUE file was generated. It is used by the following output messages to link the output messages to the time the summary data output message was printed.

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- This part discusses those variables printed for each equipment location.
- k The Error Analysis Program (ERAP) file number assigned to the summary data (see OP:ERAPDATA).
- l Frame identity of the equipment. The format of l is a one to seven digit alpha-numeric character sequence: $l^1l^2l^3l^4l^5l^6l^7$.
- m[?] Equipment location, where m is the equipment location and is used to uniquely define the piece of equipment. The format of m is $m^1m^2m^3m^4m^5m^6$ where each m is a decimal number 0 through 9. In some cases m^4 maybe an alpha character.

- m^1 — The bay location within frame.
- m^2m^3 — The horizontal location in the bay (absolute inches above the floor).
- $m^4m^5m^6$ — The vertical location in bay (the slot from the left of the bay).

The [?], which is rarely used, indicates that the particular Equipment Location (EQL) in question may or may not be equipped. In this case, the Schematic Drawing (SD) must be consulted to determine if a piece of equipment should be in the particular location.

The EQL is assumed to be in the unit under test unless the HELPER ID field specifies another unit.

- n The code variable which will describe the type of equipment referred to by the EQPT LOC variable. In the case of FA, FB, FC, FE, K LW or UN pack codes, the variable will indicate the specific pack code number. 4ESS™ peripheral unit TLP messages may specify a variety of additional codes in this field. The valid codes for the 1B processor are:

- CABLE — Interframe cabling, for example between Time Multiplexed Switchs (TMSs) and Time Slot Interchange Frames (TSIFs). (HELPER ID field should further identify).
- CONV — Implicates an individual power converter.
- CP xx — Tape transport pack.
- FAxxxx — FA pack code.
- FBxxxx — FB pack code.
- FCxxxx — FC pack code.
- FExxxx — FE pack code.
- KLWxxx — K LW pack code.
- POWER — Implicates the whole group of power converters for the frame.

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RELAY — Relay pack.

SPAPP — Signaling Processor (SP) application point. (See office translation for pulse point address for this frame and the SP.)

UNxxx — UN pack code.

XFMR — Power transformer pack.

[o] Functional name of the suspect equipment. This field is new for the 1B processor.

[p][!] The note field which refers to a set of notes for the frame under test. A note without the ! indicates general information which may be referred to by the user. A note with the ! indicates critical information in regard to replacement of the associated equipment. In this case the user must refer to the note before proceeding to replace the equipment.

The sets of notes for the various frames are contained in the Task Oriented Practices (TOP) document (see References) associated with the particular unit inferred by variable a.

For most 1B processor units, TLP notes are printed with the pack list.

The sets of TLP notes for 1B Processor units is included. The TLP notes are divided into two parts. Part one is the list of Unit Dependent TLP notes. Part two is the list of Common TLP notes (notes used by many units).

PART ONE - UNIT DEPENDENT TLP NOTES

This part contains unit dependent TLP notes for the following 1B Processor units - Central Control (CC), Master Control Complex and Utility Processor (MUP), Input/Output (IO), Input/Output Processor (IOP).

Central Control (CC) Unit Dependent TLP Notes

NOTE 20: Refer to the 1B document 234-351-004 *1B Processor Cabinet Trouble Clearing TOP* to replace these circuit packs.

NOTE 50:

This test also verifies the KLV16 interface to the KLV21. Better fault isolation can be gained by the following procedure:

- 1 Determine the active MUP (KLV16) (Master Control Complex [MCC] page 106).
- 2 Make the standby MUP active.
- 3 Rerun the failing phase.

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- 4 If the phase is Some Tests Failed (STF), the MCC Utility Interface (MUI) (KLW21) under test is the most likely suspect.
- 5 If the phase is All Tests Passed (ATP), the standby (previously active) MUP (KLW16) is the likely suspect. Replace that MUP and conditionally restore the MUP to service. Make the restored MUP active, and rerun the failing CC phase. If the phase is ATP, the fault is cleared. If the phase is STF, replace the MUI (KLW21) under test.

NOTE 51:

Suspect pack is in active CC. You must force standby CC into service before removing power to replace suspect pack.

NOTE 52:

The cable connecting the MIMB0 and MIMB1 output buses from the active Maintenance Matcher (MM) pack to the MEMB0 and MEMB1 input buses respectively, of the standby MM pack may cause a failure.

NOTE 53:

The cable connecting the MIMB0 and MIMB1 output buses from the standby Maintenance Matcher (MM) pack to the MEMB0 and MEMB1 input buses respectively, of the active MM pack may cause a failure.

NOTE 54:

The cable connecting the M0OUT and M1OUT outputs from the active MM pack to the MIN0 and MIN1 inputs respectively, of the standby MM pack may cause a failure.

NOTE 55:

The cable connecting the M0OUT and M1OUT outputs from the standby MM pack to the MIN0 and MIN1 inputs respectively, of the active MM pack may cause a failure.

NOTE 56:

The cable connecting the EEI0 and EEI1 outputs from the active MM pack to the EEEI0 and EEEI1 inputs respectively, of the standby MM pack may cause a failure.

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IO (Input/Output) Unit Dependent TLP Notes

NOTE 20:

For LDI5C and later, the FA453 in Input/Output Unit Controller/Selector (IOUCS) 5 and 7 will be an FA456, and the FA455 in IOUCS 5 and 7 will be an FA457.

Input/Output Processor (IOP) Unit Dependent TLP Notes

NOTE 20:

This pack code is application dependent and may not be an FG19.

NOTE 21:

For an expanded IOP frame, circuit pack FG90 (MC5A009A1) is used instead of FG85 (MC5A000A1).

NOTE 22:

For an expanded IOP frame, circuit pack FG86 (MC5A010A1) is used instead of FG86 (MC5A000B1).

NOTE 23:

For an expanded IOP frame, circuit pack FG87 (MC5A011A1) is used instead of FG87 (MC5A000C1).

NOTE 24:

This pack code is application dependent and may be either a TN75 or a TN82.

NOTE 25:

For an expanded IOP frame circuit pack FG89 is used instead of FG22.

NOTE 26:

This circuit pack (FC274) is used only in an expanded IOP unit with member number 8 or greater.

Master Control Complex and Utility Processor (MUP) Unit Dependent TLP Note

NOTE 140:

Check to insure LAN (local area network) is properly terminated. See SD4A-147 for location of LAN termination.

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PART TWO - COMMON TLP NOTES

This part contains the "Common" TLP notes which are referenced by several unit types.

NOTE 1:

Special procedures are required for circuit pack replacement. Refer to associated TOP.

NOTE 2: (Does not apply to 1B processor units)

The following steps should be followed (in order presented) for power monitor test failures using the diagnostic. Refer to TAP 103 for checking power problems using manual techniques.

Step 1

- 1.1 Determine if a fuse is blown. If there is no trouble indication, proceed to Step 2. Replace the blown fuse(s).
- 1.2 After replacing the blown fuse, rerun* the complete diagnostic without the TLP option. If the fuse blows again, refer to backup techniques. If the result of the diagnostic is
 - 1.2.1 ATP, the trouble is cleared.
 - 1.2.2 STF, with the same or different power monitor test failure(s), proceed to Step 2.
 - 1.2.3 STF, with the first test failure beyond the power monitor tests**, rerun* the entire diagnostic with the TLP option, and proceed to use the new TLP equipment list. Do not proceed to Steps 2, 3, 4 and 5.

Step 2

- 2.1 Determine if an LED(s) is lit and note for future reference.
- 2.2 Perform the manual power monitor tests described in Table 1. If there is no trouble indication, and an LED was not lit prior to performing the manual tests, proceed to Step 3. If there is a failure indication during or after the manual tests, replace the unit containing the LED that does not light when it should during the

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manual tests or remains lit following the manual tests. If the manual tests pass, but an LED was lit prior to executing the manual tests (now extinguished, following the manual tests), rerun* the complete diagnostic without the TLP option. If the previously lit LED remains off, suspect that the power failure indication is marginal and if this failure indication cannot be repeated, restore the unit to service if the diagnostic is ATP.

- 2.3 After making the necessary replacement, rerun* the complete diagnostic without the TLP option. If the result of the diagnostic is
 - 2.3.1 ATP, the trouble is cleared.
 - 2.3.2 STF, with the same fault signature, return the original power converter (if replaced) to its original position and proceed to Step 3.
 - 2.3.3 STF, with a different power monitor failure(s), proceed to Step 3.
 - 2.3.4 STF, with the first test failure beyond the power monitor tests, rerun* the entire diagnostic with the TLP option and proceed to use the new TLP equipment list. Do not proceed to Steps 3, 4 and 5.

Step 3

- 3.1 Run* phase 1 (or appropriate power test phase) of the diagnostic for approximately 15 iterations using the RPT option on the DGN input message. The object of this test is to check the power monitor sequence circuits for slow response. Look for LED lamps that are noticeably out of step with others. (Normally, the LEDs will not all switch simultaneously.) If there is no trouble indication, proceed to Step 4. Replace the unit containing the LED that is out of step.
- 3.2 After making the necessary replacement, rerun* the complete diagnostic without the TLP option. If the result of the diagnostic is
 - 3.2.1 ATP, the trouble is cleared.
 - 3.2.2 STF, with the same fault signature, return the original power converter (if replaced) to its original position and proceed to Step 4.

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- 3.2.3 STF, with the first test failure beyond the power monitor tests, rerun the entire diagnostic with the TLP option, and proceed to use the new TLP equipment list. Do not proceed to Steps 4 and 5.

Step 4

- 4.1 Replace packs or converters on the current TLP equipment list. Start with the entry second from the top and proceed one at a time.
- 4.2 For each piece of equipment replaced, rerun* the complete diagnostic without the TLP option. If the result of the diagnostic is
 - 4.2.1 ATP, the trouble is cleared.
 - 4.2.2 STF, with the same fault signature, return the original unit (pack or converter) to its original position and proceed to the next entry on the original equipment list. (If there are no more entries, proceed to Step 5.)
 - 4.2.3 STF, with a different power monitor failure(s), determine if the last replacement unit (from stock) is faulty (try another unit from stock). If not, proceed to the next entry on the original equipment list, proceed to Step 5.
 - 4.2.4 STF, with the first test failure beyond the power monitor tests, rerun the entire diagnostic with the TLP option, and proceed to use the new TLP equipment list. Do not proceed to Step 5.

Step 5

- 5.1 Refer to backup techniques.

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NOTE 3:

Bipolar packs (i.e., B suffix coded packs) are backward compatible and may be substituted for unipolar packs (i.e., same pack code without suffix). However, frames manufactured with bipolar packs cannot accept unipolar pack replacements.

Table 1

Manual Power Monitor Tests

<i>Action</i>	<i>Action Taken By</i>
1. The frame must be powered up (Out Of Service [OS] lamp can be on or off).	USER
2. Rotate the Power (PWR) OFF button to the Request Out Of Service (ROS) position.	USER
3. The Acknowledge (ACK) lamp winks on, then off. The OS lamp should now be on; if it is not, the unit is in service and the manual power monitor tests cannot be continued.	SYSTEM
4. Depress the TEST button for approximately 1 second.	USER
5. All LEDs on the converters (plus the FB153) will light if they pass the tests.	POWER TEST CIRCUIT
6. Rotate the PWR OFF button to the NORMAL position, then momentarily operate the "ON" button.	USER
7. All LEDs should be extinguished.	POWER TEST CIRCUIT

q The weight field supplied for each item of equipment listed and is a confidence factor ranging from 10 through 1. The equipment is listed in order of confidence with the higher values first. Equipment with equal confidence factors are equally likely to be the faulty equipment. Replacement of equipment should proceed one item of equipment at a time starting at the top of the first list and ending at the last item. A diagnostic should be run in between each replacement. Refer to the TOP document for correct pack replacement procedures.

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r s[M] t Three variables which give the Functional Schematic (FS) number, the Symbol (SYM) number, and the unit Schematic Drawing (SD) number for the associated piece of equipment. Note however that the EQPT LOC in the unit SD may differ from the EQPT LOC printed since the printed location is the absolute location in the frame instead of the absolute location in the unit. The "M" indicates the piece of equipment has more than one SYM or FS number.

[u] The HELPER ID field which has several forms and either identifies another frame or gives supplementary data about the associated equipment. The forms are described:

HELPER ID VARIABLE	MEANING
blank	This is the default case and indicates the equipment is in the frame or unit under test.
a[, b]	This indicates the equipment is actually in a unit other than the unit under test. The unit is identified by its unit type-member number a, and if need be, its subunit type submember number b.
MSN c	SP-ROW-POINT Miscellaneous Scanner Number (MSN) of trunk. SP — 2-digit decimal number indicating the SP member number, range 00-31. ROW — 3-digit decimal number indicating the SP, range 000-127. POINT — 2-digit decimal number indicating the row, range 00-15. A note will direct the user to busy-out the representative MSN and its 15 associated MSNs prior to replacing the equipment.

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HELPER ID VARIABLE	MEANING
TSN d	SP-ROW-POINT Trunk Scanner Number (TSN) of trunk. SP — 2-digit decimal number indicating the SP member number, range 00-31. ROW — 3-digit decimal number indicating the SP, range 000-255. POINT — 2-digit decimal number indicating the row, range 00-15.
MDN e	SP-ROW-POINT miscellaneous distributor number of trunk. (Refer to MSN c for values.)
TDN f	SP-ROW-POINT trunk distributor number of trunk. (Refer to TSN d for values.)
SU x SW y REC z SU x SW y XMT z	For interframe cabling between a TMS and a TSIF, the connections at the TMS are identified by the Switch Unit (SU), Switch (SW) and either Receive (REC) or Transmit (XMT) cables.
FACE x, GP y, CT z FACE x, GP y, HBDG z	For reference to equipment associated with a Disk File (DF), the Face (FACE) Group (GP) and either the Center Tape (CT) or Head Block Diode Group (HBDG) are identified.
v	The number of Equipment Locations (EQLs) printed by the TLP search program.
w	The floor location number. For those units which do not have a fixed floor assignment, this gives the floor location number of the frame containing the unit defined by the variable a.
x	The frame containing the unit identified by the a variable.
y	The floor location number for associated equipment that is not co-located with the unit defined by variable a.

NOTE *: Via Teletypewriter (TTY) request and with the power switch in the "NORM" position since power monitor tests are skipped on frame request or if the power switch is in the "ROS" position.

NOTE **: Test numbers associated with power monitor test are specified in the diagnostic user's document.

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4. ACTION TO BE TAKEN

Repair the frame by replacing one piece of equipment at a time starting at the top of the first equipment list. NOTES (critical and / or normal) should be observed.

Refer to the TOP manual for a detailed description of the repair process.

5. REFERENCES

PIDENTs
CCDG01
M3DG01

Practice 234-010-215, *Trouble Location Procedure - Description*
Practice 234-280-230, *Trouble Location Procedure Programs - Description*

TOP (Task Oriented Practices) Documents:

Practice 234-151-006, *Master Control Complex and Processor Peripheral Interface Frame*
Practice 234-151-011, *Time Multiplexed Switching Frame*
Practice 234-151-013, *Network Clock Frame*
Practice 234-151-015, *Peripheral Unit Bus System*
Practice 234-151-022, *Time Slot Interchange System*
Practice 234-151-031, *Signal Processor 1 - Terminal Interface Equipment*
Practice 234-151-050, *Echo Suppressor Terminal*
Practice 234-151-077, *Service Circuit System (SCS) Maintenance*
Practice 254-251-001, *Central Control Frame*
Practice 254-251-005, *Call Store/Program Store*
Practice 254-251-010, *Auxiliary Data System*
Practice 254-251-015, *File Store Frame*
Practice 254-251-020, *Input/Output Frame*
Practice 234-351-004, *1B Processor Cabinet Trouble Clearing TOP*

Input Messages

ALW: TLP
CLR: TLPQUEUE
INH: TLP
OP: TLPQUEUE

Output Messages

CLR: TLPQUEUE
OP: TLPQUEUE

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ID ANALY:TLPF-TL1
WORK CENTER.. MOC
GENERIC 4E19 through 4E21
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

ANALY:TLPFILE [a[,b]] TLP
TLP TAPE ACQUISITION ERROR c d e
[MOUNT TLP TAPE WITH FILE ID = f]
[RETRY IN PROGRESS]

2. REASON FOR OUTPUT

To print when the Trouble Location Procedure (TLP) search process abnormally terminates due to problems associated with the TLP tape. In this case, the TLP program assumes the cause is due to TLP tape data acquisition errors and employs a retry strategy.

If the retry attempt fails, the TLP search process will be automatically inhibited and the output message ANALY:TLPF-TL3 will be generated.

3. VARIABLE FIELD DEFINITIONS

[a[,b]]	When present, a is the unit type - member number and b is the subunit type - submember number. When absent this indicates the associated TLP program was not performing a unit dependent function (for example, generating output in response to the OP:TLPQUEUEinput message).
c	TLP search control word bit definitions (DG1A_LOCTRL): 0 — Key utility job in progress. 1 — Locate utility job in progress. 3 — Search job in progress. 4 — TLP search process suspended. 5 — TLP search process enabled. 13 — TLP program either suspended or some unit inhibited from enqueueing TLP summary data.
d	Low priority address (DG1A_TSKADL). This address which is either in the Maintenance Control Program (MACP) paging of in PIDENT DRPSUPR gives the address of the last TLP tape operation.
e	Error summary word bit definitions (DG1A_TAPERR): 0 — File sequence error. 8 — TLP tape has no valid data.

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- 9 — TLP directory does not contain requested data.
- 10 — Tape error; retry attempted.
- 11 — MACP TLP search aborted.
- 12 — Off-normal operation code (see bits 3-1).
- 13 — Off-normal success code (see bits 7-4).
- 14 — Unexpected end of tape occurred.
- 15 — Off-normal rejection code (see bits 7-4).
- 16 — Directory block error.
- 17 — Time out on tape operation; retry attempted.
- 18 — Time out on TLP search; suspend processing.
- 19 — Tape data block size error.
- 20 — Tape data block word count error.
- 21 — Unexpected end of file encountered.
- 22 — Unexpected beginning of tape encountered.

f The TLP tape FILE ID that the TLP program could not find in the TLP tape directory labels.

4. ACTION TO BE TAKEN

Normally no action is required, however, excessive numbers of this message may indicate abnormal wear of the TLP tape or misalignment of the tape unit read heads.

Align the read heads following normal maintenance procedures and/or replace the TLP tape with a new copy.

However, when the phrase MOUNT TLP TAPE WITH FILE ID = f is printed, consult the TLP tape loader maps and mount the correct TLP tape.

5. REFERENCES

PIDENTs
DRPPASUB
DRPPSSUB
DRPSUPR

Practice 234-180-270, *Diagnostic Results Post-Processing Program - Description*

Practice 234-280-230, *Trouble Location Procedure Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

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Input Messages

ALW:TLP
CLR:TLPQUEUE
INH:TLP
OP:TLPQUEUE

Output Messages

ANALY:TLPF-TL3
CLR:TLPQUEUE
OP:TLPQUEUE

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ID ANALY:TLPF-TL2
WORK CENTER.. MOC
GENERIC 4E22 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

ANALY:TLPFILE [a b[,c d]]
TLP PROGRAM ABORTED e f g

2. REASON FOR OUTPUT

To print when the Trouble Location Procedure (TLP) search process abnormally terminates.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|------------------------|
| a | Unit type |
| b | Member number |
| c | Subunit type |
| d | Subunit member number. |

NOTE: When absent this indicates the associated TLP program was not performing a unit dependent function (for example, generating output in response to the OP:TLPQUEUE input message).

- | | |
|---|---|
| e | TLP search control word bit definitions (DG1A_LOCTRL): <ul style="list-style-type: none">1 — Locate job in progress.3 — Search job in progress.4 — TLP search process suspended.5 — TLP search process enabled.13 — TLP program either suspended or some unit inhibited from enqueueing TLP summary data. |
| f | Low priority address (DG1A_TSKADL). This address which is either in the Maintenance Control Program (MACP) paging area or in PIDENT DRPSUPR gives the address of the last TLP operation. |
| g | Error summary word bit definitions (DG1A_TAPERR): <ul style="list-style-type: none">0 — Empty file.1 — Over all time out.2 — Disk operation time out.3 — No MACP job in progress or requested. |

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- 4 — Restart was requested flag.
- 5 — Delay suspend flag.
- 8 — LOCTID has no corresponding path.
- 9 — Contents of LOCTID not in directory.
- 10 — Operation error has occurred.
- 11 — Summary Process (SP) encountered failure.
- 13 — Read file request failed submit.
- 14 — Read file request timed out.
- 15 — Read file bad Attached Processor Interface (API) status.
- 16 — Read file bad File Manager Interface (FMI) status.
- 17 — Open file request failed submit.
- 18 — Open file request timed out.
- 19 — Open file bad API status.
- 20 — Open file bad FMI status.
- 21 — Off-normal End Of File (EOF) encountered.
- 22 — Control word is zero.

4. ACTION TO BE TAKEN

Normally no action is required, however excessive numbers of this message may indicate bad data in the TLP File (TLPFILE) being processed.

5. REFERENCES

PIDENTs
DRPPASUB
DRPPSSUB
DRPSUPR

Practice 234-180-270, *Diagnostic Results Post-Processing Program - Description*
Practice 234-280-230, *Trouble Location Procedure Programs - Description*

PA-4A002-01, 4ESSTM User's Manual, Section C.3, Trouble Location Procedures

Input Messages
ALW: TLP
CLR: TLPQUEUE
INH: TLP
OP: TLPQUEUE

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4ESS
OM-4B000-01

ANALY:TLPFILE

Output Messages
ANALY:TLPF-TL3
CLR:TLPQUEUE
OP:TLPQUEUE

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ANALY:TLPF-TL2-3

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September 2001

ID ANALY:TLPF-TL3
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

ANALY:TLPFILE [a b[,c d]] TLP
CURRENT TLP SEARCH ABORTED
ALL PENDING TLP SEARCHES INHIBITED

2. REASON FOR OUTPUT

To report that the Trouble Location Procedure (TLP) search process has automatically inhibited itself because processing errors have occurred.

3. VARIABLE FIELD DEFINITIONS

a	Unit type
b	Member number
c	Subunit type
d	Subunit member number.

NOTE: When absent this indicates the associated TLP program was not performing a unit dependent function (for example, generating output in response to the OP:TLPQUEUE input message).

4. ACTION TO BE TAKEN

The TLP Disk Queue (TLPQUEUE) file which causes the errors will be marked with a "*" when the TLPQUEUE is printed using the input message OP:TLPQUEUE.

Remove the offending TLP File (TLPFILE) using the input message CLR:TLPQUEUE.

Regenerate the TLPFILE either by requesting the diagnostic or by manually entering the summary data using the input message ANALY:TLPFILE.

5. REFERENCES

PIDENTs
DRPPASUB
DRPPSSUB
DRPSUPR

Practice 234-180-270, *Diagnostic Results Post-Processing Program - Description*
Practice 234-280-230, *Trouble Location Procedure Programs - Description*

PA-4A002-01, 4ESSTM User's Manual

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Input Messages

ANALY:TLPFILE
ALW:TLP
CLR:TLPQUEUE
INH:TLP
OP:TLPQUEUE

Output Messages

CLR:TLPQUEUE
OP:TLPQUEUE

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ID ANALY:TLPF-TL4
WORK CENTER.. MOC
GENERIC 4E19 through 4E21
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

ANALY:TLPFILE [a b[,c d]] TLP
WARNING; VERSION e does NOT MATCH EXPECTED VERSION f

2. REASON FOR OUTPUT

To print whenever the format version read from the Trouble Location Data Base (TLDB) tape does not match the format version of the Trouble Location Procedure (TLP) programs. If the TLP process were to proceed, an interrupt would most likely occur; or worse yet, erroneous equipment lists would be generated.

3. VARIABLE FIELD DEFINITIONS

a	Unit type
b	Member number
c	Subunit type
d	Subunit member number.

NOTE: When absent this indicates the associated TLP program was not performing a unit dependent function (for example, generating output in response to the OP:TLPQUEUE input message).

e	Format version of the TLP programs.
f	Format version from the TLDB tape.

4. ACTION TO BE TAKEN

If the wrong TLDB tape is currently mounted, locate and mount the TLDB tape compatible with the generic issue of the TLP program. Set up the TLDB tape and enable the TLP search process using the input message ALW:TLP:SRCH.

5. REFERENCES

PIDENTs
DRPPASUB
DRPPSSUB
DRPSUPR

Practice 234-180-270, *Diagnostic Results Post-Processing Program - Description*
Practice 234-280-230, *Trouble Location Procedure Programs - Description*

PA-4A002-01, 4ESSTM User's Manual

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Input Messages

ALW:TLP
CLR:TLPQUEUE
INH:TLP
OP:TLPQUEUE

Output Messages

CLR:TLPQUEUE
OP:TLPQUEUE

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ID AUD:0
WORK CENTER.. MAC, MOC, NMOC, TEC,
TOC
GENERIC 4E22 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

- [1] AUD:a,TD b;c d [e]
DATA MISMATCHES
- | TYPE | CORE/FILE | ADR | TAPE | CORE/ID | TAG | FSCPY0 | FSCPY1 |
|------|------------|-----|---------|---------|-----|----------|----------|
| ffff | gggggggggg | | hhhhhhh | iiiiiii | | jjjjjjjj | kkkkkkkk |
| . | | | | | | | |
| . | | | | | | | |
| . | | | | | | | |
| ffff | gggggggggg | | hhhhhhh | iiiiiii | | jjjjjjjj | kkkkkkkk |
- [2] AUD:a,TD b;c d [e]
AWAITING INSTRUCTIONS
- [3] AUD:a,TD b;c d [e]
CODE l
- [4] AUD:a,TD b;c d [e]
m ERROR(S) IN ID2FS MAP DETECTED
- [5] AUD:a,TD b;c d [e]
n ERROR(S) IN CS2FS MAP DETECTED
- [6] AUD:a,TD b;c d [e]
o ERROR(S) IN ID2SEG MAP DETECTED
- [7] AUD:a,TD b;c d [e]
p ERROR(S) IN SEGPTRS MAP DETECTED
- [8] AUD:a,TD b;c d [e]
q ERROR(S) IN HASH TABLES DETECTED
- [9] AUD:a,TD b;c d [e]
TAPE FMT NG r
- [10] AUD:a,TD b;c d [e]
TAPE HDR MM
- [11] AUD:a,TD b;c d [e]
TIMEOUT

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[12] AUD:a,TD b;c d [e]
CODE s CODE t

2. REASON FOR OUTPUT

To report the results of a manual request to audit a data base using the system backup tape as a reference.

Format [2] AWAITING INSTRUCTIONS, the user has 30 minutes to enter further instructions to the tape audit program. When this message appears the first time, if no instructions are given within 10 minutes, the message is repeated. If another 10 minutes elapses and no instructions are given, the message is again repeated with variable d as LAST REQUEST. After 30 minutes, the audit times out.

Depending on the other data reported, one of the three following instructions should be given to the audit, where variable a matches a in the original output message:

- (a) To ignore tape header mismatch input:
AUD:a,TD z;NCG!
- (b) To continue audit and correct errors reported or rebuild maps:
AUD:a,TD z;CORR!
- (c) To stop audit:
STOP:AUD;a!

Format [10] TAPE HDR MM, tape type does not match type of audit.

Format [11] TIMEOUT, the user has not responded within 30 minutes to the AWAITING INSTRUCTIONS message. Audit is terminated.

3. VARIABLE FIELD DEFINITIONS

- a Type of audit requested:
 - GEN — Generic (GEN).
 - LIBSYS — Library.
 - NWM — Network Management (NWM).
 - ODA — Office Data (ODA).
 - TPM — Traffic Plant Measurements (TPM).
- b 3B tape drive number (0-1).
- c Audit mode:
 - CORR — Correcting.
 - NCG — Noncorrecting.
 - UCL — Unconditional load of data from tape to file store area specified by system maps (NWM and TPM only).

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- d Disposition of the request:
- ABORTED.
- COMPLETED.
- IN PROGRESS.
- STOPPED.
- Partition message indicator:
- MSG COMPL.
- MSG IP.
- MSG STARTED.
- e Additional audit information:
- CORRECTION BUFFER IS FULL — Area reserved for correction blocks has filled up.
- HEADER OF INPUT TAPE DOES NOT MATCH SYSTEM COPY —
 Tape mounted is not the most recently written tape of the type requested.
- NOTE:** Reentering the appropriate AUD: input message will cause System Audit Of Stores Using Tape (SAST) to run.
- LAST REQUEST — User has ten minutes to give audit instructions. (See Format [2] under "REASON FOR OUTPUT".)
- MAP ERRORS REQUIRE AUDIT OF NEXT TAPE — Errors in system maps were found. Another system tape must be audited before errors can be resolved. Continue auditing tape.
- TAPE DONE — Entire tape has been read.
- f Type of address where mismatch occurred:
- CORE.
- FILE.
- g Mismatch found during audit. Octal number indicating a 30 bit core address or file system offset. File offset when TYPE = FILE.
- h Mismatch found during audit. Octal number indicating tape data.
- i Mismatch found during audit. Octal number indicating data found in core or file ID tag. File ID tag when TYPE = FILE.
- j Mismatch found during audit. Octal number indicating data found in File System Copy 0 (FSCPY0). If FSCPY0 is out-of-service, data is the same as that found in FSCPY1.

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- k Mismatch found during audit. Octal number indicating data found in File System Copy 1 (FSCPY1). If FSCPY1 is out-of-service, data is the same as that found in FSCPY0.
- l Error code:
- 40 — Print request rejected.
 - 50 — Disk read request rejected.
 - 51 — Disk write request rejected.
 - 52 — Disk queue full.
 - 53 — Both files out-of-service.
 - 54 — Core address to file system address conversion failed - no backup.
 - 60 — System Audit Of Writable Stores (SAWS) lockout. Other core changing client is in progress.
 - 61 — Disk address of hash sum table could not be determined.
 - 62 — Map errors detected with nonallocating tape.
 - 63 — Load mode invalid for given tape type.
 - 64 — Invalid hash sum head table index detected during load.
 - 79 — Request for additional Maintenance Control Program (MACP) memory failed.
 - 81 — Request for status on the MACP memory request failed.
 - 82 — No tape type in TA1TPCODE.
 - 83 — Failed to find FS backup address for hash table.
 - 84 — Hash update failure.
 - 85 — Timed out while waiting for additional MACP memory.
 - 86 — Failed to covert core offset to MCODE and MCODE offset.
 - 87 — Failed to rebuild XS2FS map.
 - 88 — SEGPTRS error with core back entry/entries, System Audit Of Stores Using Tape (SAST) cannot correct this error - seek technical assistance.
 - 91 — Disk or tape operation failure.
 - 92 — Maintenance interrupt, System Audit Of Stores Using Tape (SAST) not active.
 - 93 — MACP holding time exceeded.
 - 94 — Paging supervisor aborted.
 - 95 — Open GBT (general buffer table) failed.

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- 96 — Maintenance interrupt, SAST active.
- 97 — Manual request.
- m Decimal number of errors detected in Program Store (PS) copy of ID tag to File System (FS) map. Even if zero errors are detected, the map is rebuilt from tape and both the file system and program store copies will be updated if there are errors in another map and the audit is given instructions to correct.
- n Decimal number of errors detected in program store copy of core to file system map. Even if zero errors are detected, the map is rebuilt from tape and both the file system and program store copies will be updated if there are errors in another map and the audit is given instructions to correct.
- o Decimal number of errors detected in Program Store (PS) copy of ID tag to file segment map. Even if zero errors are detected, the map is rebuilt from tape and both the file system and program store copies will be updated if there are errors in another map and the audit is given instructions to correct.
- p Decimal number of errors detected in program store copy of core to file segment map. Even if zero errors are detected, the map is rebuilt from tape and both the file system and program store copies will be updated if there are errors in another map and the audit is given instructions to correct.
- q Decimal number of errors detected in call store copy of hash sum head table or program store copy of hash sum collision block (index 0). This number does not include any mismatches found in hash sums. Even if zero errors are detected, the tables are rebuilt from tape, and both the file system and main memory copies will be updated if the audit is given instructions to correct.
- r Error code:
- 01 — Expected tape header - read EOF.
 - 02 — Expected full generic tape - tape header indicates partial update tape.
 - 03 — Expected merge data file header - read EOF.
 - 04 — Expected merge data file header - ID mismatch.
 - 05 — Expected CS2FS map - read EOF.
 - 06 — Expected CS2FS map - read ID mismatch.
 - 07 — Expected ID2FS map - read EOF.
 - 08 — Expected hash sum head table 1 - ID mismatch.
 - 09 — Expected ID2SEG map - read EOF.
 - 10 — Expected ID2FS map - ID mismatch.

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- 11 — Expected hash sum head table - read EOF.
- 12 — Expected hash sum head table - ID mismatch.
- 13 — Expected ID2SEG map - ID mismatch.
- 14 — Expected file header - ID mismatch.
- 15 — Hash head cell contents could not be determined.
- 16 — Expected first hash sum block - ID mismatch.
- 17 — Expected hash sum block - ID mismatch.

S

1B error codes:

- 1 — Maintenance Control Program (MACP) unable to send message via Attached Processor Message Handler (APMH) to DMERT Interface (DMI).
- 2 — Timed out waiting for the 3B DMI to fork job (Attached Processor Tape Unit Process [APTUP]).
- 3 — DMI failure when trying to fork job (APTUP).
- 4 — MACP unable to send message via APMH to 3B tape manager (APTUP).
- 5 — Timed out waiting for the 3B (APTUP) to open/read tape.
- 6 — APTUP open failure of tape device or tape read failure.
- 7 — MACP unable to send message to open 3B file.
- 8 — Timed out waiting for the 3B file manager to open file.
- 9 — /tmp/tape_file file open failure.
- 10 — /tmp/tape_file file open failure.
- 11 — MACP unable to send message to read 3B file.
- 12 — Timed out waiting for the 3B file manager to read the file.
- 13 — /tmp/tape_file file read failure.
- 14 — /tmp/tape_file file read failure.
- 15 — Fork routine got a message from someone other than DMI.
- 16 — APTUP routine got a message from someone other than APTUP.
- 17 — Open file routine got a message from someone other than the file manager.
- 18 — Read file routine got a message from someone other than the file manager.
- 19 — APTUP unable to startup, tape device may not be read mode, or open failure on file /tmp/tape_file.

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- t 3B error codes:
- 5 — Failed to open tape drive. Possible explanations: incorrect tape drive specified, tape drive not on line, tape not loaded, tape drive in use by another 3B process.
 - 6 — Failed to open 3B transfer file /tmp/tape_file.
 - 8 — A read failure from the tape drive. Possible explanations: bad tape, tape device error.
 - 13 — Write to 3B /tmp/tape_file transfer file failed.
 - 14 — 3B received a bad or incorrect message.

4. ACTION TO BE TAKEN

Conditions during audit that require user-action result in output of an Awaiting INSTRUCTIONS message. Respond within 30 minutes. See Variable Field Definitions for responses.

5. REFERENCES

PIDENTs
LIBRLOAD
MACP
SASR
SAST

Input Messages
AUD:GEN
AUD:LIBSYS
AUD:NWM
AUD:ODA
AUD:TPM
OP:RCRORNU
STOP:AUD

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ID AUD:ERAPDATA
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

AUD:ERAPDATA CORRECTED: a,b,c, ...

2. REASON FOR OUTPUT

To report that the processor error analysis has verified its data base and has corrected any detected errors. Decimal numbers will be output, representing the corrective actions actually taken.

3. VARIABLE FIELD DEFINITIONS

a, b, c, ... Numbers (audit correction codes), representing the action taken:

- 0 — Internally held maintenance control program (MACP) scratch pad address corrected.
- 1 — Internally held MACP paging area address corrected.
- 2 — Base-level buffer pointers corrected.
- 3 — Interrupt-level buffer pointers corrected.
- 4 — Call store progression table pointer corrected.
- 5 — Program store progression table pointer corrected.
- 6 — Input message buffer pointer corrected.
- 7 — Copied file store 0 to file store 1 (error analysis data).
- 8 — Copied file store 1 to file store 0 (error analysis data).
- 9 — Error analysis data base reinitialized.
- 10 — Rebuilt directory tables from data records.
- 11 — Excessive interrupt level buffer pointers corrected.
- 12 — Base level buffer unload in progress; bits were set when no job was active; bits corrected.
- 13 — Rebuilt file descriptor blocks from data records.
- 14 — Data records were removed because of bad data.
- 15 — Unprocessed data pointer corrected from disk backup.
- 16 — Processed data pointer corrected from disk backup.
- 17 — Maintenance file number (MFNUM) and backup mismatch - used largest.

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18-22 — Unassigned.

23 — No error found.

If the correction codes printed include 14, there will follow a UPD:ERAP FSDATA output message to indicate that the data base was repacked.

4. ACTION TO BE TAKEN

Detailed information on the audit corrective action taken on the file store (FS) data is contained in a record stored by error analysis and may be printed by using an input message of the form:

OP:ERAPDATA ERAUDREC:MFNUM a!

5. REFERENCES

PIDENTs
ERAP
ERIF

Practice 254-280-320, *Error Analysis Program*
Practice 254-200-215, *Error Analysis Program Application*

Input Messages
AUD:ERAPDATA
CLR:ERAPDATA

Output Message
UPD:ERAP

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ID AUD:NUM
WORK CENTER.. MAC, MOC, NMOC, TEC,
 TOC
GENERIC 4E21 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] AUD:NUM a COMPLETE b ERRORS DETECTED
- [2] AUD:NUM c [c...c] ALREADY IN PROGRESS
- [3] AUD:NUM c [c...c] INHIBITED

2. REASON FOR OUTPUT

For Format [1], to identify the number of errors, if any, that the system has detected during a requested audit.

For Format [2], to notify the user that requested audits have been previously requested and are in progress.

For Format [3], to indicate any audits that are inhibited.

Format [3] will be printed if one of the following four conditions exists:

- (a) An INH:AUD input message has been entered requesting that an audit be inhibited.
- (b) An ALW:AUD input message has been entered requesting that an audit be allowed to run. In this case, any other audit programs still inhibited will also be listed.
- (c) An AUD:NUM input message has been entered requesting that an audit be run, but the specified audit has been inhibited.
- (d) A quarter-hourly summary of all audit programs is inhibiting the audit. Audit programs should never be inhibited for long periods of time unless known system problems exist.

3. VARIABLE FIELD DEFINITIONS

- a Audit number of the audit completed. See Table A for a list of valid audit numbers.
- b Decimal number of errors detected by the audit. (Since the audit system only maintains a seven bit error counter, this number will never be larger than 127. If 127 is output, it is possible that more than 127 errors may have been detected.)
- c The audit numbers of those audits found to be either in progress or inhibited.

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4. ACTION TO BE TAKEN

Usually no further action is required since the AUD:NUM output message is basically an informational message. In the case where an audit is inhibited and the user wishes to proceed with the audit, enter the ALW:AUD input message to allow the audit.

5. REFERENCES

PIDENT
AUDSCTRL

Practice 234-180-220, *Audit System Programs Description*

Input Messages
ALW:AUD
AUD:NUM
INH:AUD

NOTE: Audits that cannot be manually demanded are indicated in TABLE A.
AUD:NUM message on any of these audits will not be accepted by system and output message of range error will result.

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TABLE A
VALID AUDIT NUMBERS

AUDIT NUMBER	AUDIT DESCRIPTION
1	Call register (CR) idle link list
2	CR
3	Interject level timing link list [CR, trunk maintenance register (TMR)]
4	Base-level timing link list (CR, TMR)
5	CR queue for multi-frequency (MF) receiver
6	CR queue for MF transmitter
7	CR queue for operator position
8	Trunk register (TR)
9	TR interject-level engineered timing list
10	TR base-level engineered timing list
11	TR interject-level timing link list
12	TR base-level timing link list
13	TR trunk maintenance high and wet timing link list
14	Network path annex engineered list
15	Trunk maintenance register (TMR)
16	Trunk status busy / idle bits
17	Input / output system
18	Trunk register (TR) link-list trace to detect circular lists
19	Maintenance status of trunks
20	Ring and tone plant
21	Trunk maintenance register (TMR) idle link list
22	Multi-frequency (MF) transmitter (XMTR), MF receiver (RCVR), common channel interoffice signaling (CCIS) transceiver (XCVR) trunk block status linkage and idle trunks counter
23	Audit list block / integrity (B/I) status
24	TR MF origination queue for call register (CR)
25	Dial pulse-out work-list counters
26	Network map
27	Signaling processor (SP) universal T-bits
28	SP miscellaneous T-bits
29	Trunk block status linkage and trunk subgroup idle trunks counter
30	Trunk error analysis data structures
31	Disk administration
32	SP polling mask, stack configuration, integrity monitor audit request test
33	Traffic separation counters (Cannot be manually demanded.)

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TABLE A (Continued)
VALID AUDIT NUMBERS

AUDIT NUMBER	AUDIT DESCRIPTION
34	Trunk subgroup head cell information (satellite bit, adjunct linkage, maintenance bus counters) Trunk subgroup head cell information
35	Overload timing control tables
36	Centralized automatic message accounting (CAMA) operator position occupancy counter
37	Miscellaneous CR occupancy counters
38	TR queue for CR (dial pulse-in)
39	File store paging supervisor
40	List CR on idle link list
41	Quick check of all TR link list head cells
42	Lost TMR on idle link list
43	File system to core generic audit
44	Core resident generic data hash check
45	Core resident and expanded memory (XM) nongeneric data hash check
46	Network management (NM) data structures
47	Recorded announcement system
48	Trunk maintenance (TM) data structures
49	Common channel interoffice signaling (CCIS) link security data
50	Dedicated time slot interchange (TSI)
51	CCIS trunk register (TR) queue for call register (CR)
52	CCIS trunk query (Cannot be manually demanded.)
53	Machine administration center (MAC) job structures
54	Trunk maintenance register (TMR) job buffer link list
55	International telephone user part (ITUP) origination query for CRs
56	Long TR base-level engineered timing list
57	TR queue for CR common channel signaling system number 6 (CCITT6)
58	CR queue for multi-frequency (MF) receiver (two-stage)
59	TR No. 5 MF original queue for CR
60	ADS service access data channel (SADC) link status
61	Auxiliary call register (ACR) idle link list
62	ACR
63	Dedicated time slot interchange (TSI) connection register (DTCR)
64	CR queue for government emergency telecommunications service (GETS) dual tone multi-frequency (DTMF) receiver
65	Trunk appearance number (TAN)-to-TAN
66	File system to core nongeneric audit
67	Not used
68	Not used

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TABLE A (Continued)
VALID AUDIT NUMBERS

AUDIT NUMBER	AUDIT DESCRIPTION
69	Not used
70	Not used
71	Not used
72	Memory fault
73	Not used
74	1B master control complex and utility processor (MUP) hardware/software activity
75	Not used
76	Not used
77	Not used
78	Not used
79	Not used
80	Meet-me teleconferencing status
81	Not used
82	Not used
83	Not used
84	Blue box fraud
85	Large scale nailup connection
86	TR origination queue for IDTS-DTMF receiver
87	IDTS-DTMF origination queue for CRs
88	Trunk register (TR) origination queue for IWS-[dual tone multi- frequency (DTMF)] receiver and call register (CR)
89	CR queue for DTMF transmitter
90	Integrated services digital network (ISDN) user part (ISUP) origination queue for CRs
91	Q.931 origination queue for CRs
92	Total signal failure (TSF) on Q.931 trunks
93	Not used
94	Not used
95	ISUP trunk query (Cannot be manually demanded.)
96	Quick ISUP trunk query
97	Non-call associated temporary signaling connection (NCAT) register idle count
98	NCAT trapping structure
99	TR queue for CR (International integrated services digital network [ISDN] user part [INUP])
100	CR queue for positive call processing (PCP) DTMF receiver
101	RTNR transport capability (TC) idle channel count

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TABLE A (Continued)
VALID AUDIT NUMBERS

AUDIT NUMBER	AUDIT DESCRIPTION
102	RTNR routing pattern index (RPI) calls in progress count (Cannot be manually demanded.)
103	End-to-end class of service (ECOS) idle channel count (Cannot be manually demanded.)
104	ECOS calls in progress count

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ID AUD:PUSTAT
WORK CENTER.. MOC
GENERIC 4E22 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] AUD:PUSTAT [a] [b] c
CONTR 0 CONTR 1 DFT SUPPLEMENTARY DATA
OLD dddddddd eeeeeeee f gggggggg hhhhhhhh iiiiii
NEW jjjjjjjj kkkkkkkk l mmmmmmm nnnnnnnn ooooooooo
- [2] AUD:PUSTAT [a] [b] c
OLD pppppppp
NEW qqqqqqqq
- [3] AUD:PUSTAT [a] [b] c
CONTR 0 CONTR 1 DFT SUPPLEMENTARY DATA
OLD rrrrrrrr ssssssss t uuuuuuuu
NEW vvvvvvvv wwwwwwww x yyyyyyyy
- [4] AUD:PUSTAT [a] [b] c
CONTR 0 CONTR 1 DFT SUPPLEMENTARY DATA
OLD zzzzzzzz a1....a1 b1 c1....c1 d1....d1 e1....e1
NEW f1....f1 g1....g1 h1 i1....i1 j1....j1 k1....k1
- [5] AUD:PUSTAT [a] [b] c
CONTR 0 CONTR 1 DFT
OLD rrrrrrrr ssssssss t
NEW vvvvvvvv wwwwwwww x

2. REASON FOR OUTPUT

To respond to a manual request for the peripheral status audit or when the status of a Peripheral Unit (PU) is changed by the audit. One message is printed per unit, giving both the old status as it was found by the audit and the new status after correction.

Format 1 is used to print the status for all Time Slot Interchange (TSI) and Expanded Time Slot Interchange (XTSI).

Format 2 is used to print the status for Master Control Complex (MCC), Input / Output Unit Selector (IOUS), or Peripheral Unit Bus (PUB).

Format 3 is used to print the status for Signaling Processor (SP).

Format 4 is used to print the status for Network Clock (NCLK).

Format 5 is used to print the status for all other peripheral units.

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3. VARIABLE FIELD DEFINITIONS

- a Unit type.
- b Member number.
- c Message header:
 - MSG COMPL — This message is output at the end of the audit after all software status change messages have been printed. (The start and complete messages print only if the audit was requested manually or if discrepancies are found in the software status words during the Maintenance Control Program (MACP) scheduled audit. The unit type and member number variables are null for these messages.)
 - MSG IP — This message is printed when the status of a peripheral unit is altered during the interval in which the audit runs. One message is printed per unit, giving both the old status as it was found by the audit and the new status after correction.
 - MSG STARTED — When the audit is requested manually, this message is printed at the beginning of the audit. If PUCNAUDS is run via a MACP scheduled request, the start message is printed at the end of the audit before the status corrected messages are printed. (The start and complete messages print only if the audit was requested manually or if discrepancies are found in the software status words during the MACP scheduled audit. The unit type and member number variables are null for these messages.)
- d Old controller 0 status (even member number) before correction.
- e Old controller 1 status (even member number) before correction.
- f Old duplex fail status (even member number) before correction.
- g Old frame status (word-0 even member number) before correction.
- h Old frame status (word-1 even member number) before correction.
- i Old duplex fail status (odd member number) before correction.
- j New frame status (word-0 even member number) after correction.
- k New frame status (word-1 even member number) after correction.
- l New duplex fail status (even member number) after correction.
- m New frame status (word-0 even member number) after correction.
- n New frame status (word-1 even member number) after correction.
- o New duplex fail status (odd member number) after correction.
- p Old status of unit before correction.
- q New status of unit after correction.

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r	Old controller 0 status before correction.
s	Old controller 1 status before correction.
t	Old duplex fail status before correction.
u	Old pulse point status before correction.
v	New controller 0 status after correction.
w	New controller 1 status after correction.
x	New duplex fail status after correction.
y	New pulse point status after correction.
z	Old chain 0 status before correction.
a1	Old chain 1 status before correction.
b1	Old duplex fail status for chains 0 and 1 before correction.
c1	Old chain 2 status before correction.
d1	Old chain 3 status before correction.
e1	Old duplex fail status for chains 2 and 3 before correction.
f1	New chain 0 status after correction.
g1	New chain 1 status after correction.
h1	New duplex fail status for chains 0 and 1 after correction.
i1	New chain 2 status after correction.
j1	New chain 3 status after correction.
k1	New duplex fail status for chains 2 and 3 after correction.

4. ACTION TO BE TAKEN

This message indicates a possible problem with hardware and/or maintenance programs.
The printout may be useful in finding the cause of some F-level interrupts.

5. REFERENCES

PIDENT
PUCNAUDS

COMPOOL - Software status layouts of peripheral units and PU bus:

D3U	—	T14XD3USTATUS
DIF	—	DA4CSTATATUS
DT	—	DT4STAT
EST	—	ES4CSTATUS
IOUS	—	IO1RSTIOUS
MCC	—	MC1RSTATUS
NCLK	—	NC4STAT
PUB	—	PB1CEBSTAT

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SCLK	—	SK4STAT
SP	—	SP4STAT
SPU	—	T14XSPSSTATUS
TGR	—	CI4TACSTREG
TMSP	—	TG4STAT
TSI	—	TI4STAT, TI4XFSTATUS
VIF	—	VC4STAT
XTSI	—	TI4STAT, TI4XFSTATUS

Input Message
AUD:PUSTAT

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ID AUDIT:AT-AUX-CLIEN
WORK CENTER.. MAC, MOC, NMOC, TEC,
TOC
GENERIC 4E21 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

AUDIT AT aaaaaaaaa AUX=bbbbbbbbb [c] CLIENT=d e
f
.
.
.
f

2. REASON FOR OUTPUT

To report that a software error was detected by the audit system or by a defensive check failure in another program.

3. VARIABLE FIELD DEFINITIONS

- a The address of the instruction that transfers to the audit system defensive check module. This address can be used to locate the program making the audit call and the actual audit macro which produced the message. This can tell what data was printed, what corrective action was taken and, via a comment, why the audit message was deemed necessary.
- b Auxiliary failure address, if the address given by b is not in the audit macro identified by the address given by a. This address can be used to more accurately pinpoint the program location that first detected the error. If either bits 22 or 23 are set, they should be ignored as part of the address. However, if bit 22 is set, the error was initially discovered by a system subroutine who returned to the calling program before completing the audit call.
- NOTE:** Use the a and b variables (addresses) to find any further documentation as to what exactly went wrong, and what was done about it.
- c ****DATA LOST**** - This text appears when the data from an audit call exceeds the permissible number of words printed in the audit message. It will appear in the truncated audit call or the last audit call that was printed when size of the print buffer was exceeded.
- d A text identification of the program which initially discovered the error. Possible clients are:
- AUDIT — Audit or other system integrity program.

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- MTC — Hardware maintenance program.
- OPER DEFENSIVE CHECK FAILURE — Operational program.
- e If present, the decimal number of the audit that is reporting the error. See Table A in the AUD:NUM output message for a list of audits.
- f Specific information concerning the software error detected. Heading 3.1 through 3.13 describe the different formats that can be displayed for this variable.

3.1 Auxiliary Call Register

ACR ADR=aaaaaaaa
b...b b...b b...b b...b b...b b...b b...b b...b
•
•
•
b...b b...b b...b b...b b...b b...b b...b b...b

The contents of an Auxiliary Call Register (ACR) are displayed.

- a — The address of the ACR being displayed.
- b — The contents of the ACR.

3.2 Adjunct Trunk Subgroup Head Cell

ATSGHC ADR=aaaaaaaa
b...b b...b b...b b...b b...b b...b b...b b...b

The contents of an Adjunct Trunk Subgroup Head Cell (ATSGHC) are displayed. The ATSGHC is used to hold network management control information for a Trunk Subgroup (TSG).

- a — The address of the ATSGHC being displayed.
- b — The contents of the ATSGHC.

3.3 CAMA Accounting Block

CAMA AB ADR=aaaaaaaa
bbbbbbbb bbbbbbbb bbbbbbbb bbbbbbbb bbbbbbbb bbbbbbbb

The contents of a Centralized Automatic Message Accounting (CAMA) Accounting Block (AB) are displayed.

- a — The address of the AB being displayed.
- b — The contents of the AB.

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3.4 CC Registers And Shadow Registers

CC REGS

L=aaaaaaaa F=bbbbbbbb G=cccccccc J=dddddddd
K=eeeeeeee X=ffffffff Y=gggggggg Z=hhhhhhhh

SHADOW REGS

L=iiiiiii F=jjjjjjj G=kkkkkkk J=lllllll
K=mmmmmmm X=nnnnnnn Y=oooooooo Z=ppppppp

This message displays the contents of the Central Controller (CC) registers and their corresponding shadow registers.

3.4.1 Generic Program and Office Data For CC Register Displays

Following the standard portion of the message (Heading 1) and the CC register printout (Heading 3.4) is data provided by the System Audit Of Writable Stores (SAWS). One or more of the following text phrases follows the CC register printout:

- | | |
|---|--|
| 1. FAILURE RESOLVED | — The audit has corrected the failing data. |
| 2. RANGE UTILITY
FUNCTION TERMINATED | — Generic utility functions planted in the failing BINK have been removed. |
| 3. UNRESOLVED FAILURE | — The audit was not able to correct the failing data. |
| 4. NO VALID COPY | — No available copy of the data was valid as indicated by the system hash table. |
| 5. VALID COPY
NOT RESOLVED | — No available copy of the data could be uniquely identified as valid. |
| 6. AUTO CORRECTION
INHIBITED | — Automatic correction of failing BINKs was inhibited. |
| 7. MERGE STRUCTURE
HASH MISMATCH | — Special hash sums over the merge structures do not match. |
| 8. AUDIT OF BINK TERMINATED | — Audit of the current BINK was not completed. |
| 9. EXCESSIVE HASH FAILURE | — There were excessive failing BINKs in the current 64 BINK range. |

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- | | |
|---------------------------------|---|
| 10. LOCKOUT INTERFACE FAILURE | — The SAWS/data update client lockout mechanism was in an invalid state. |
| 11. DATA MISMATCH DURING UPDATE | — Sector hash checks fail on system hash table while attempting to update it with new data. |

If any of the text phrases 1 through 8 are printed, the next output is of the following format:

```
ERRDATA:
aaaaaaaa
ADDR:
bbbbbbbb cccccccc dddddddd dddddddd
HASH CODE FAILURE
ADDR:
eeeeeeee ffffffff ffffffff gggggggg hhhhhhhh iiiiiiii jjjjjjjj
[DATA MISMATCH]
[ADDR:]
[kkkkkkkk llllllll llllllll mmmmmmmm nnnnnnnn ooooooooo pppppppp]
```

- a — Bits 0-17 (in BCD) mismatch count.

Bits 18-23 (in Binary Coded Decimal [BCD]) automatic correction vector:

0 — Core corrected from either file system.

1 — Write to file system 0.

2 — Write to file system 1.

3 — Core corrected from file system 1.

4 — Core corrected from file system 0.

5 — Write to file system 0 and file system 1.

6 — File system 1 copied to file system 0.

7 — File system 0 copied to file system 1.

- b — Standard SAWS subrecord header (see Heading 3.4.2).

- c — Internal error point address.

- d — Failing BINK address. *

- e — Standard SAWS subrecord header (see Heading 3.4.2).

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- f — Failing BINK address. *
- g — System hash sum for the failing BINK.
- h — Computed hash sum, file system 1.
- i — Computed hash sum, file system 0.
- j — Computed hash sum, core.
- k — Standard SAWS subrecord header (see Heading 3.4.2).
- l — Mismatch address. *
- m — File system address. *
- n — File system 1 data.
- o — File system 0 data.
- p — Core data.

NOTE *: If the address in the printout is a FS address, then the address is a relative address; relative to the start of its file segment.

If the text phrase is 9, the data is of the following format:

DATA:

aaaaaaaa bbbbbbbb cccccccc cccccccc

- a — Standard SAWS subrecord header (see Heading 3.4.2).
- b — Bad BINK count (including corrected BINKs, in bits 18-23), correction inhibit flag (bit 1), specified FS-only range flag (bit 0).
- c — Store address with excessive failures (store size is 1 megabyte).

If the text phrase is 10 or 11, the receiving data is of the following format:

```
a...a b...b c...c c...c c...c c...c c...c c...c
c...c c...c d...d d...d d...d e...e f...f f...f
g...g g...g h...h h...h i...i i...i i...i i...i
i...i i...i i...i i...i i...i i...i i...i i...i
i...i i...i i...i i...i i...i i...i i...i i...i
i...i
```

- a — Standard SAWS record header (see Heading 3.4.2).
- b — Standard SAWS subrecord header (see Heading 3.4.2).
- c — CC registers.

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- d — Three stack entries.
- e — SAWS subtask activity word (AS1SAWS_ACT).
- f — SAWS update client activity words:
AS1SAWS_INH — ID tags 0-15 (bits 0-15),
AS1SAWS_INH+1 — ID tags 16-32 (bits 0-15),
- g — Generic Utility Program (GULP) update client activity words:
AS1GULPIDS — ID tags 0-15 (bits 0-15),
AS1GULPIDS+1 — ID tags 16-32 (bits 0-15),
- h — Tape Writing Program (TWRP) update client activity words:
AS1TWRPIDS — ID tags 0-15 (bits 0-15),
AS1TWRPIDS+1 — ID tags 16-32 (bits 0-15),
- i — SAWS update client subroutine control block (AS1SAWSSCB).

3.4.2 SAWS Record Layout

Heading 3.4.1 references standard SAWS record and subrecord headers. Their layouts are as follows:

STANDARD SAWS RECORD HEADER: (1 word)

Bits 0-5	Length of record-1
Bits 6-16	Mismatch count
Bit 17	Hash fail indicator
Bits 18-20	Automatic correction vector
Bits 21-22	Record type
Bit 23	Automatic correction inhibited

SAWS ERROR RECORD TYPES (AS1ERECTYPE)

State	Symbolic Name	Description
0	1ASBINKFAIL	Error detected during audit of BINK or merge structure.
1	1ASECBADBKS	Excessive number of bad BINKs within 64-BINK range.
2	1ASNTERFACE	Audit, update program interface problem.
3	1ASHTABPROB	Hash structure problem detected.

STANDARD SAWS SUBRECORD HEADER: (1 word)

Bits 0-5	Subrecord length
Bits 6-11	Subrecord type
Bits 12-16	File system ID tag being audited
Bits 18-20	Copies not available to audit (FS 1, bit 20; FS 0, bit 19; Core, bit 18)

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SAWS ERROR SUBRECORD TYPES (AS1ERSRTYPE)

State	Symbolic Name	Description
1	1ASMISMATCH	Mismatch
2	1ASHASHFAIL	BINK hash failure
3	1ASMERGFAIL	Merge structure hash failure
4	1ASCORRECTD	Failing range corrected
5	1ASNOCRCT	Automatic correction inhibited
6	1ASEXBBKLIM	Excessive failing BINKs with 64-BINK range
7	1ASINTERNAL	Internal error
8	1ASTERMINAL	Terminal error
9	1ASFSBFRDIF	Immediate fail return from DKAD of read into buffer
10	1ASSP_HSHMM	Special hash sums mismatch
11	1ASNGOODCPY	No good copy of failing range available
12	1ASGCINDTERM	Good copy of failing range not identifiable
13	1ASCRCTFSIF	Immediate fail return from DKAD during correction
14	1ASINTRFACE	Audit, update program interface problem
15	1ASHASHPROB	Hash structure problem
16	1ASDISKPROB	DKAD failure return in a SAWS update subroutine

3.4.3 SADK Audit

Following the standard portion of the message, (Heading 1), and the CC register printout, (Heading 3.4), is data provided by System Audit Disk (SADK). This will include a text phrase and data:

a) DKADI POINTER MISMATCH
ADDR

a b c d

- a — Pointer to start of active Job Control Buffer (JCB) header.
- b — Pointer to start of active JCBs.
- c — Pointer to start of active scratch area.
- d — Pointer to start of active message building area.

b) DKADI JCB HEADER
ADDR

a b c d e f f f
f f f f f f f f

- a — Allocate pointer and mask.
- b — Audit pointer.
- c — Size of JCBs (16-23), number of JCBs (8-15), number of free buffers (0-7).
- d — Not used.

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- e — Not used.
- f — Bit map for active buffers.

c) DKADI JCB ERROR

Message DKADI JCB ERROR and its corresponding data is printed in three cases:

1. If SADK finds DKADI JCB ERROR.
2. If DKADI write_partial routine finds overflow in JCB save buffer.
3. If DKADI completion_return routine cannot find a match for a JCB in the save buffer of write_partial.

NOTE: Cases 2 and 3 only occur during partial updates.

Format for cases 1 and 3:

DKADI JCB ERROR
ADDR

- | | a | b | c | d | e | f | g | h |
|---|---|---|---|---|---|---|---|---|
| a | — Number of words in JCB (0-15), disk ID tag (16-20), fill request flag (21), read or write code (22,23). | | | | | | | |
| b | — Disk address. | | | | | | | |
| c | — Core address. | | | | | | | |
| d | — Client information. | | | | | | | |
| e | — Completion return address. | | | | | | | |
| f | — APMH buffer number. | | | | | | | |
| g | — Write_partial flag (23). | | | | | | | |
| h | — Spare. | | | | | | | |

Format for case 2:

DKADI JCB ERROR
ADDR

- | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|
| | a | a | a | a | a | a | a | a |
| | a | a | a | a | a | a | a | a |
| | a | a | a | a | a | a | a | a |
- a — Write_partial save buffer contents.

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d) APMH CURRENT POINTER
ADDR

a b c d

- a — AP options mask.
- b — Current pointer for buffer address access.
- c — Current pointer to scratch message buffer.
- d — Current mode (COM or XCOM).

e) APMH CIRCULAR BUFFER
ADDR

a b c de

- a — Sequence number.
- b — Self pointer.
- c — Size of buffer.
- d — Load pointer.
- e — Unload pointer.

f) APMH JCB HEADER
ADDR

a b c d e f f f
f f f f f f f f

- a — Allocate pointer and mask.
- b — Audit pointer.
- c — Size of JCBs (16-23), number of JCBs (8-15), number of free buffers (0-7).
- d — Not used.
- e — Not used.
- f — Bit map for active buffers.

g) APMH BITMAP/JCB MISMATCH
ADDR

a b c d e f g h

- a — State vector (16-23), number of words (0-15).
- b — Address.
- c — Identification field.
- d — Local ID (16-23), SBN (8-15), CTIME (0-7).
- e — Arrival time.
- f — Remote ID (16-23).

SEE PROPRIETARY NOTICE ON COVER PAGE

- g — Spare.
- h — Checksum.
- h) APMH JCB CHECKSUM
ADDR
- | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|
| | a | b | c | d | e | f | g | h |
|--|---|---|---|---|---|---|---|---|
- a — State vector (16-23), number of words (0-15).
- b — Address.
- c — Identification field.
- d — Local ID (16-23), SBN (8-15), CTIME (0-7).
- e — Arrival time.
- f — Remote ID (16-23).
- g — Spare.
- h — Checksum.
- i) APMH FREE COUNTER
ADDR
- | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|
| | a | b | c | d | e | f | f | f |
| | f | f | f | f | f | f | f | f |
- a — Allocate pointer and mask.
- b — Audit pointer.
- c — Size of JCBs (16-23), number of JCBs (8-15), number of free buffers (0-7).
- d — Not used.
- e — Not used.
- f — Bit map for active buffers.
- j) APMH JCB TIMEOUT
ADDR
- | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|
| | a | b | c | d | e | f | g | h |
|--|---|---|---|---|---|---|---|---|
- a — State vector (16-23), number of words (0-15).
- b — Address.
- c — Identification field
- d — Local ID (16-23), SBN (8-15), CTIME (0-7).
- e — Arrival time.
- f — Remote ID (16-23).
- g — Spare.
- h — Checksum.

SEE PROPRIETARY NOTICE ON COVER PAGE

k) APS STATUS ERROR - LINK ACCESS FLAG
ADDR

a

a — APS status word, APIAPSSTATUS.

3.4.4 DKADI WRITE_PARTIAL AUDIT

Following the standard portion of this message (Heading 1), and the CC register printout, (Heading 3.4), is data provided by audits from the WRITE_PARTIAL routine in the Disk Administration Interface Program (DKADI). The same text phrase may be followed by the two data formats seen following. Format (a) indicates an overflow in the Job Control Buffer (JCB) save area. Format (b) indicates no match in the JCB save area for the JCB number of a completed job.

DKADI JCB ERROR

a) ADDR

```
a  a  a  a a a  a  a
a  a  a  a a a  a  a
a  a  a  a a a  a  a
```

a — Write_partial save buffer contents.

b) ADDR

```
a  b  c  d e f  g  h
```

a — Number of words in JCB (0-15), disk ID tag (16-20), fill request flag (21), read or write code (20,23).

b — Disk address.

c — Core address.

d — Client information.

e — Completion return address.

f — APMH buffer number.

g — Write_partial flag (23).

h — Spare.

3.5 Call Register

CR ADR=aaaaaaaa

b...b b...b b...b b...b b...b b...b b...b b...b

•

•

•

b...b b...b b...b b...b b...b b...b b...b b...b

The contents of a Call Register (CR) are displayed.

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- a — The address of the CR being displayed.
- b — The contents of the CR.

3.6 Miscellaneous Data

DATA:

```
a...a a...a a...a a...a a...a a...a a...a a...a
•
•
•
a...a a...a a...a a...a a...a a...a a...a a...a
```

This message displays a block of data specified by the client program.

- a — The raw data.

3.7 Link List Head Cell

LLHC ADR=aaaaaaaa bbbbbbbb bbbbbbbb

This message displays the contents of a standard 2-way Link List Head Cell (LLHC). A LLHC is used to link together various types of system registers. The head cell displayed may be of two types, either linked by Trunk Scanner Number (TSN) or linked by address.

- a — The address of the LLHC being displayed.
- b — The contents of the LLHC.

3.8 Output Message Register

```
OMR ADR=aaaaaaaa
b...b b...b b...b b...b b...b b...b b...b b...b
•
•
•
b...b b...b b...b b...b b...b b...b b...b b...b
```

This message displays the contents of an Output Message Register (OMR).

- a — The address of the OMR being displayed.
- b — The contents of the OMR.

3.9 Recording Register

```
RR ADR=aaaaaaaa
b...b b...b b...b b...b b...b b...b b...b b...b
```

The contents of a Recording Register (RR) are displayed.

- a — The address of the RR being displayed.
- b — The contents of the RR.

SEE PROPRIETARY NOTICE ON COVER PAGE

3.10 Stack Register

```
STACK STKCNTN=aaaaaaaa T=bbbbbbbb
c...c c...c c...c c...c c...c c...c c...c c...c
.
.
.
c...c b...b b...b b...b b...b b...b b...b b...b
```

This message displays the contents of the transfer address stack.

- a — The contents of the stack counter which points to the next available entry in the stack. The data associated with c corresponds to STKCNTN=0, and the data associated with d corresponds to STKCNTN=1, etc.
- b — The contents of the top of stack register (T).
- c — The contents of the stack in call store.

3.11 Trunk Maintenance Register

```
TMR ADR=aaaaaaaa
b...b b...b b...b b...b b...b b...b b...b b...b
.
.
.
b...b b...b b...b b...b b...b b...b b...b b...b
```

This message displays the contents of a Trunk Maintenance Register (TMR). The TMR contains information used to test trunks and various service circuits.

- a — The address of the TMR being displayed.
- b — The contents of the TMR.

3.12 Trunk Register

```
TR aaaaaaaaa aaaaaaaaa ADR=bbbbbbbb TSN=0'cccccccc CIN
deeee ee ee eee eee
TRNX ffffffff ffffffff
```

This message displays the contents of a Trunk Register (TR).

- a — The contents of the TR.
- b — The address of the TR being displayed.
- c — The TSN of the TR, in octal.
- d — The traffic number of the TR.
- e — The Circuit Identification Number (CIN) for the TR.
- f — Trunk registers armed.

SEE PROPRIETARY NOTICE ON COVER PAGE

3.13 Trunk Subgroup Head Cell

```
TSGHC ADR=aaaaaaaa TSGN=0'bbbb CIN cdddd dd dd ddd ddd
e...e e...e e...e e...e e...e e...e e...e
      •
      •
      •
e...e e...e e...e e...e e...e e...e e...e
```

This message gives the contents of a Trunk Subgroup Head Cell (TSGHC). The TSGHC contains information about the current status of a Trunk Subgroup (TSG).

- a — The address of the TSGHC being displayed.
- b — The Trunk Subgroup Number (TSGN) in octal assigned to the TSGHC.
- c — The base traffic number for the TSG.
- d — The circuit identification name associated with the TSG.
- e — The contents of the TSGHC.

4. ACTION TO BE TAKEN

Messages with text phrases 3 and/or 7 in Heading 3.4.1 require manual intervention. Run System Audit Of Stores Using Tape (SAST) with the appropriate system tape. If the failing address is in one of the special hash words (AS1HSH2FSTB, AS1HSH0HDTB, or AS1HSH0HSHS), special action must be taken. After running SAST in the noncorrecting mode, run the correcting mode even if SAST detects no errors. This will cause SAST to recompute and correct the failing special hash word(s).

The remaining messages displayed by AUDIT:AT-AUX-CLIEN are informational. Any action taken must be based on the specific information printed and the technical impact of that data.

5. REFERENCES

PIDENTs
AUDSDPCM
SAST
SAWS

Practice 234-180-220, *Audit System Programs Description*
Practice 254-280-260, *Audit Programs Description*

Output Message
AUD:NUM

SEE PROPRIETARY NOTICE ON COVER PAGE

ID AUDIT:SYS-ERR
WORK CENTER.. MAC, MOC, NMOC, TEC,
 TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

AUDIT SYSTEM ERROR
INVALID PRINT CODE DETECTED IN AUDIT PRINT BUFFER
BUFFER CONTENTS:
aaaaaaaa bbbbbbbb cccccccc dddddddd eeeeeeee ffffffff gggggggg
hhhhhhh
•
•
•
aaaaaaaa bbbbbbbb cccccccc dddddddd eeeeeeee ffffffff gggggggg
hhhhhhh
BUFFER HAS BEEN REINITIALIZED

2. REASON FOR OUTPUT

To report that either a software error has been detected internal to the audit system's defensive check module output routine, or an invalid message code was detected in the audit system print buffer. This invalid message code could be the result of:

1. Audit print buffer memory mutilation.
2. A program invalidly calling the AUDIT or AUDIT_PRINT macros and programs or using the AUDIT_PRINT facility in the wrong sequence.
3. Memory mutilation of the audit print buffer load pointer.

As a result of this message, the audit print buffer is reinitialized, and the messages contained therein will not be printed.

3. VARIABLE FIELD DEFINITIONS

a, b, . . . h The contents of the audit print buffer as raw and unformatted data.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
AUDSDPCM

Practice 234-180-220, *Audit System Programs Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID AUDIT:SYS-TR
WORK CENTER.. MAC, MOC, NMOC, TEC,
TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

AUDIT SYSTEM TROUBLE
PRINT BUFFER OVERFLOW. AUDIT MESSAGES ARE LOST OR TRUNCATED.

2. REASON FOR OUTPUT

To print the results of an overflow in the audit system print buffer. This condition can occur when a large number of software errors are detected in a short period of time. This message always appears after the lost or truncated messages. Therefore, all audit messages given after this message are intact unless this message again appears. Audit messages may be totally lost or only partially truncated. Messages that are shortened are not necessarily shortened at the end. In most cases, only large blocks of raw data will be lost.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
AUDSDPCM

SEE PROPRIETARY NOTICE ON COVER PAGE

ID CANCELLED:WRONG
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

CANCELLED - WRONG MEMBER OF A MULTIMEMBER FRAME SPECIFIED

2. REASON FOR OUTPUT

To report that an illegal member number of a multimember frame was input in a LOAD, DUMP, INH, or ALW message.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
PULP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID CFR:ALMGRP
WORK CENTER.. MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

CFR:ALMGRP ab COMPL

2. REASON FOR OUTPUT

To report that an alarm grouping has been completed between the maintenance centers specified. This message is in response to a CFR:ALMGRP input message.

3. VARIABLE FIELD DEFINITIONS

ab All MCs — Alarm grouping has been completed for all maintenance centers.

Alarm grouping has been completed for two or more of the following centers:

MOC — Master operations center.

TEC1 — Terminal equipment center 1.

TEC2 — Terminal equipment center 2.

TEC3 — Terminal equipment center 3.

TEC4 — Terminal equipment center 4.

TEC5 — Terminal equipment center 5.

TOC — Trunk operations center.

4. ACTION TO BE TAKEN

Observe the alarm transfer / alarm grouping (AT-AG) lamp on the alarm grid display panel light for all the grids in the maintenance centers specified.

5. REFERENCES

PIDENT
ALRM01

Practice 234-100-040, *Office Alarm System Description and Theory*

Input Message
CFR:ALMGRP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID CFR:SIGLK-VFL
WORK CENTER.. MOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

CFR: SIGLK aabb VFL cdddd dd dd ddd ddd e

2. REASON FOR OUTPUT

To respond to a CFR:SIGLK input message and to give a termination report for the requested configuration. A domestic terminal has two voice frequency links (VFLs) and they may be interchanged via the CFR:SIGLK input message. An international terminal has one VFL and the CFR:SIGLK input message is used to connect the VFL and the terminal when they become separated.

3. VARIABLE FIELD DEFINITIONS

- a Terminal grouping (TGR) frame number (00-15).
- b Terminal subunit within the frame (00-15).
- c Traffic number of the VFL to be configured.
- d The circuit identification number (CIN) of the VFL with the town, state, building, far-building subdivision, near-building subdivision of the VFL to be configured.
- e Termination report. Possible outputs are:
 - ABORTED — The system aborted the configure procedure.
 - COMPLETED — The requested configure has been successful.
 - FAILED — The VFL failed a preliminary test.
 - STOPPED — The specified link or mate link failed during configure.
 - STOPPED, FE REFUSAL — STP did not complete VFL test in one minute.
 - STOPPED, RETRY LATER — The link is in a transient state. Configure request cannot be handled at this time. Retry after one minute.
 - STOPPED FE REFUSAL — The far-end will not allow the configuration request.
 - STOPPED LINK FAILED — The link failed to recover in the new configuration.
 - STOPPED MATE FAILED — The mate link has failed. This request is stopped, and link is returned to the system.

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STOPPED PRIP — Previous request in progress.

STOPPED VFL FAILED — The VFL failed a preliminary test.

4. ACTION TO BE TAKEN

Test and repair the VFL.

5. REFERENCES

PIDENTs
CCISIOPR
CCISLSIO
CCISMNAC
CCISSLCN

Input Message
CFR:SIGLK

SEE PROPRIETARY NOTICE ON COVER PAGE

ID CLR:BP-SCS
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] CLR:BP SCS a CONTR b
- [2] CLR:BP SCS a SCU c d
- [3] CLR:BP SCS a ALL!
CONTR b
[SCU c d]

2. REASON FOR OUTPUT

This message prints in response to a CLR:BP-SCS input message. Format [1] is output if the input request specified that all breakpoints of a Service Circuit System (SCS) simplex controller or duplex controllers be cleared.

Format [2] is output if the input request specified that all breakpoints of a Service Circuit Unit (SCU) be cleared.

Format [3] is output if the input request specified that all breakpoints of an SCS frame (controllers and SCUs) be cleared.

3. VARIABLE FIELD DEFINITIONS

- a SCS member number in decimal (0-7).
- b Controller request fail code:
 - COMPLETED All breakpoints have been removed from the controller.
 - DENIED - CONTR DUP FAILED Request denied because the frame is duplex failed.
 - DENIED - SCC IN GROWTH Request denied because the frame is in growth or special growth.
 - DENIED - SCC UNEQ Request denied because the frame is unequipped.
 - RL - CONTR LOM Request denied because the frame controller is in listen-only mode.
- c SCU number in decimal (0-15).

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- d SCU request status code:
- ABORTED - MACRO REJECTED Request for the given SCU was aborted because the SCS frame rejected the clear command.
 - ABORTED - MACRO TIMEOUT Request for the given SCU was aborted because the SCS frame did not reply to the clear command.
 - COMPLETED All breakpoints have been removed from the SCU.
 - DENIED - CONTR DUP FAILED Request denied because the frame is duplex failed.
 - DENIED - SCU IS OOS Request for the given SCU was denied because the SCU is out of service.
 - DENIED - SCU IN GROWTH Request for the given SCU was denied because the SCU is in growth or special growth.
 - DENIED - SCU UNEQ Request for the given SCU was denied because the SCU is unequipped.
 - FAILED - INTERNAL ERROR Request for the given SCU failed because of an unexpected software error when processing the clear command.
 - RL - CONTR LOM Request denied because the frame controller is in listen-only mode.
 - STOPPED - MACRO FAILED Request for the given SCU was stopped because the SCU failed in processing the clear command.

4. ACTION TO BE TAKEN

If variable b is:

- If RL - CONTR LOM then retry later, as this condition should be cleared quickly.

If variable d is:

- If ABORTED - MACRO REJECTED then contact the Technical Assistance Center for further information.
- If ABORTED - MACRO TIMEOUT then contact the Technical Assistance Center for further information.
- If FAILED - INTERNAL ERROR then contact the Technical Assistance Center for further information.
- If RL - CONTR LOM then contact the Technical Assistance Center for further information.

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If STOPPED - MACRO FAILED then contact the Technical Assistance Center for further information.

5. REFERENCES

PIDENT
SCSBPMEM

Input Messages
CLR:BP-SCS
OP:BP-SCS
SET:BP-SCS

Output Message
OP:BP-SCS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID CLR:ERAPCOND
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

CLR:ERAPCOND a
b c d...

2. REASON FOR OUTPUT

To give the disposition of the request made by the CLR:ERAPCOND input message.

3. VARIABLE FIELD DEFINITIONS

a Disposition of the input request:

COMPLETED — The conditions listed have been successfully cleared from disk memory.

STOPPED ?I, INC DATA — One of the input condition names does not match with the name of any stored condition; a condition to be cleared was used in a search, the results of which are currently stored in disk memory (see input message OP:ERAPSRES); or, the input message was missing condition names as well as the unconditional (UCL) parameter. None of the conditions listed were cleared.

b c d... Names of the conditions that were input.

4. ACTION TO BE TAKEN

If a is STOPPED, use the input message OP:ERAPCOND;SUM to summarize all conditions currently stored. If the condition to be cleared is an input condition of an existing search, the search results (SRES) should be cleared first. Then the condition may be cleared. Alternatively, the UCL option may be used on the CLR:ERAPCOND input message.

5. REFERENCES

PIDENTs
ERAP
ERIF

Practice 254-200-215, *Error Analysis Program Application*
Practice 254-280-320, *Error Analysis Program*

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Messages
CLR:ERAPCOND
OP:ERAPCOND
OP:ERAPSRES

SEE PROPRIETARY NOTICE ON COVER PAGE

ID CLR:ERAPDATA
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

CLR:ERAPDATA a b,c
INPUT SRES: d
NUM FILES=e MFNUM RANGE: f THROUGH g
NUM RECORDS=h NUM WORDS=i
DATA TYPES: j

2. REASON FOR OUTPUT

To inform the user of the disposition of a previously input CLR:ERAPDATA input message, requesting that specified records be cleared from the error analysis data base. The user is reminded that the CLR:ERAPDATA message results only in a logical deletion of the records specified. The physical deletion, i.e., actual removal, of the records is accomplished with the aid of the input message UPD:ERAP FSDATA, which causes a repack of the file store (FS) data base.

3. VARIABLE FIELD DEFINITIONS

- a Disposition of the input request.
- COMPLETED — The input message was successfully processed, and the clear was done.
- STOPPED — A problem was encountered in processing the input message and the clear was not done.
- b, c If a is stopped, one of the following failure indications:
- ?D, INC DATA — One of the arguments of keyword SRES is invalid because there is no stored set of search results (SRES) corresponding to the SRES number indicated (see input message OP:ERAPSRES).
- ?D, RANGE ERR — A range error was made in the argument of keyword SRES (valid range is 0-11) or in the argument of keyword MRNUM (valid range is 0-1343).
- ?I, INC DATA — An argument of keyword ERAPDATA is invalid (only entire files or records may be cleared, not subrecords).
- ?I, INV CHAR — An argument of keyword ERAPDATA was not recognized (list of valid arguments is given in Tables 1 and 2 of description of input message OP:ERAPDATA).

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d	Arguments of keyword SRES used on input.
e	Number of files from which some records are to be cleared.
f	Smallest maintenance file number (MFNUM) of these files.
g	Largest maintenance file number of these files.
h	Number of records cleared.
i	Total number of words comprising the records cleared.
j	Input arguments of keyword ERAPDATA.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
ERAP
ERIF

Practice 254-200-215, *Error Analysis Program Application*
Practice 254-280-320, *Error Analysis Program*

Input Messages
OP:ERAPDATA
OP:ERAPSRES
UPD:ERAP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID CLR:ERAPSRES
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

CLR:ERAPSRES a
b c d ...

2. REASON FOR OUTPUT

To print the disposition of the request made by the CLR:ERAPSRES input message.

3. VARIABLE FIELD DEFINITIONS

a Disposition of the input request:

COMPLETED — The search results (SRES) listed (bcd...) have been successfully cleared from disk memory.

STOPPED ?I, INC DATA — A search results set to be cleared was used as an input to another search, the results of which are currently stored in disk memory.

STOPPED ?I, RANGE ERROR — One of the input search results numbers is out-of-range (valid range is 0-11) and, consequently, the search results were not cleared.

b c d ... Search results (SRES) numbers which were input.

4. ACTION TO BE TAKEN

If a is STOPPED, use the input message OP:ERAPSRES;SUM to summarize the identifying numbers of all search results currently stored. If the search results set to be cleared was an input to a second search results set, the latter should be cleared first; alternatively, the unconditional (UCL) option may be used on the CLR:ERAPSRES input message.

5. REFERENCES

PIDENTs
ERAP
ERIF

Practice 254-200-215, *Error Analysis Program Application*
Practice 254-280-320, *Error Analysis Program*

Input Messages
CLR:ERAPSRES
OP:ERAPSRES

SEE PROPRIETARY NOTICE ON COVER PAGE

ID CLR:FNS
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

[1] CLR:FNS a; FILTER b [c]
[d]

2. REASON FOR OUTPUT

This output message provides information on the completion status of the CLR:FNS input message. It will print one success code or one or more error messages to help the user determine the problem(s) with the and Fan System (FNS).

NOTE: The results from a successful CLR will state the CLR has COMPLETED. The results from an unsuccessful CLR could be caused by the FNS becoming inhibited, the Scan And Signal Distributor (SSD) being Out-Of-Service (OOS), the CLR MACP job being aborted, or an incorrect response(s) from the FNS.

3. VARIABLE FIELD DEFINITIONS

- a The FNS frame number (0 or 1).
- b Results of an CLR:FNS input request:
COMPLETED
STOPPED
- c Optional. Only reported under one of the following conditions:
AUTONOMOUS FNS REPORT
FNS AUTOMATICALLY INHIBITED
FNS INHIBITED
FNS INVALID RESPONSE
MACP JOB ABORTED
REPLACE FC — Replace Fan Controller (FC).
SSD OOS — Scan and signal distributor out-of-service.
- d Optional. If the CLR routine fails, specific debugging and error information will be displayed. This information will identify the general software location when the error occurred, and the status of the interface between the 1B and the FNS. The layout and content of this information is described in the following list.
AUX DATA Auxiliary data, identifies the debugging information.

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SUBTASK Followed by single decimal digit (0-3). This number indicates the location within software or the specific task being executed within the CLR routine when the error occurred.

SSDSTATES Followed by a twelve digit binary number in the form of eeeeeeeeefff, where e contains the value of the Signal Distributor (SD) bits and f is the scan points associated with the FNS when the error occurred.

SD Values

Bits	Meaning
1000	— ALW:FNS Initialize the FNS, or inhibit the FNS
1001	— TEST:FNS Report all fan system errors
1010	— Report fan status
1100	— Clear fan air filter from the FNS error stack
1101	— Verify FNS sanity
1110	— Continue reporting

Scan Values (1st four, reading right to left)

Bits	Meaning
0000	— Fan controller fault (replace FC)
0001	— Fan 1 error
0010	— Fan 2 error
0011	— Fan 3 error
0100	— Fan 4 error
0101	— Heartbeat (FNS sanity verified)
0110	— Fan 5 error
0111	— TEST:FNS in-progress
1000	— Lower front temperature sensor error
1001	— Lower rear temperature sensor error
1010	— CLR completed, or All Seems Well (ASW)
1011	— Fan 6 error
1100	— High frame temperature
1101	— Replace air filter
1110	— Not used
1111	— FNS automatically inhibited

Scan Values (2nd four, reading right to left)

Bits	Meaning
0001	— Heartbeat (FNS sanity verified)
0010	— ASW
0000-0001, 0011-1111	— Invalid states: fault detected and reported

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

NOTE: Whenever the FNS becomes automatically inhibited, the first action should be to re-initialize the FNS by entering the ALW:FNS input command. The fan controller would normally be replaced when the FNS becomes automatically inhibited, but it is possible the error situation which caused the FNS to become inhibited can be cleared by re-initializing the FNS and fan controller. If the FNS passes the initialization, the previous error will have been cleared and the FNS should operate normally. If the initialization fails and the FNS becomes re-inhibited, the fan controller should then be replaced. However, this should only be used as a last resort measure when the FNS will not maintain an in-service state and repetitively becomes inhibited no matter how many re-initializations are attempted.

NOTE: At times, more than one output message can be reported back to back. In these cases, the action for the last reported output message should be followed.

Refer to variable field definition letters.

For variable b:

If COMPLETED, do nothing. Clearing the air filter error from the FNS error stack worked successfully.

For variable c:

If AUTONOMOUS FNS REPORT, allow the system to process the new report. This should not take longer than 30 seconds, and a fan system report will be generated at completion. After the report is received, retry the CLR:FNS input command.

If FNS AUTOMATICALLY INHIBITED, there is a power supply problem to the fan controller, or the fan controller is bad and should be replaced.

If FNS INHIBITED, a ALW:FNS input message must be submitted to reinitialize the FNS to an operational in-service state. After the ALW:FNS completes (ALLOW completed reported), resubmit the CLR:FNS input message request.

If FNS INVALID RESPONSE, a FNS sanity check will be submitted by the system. This check will take approximately 1.5 minutes to execute. If no subsequent fan system error messages are reported during the 1.5 minutes, the sanity check passed. Retry the CLR:FNS input command.

If MACP JOB ABORTED, retry again.

If REPLACE RC, a FNS sanity check will be submitted by the system. This check will take approximately 1.5 minutes to execute. If no subsequent fan system error messages are reported during the 1.5 minutes, the sanity check passed. Retry the CLR:FNS input command.

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If SSD 00S check the SSD status. Retry the CLR:FNS input command when the SSD is in-service.

5. REFERENCES

PIDENTs
FNFRBASE
MCCMEPS1

Input Messages
ALW:FNS
CLR:FNS
INH:FNS
TEST:FNS

Output Messages
ALW:FNS
REPT:FAN-ST
TEST:FNS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID CLR:RCB
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

CLR:RCB a
BUFFER HAS BEEN CLEARED
IT FORMERLY CONTAINED ORNU:
b
cccccc dddddd eeeeeee fffffff gggggg hhhhhh iiiiii jjjjjj kkkkkk
llllll
•
•
•
cccccc dddddd eeeeeee fffffff gggggg hhhhhh iiiiii jjjjjj kkkkkk
llllll

2. REASON FOR OUTPUT

To list the order numbers (ORNUs) of messages in the recent change (RC) buffer in response to a CLR:RCB input message to clear the buffer.

3. VARIABLE FIELD DEFINITIONS

a Partitioned message header:
MSG COMPL — Final partition. Message is complete.
MSG IP — Following partitions.
MSG STARTED — First of several partitions required to print
data set.
b NONE — The buffer was empty.
c, d, . . . l List of order numbers that were in the buffer.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
RCMAMAIN

Translation Guide, 4ESSTM, TG-4

Input Message
CLR:RCB

SEE PROPRIETARY NOTICE ON COVER PAGE

ID CLR:TLPQUEUE
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

CLR:TLPQUEUE STATUS

[TLPFILE a IS INVALID]
[EMPTY]

[TLPFILE a DELETED:MFNUM b]

•
•
•

[TLPFILE a DELETED:MFNUM b]
[TLPFILE a IS INVALID
CURRENT TLP SEARCH ABORTED]

2. REASON FOR OUTPUT

To print the trouble location procedure (TLP) disk queue files which have been removed from the TLP disk queue in response to the input message CLR:TLPQUEUE and to indicate if the TLP disk queue is empty.

If the input message (CLR:TLPQUEUE:TLPFILE a) requested the removal of a specific TLP disk queue file number and if the file number is not in the TLP disk queue, the output message will indicate that the TLP disk queue file is invalid.

See Section C3 Trouble Location Procedure (TLP) in PA-4A002-01 in regard to the concepts of:

1. The TLP disk queue,
2. A TLP disk queue file, and
3. A TLP disk queue number.

Also see input message CLR:TLPQUEUE.

3. VARIABLE FIELD DEFINITIONS

a	The TLP disk queue file number.
b	The error analysis program (ERAP) file number (FNUM) assigned to the summary data (See the OP:ERAPDATA input message).
EMPTY	There are no TLP disk queue files in the TLP disk queue.

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

If the input message requested a specific TLP disk queue file number and the output message indicates the file number is invalid, resubmit the input message after correcting the file number.

5. REFERENCES

PIDENTs
DRPPASUB
DRPSUPR

Practice 234-180-270, *Diagnostic Results Post-Processing Program - Description*
Practice 234-280-230, *Trouble Location Procedure Programs - Description*

PA-4A002-01, 4ESSTM User's Manual

Input Messages
CLR:TLPQUEUE
OP:ERAPDATA

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ID CLR:TRKSTAT
WORK CENTER.. MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

CLR:TRKSTAT, a b, STAT c, SUM d
TRK COUNT e

2. REASON FOR OUTPUT

To report the number of trunks that were processed by removing from the trunk(s) the restriction input.

NOTE: The output for this message is always in a summary version.

3. VARIABLE FIELD DEFINITIONS

- a Identity of the trunk:
- CIN — Circuit identification number.
 - TAN — Trunk appearance number.
 - TRK — Trunk scanner number.
 - TSN — Trunk.
- b Type of group option specified:
- NUM — Consecutive TSNs, TFNs, or TANs
 - TSG — Trunk subgroup
- c Restriction to be removed:
- BLK — Blocked.
 - HAW — High and wet list.
 - HWT — High and wet timing.
 - TSF — Total signaling failure outage reason (trunks must be CAD.DSA and integrated services digital network (ISDN) user part (ISUP) (CCS7)).
- d Disposition of the request:
- COMPLETED — Normal completion
 - STOPPED, MAN — A manual request to stop the message has been processed.
- e The number of trunks that were actually cleared of the restriction specified.

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

This output message is informational. Any action taken must be based on the information printed and the technical impact of that data.

5. REFERENCES

PIDENTs
TMAD0005
TMAD0006

SEE PROPRIETARY NOTICE ON COVER PAGE

ID CLR:TSIBP
WORK CENTER.. MOC
GENERIC 4E24 Rel. 2 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] CLR:TSIBP XTSI a COMPLETE
- [2] CLR:TSIBP XTSI a b
- [3] CLR:TSIBP XTSI a D3U c COMPLETE
- [4] CLR:TSIBP XTSI a D3U c d
- [5] CLR:TSIBP XTSI a SPU e COMPLETE
- [6] CLR:TSIBP XTSI a SPU e d
- [7] CLR:TSIBP XTSI a IBU 0 COMPLETED
- [8] CLR:TSIBP XTSI a IBU 0 d
- [9] CLR:TSIBP XTSI a ALL!
CONTR COMPLETE
D3U COMPLETE
SPU COMPLETE
- [10] CLR:TSIBP XTSI a ALL!
CONTR COMPLETE
D3U c d
- [11] CLR:TSIBP XTSI a ALL!
CONTR COMPLETE
D3U COMPLETE
SPU e d
- [12] CLR:TSIBP XTSI a ALL!
CONTR b

2. REASON FOR OUTPUT

This message prints in response to a CLR:TSIBP input message.

Formats [1-2] is output if the input request specified that all breakpoints of a Expanded Time Slot Interchange (XTSI) simplex controller or duplex controllers be cleared.

Formats [3-4] is output if the input request specified that all breakpoints of a Digital Signal Level 3 Unit (D3U) be cleared.

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Formats [5-6] is output if the input request specified that all breakpoints of a Signal Processing Unit (SPU) be cleared.

Formats [7-8] is output if the input request specified that all breakpoints of a In-Band Unit (IBU) be cleared.

Formats [9-12] is output if the input request specified that all breakpoints of an XTSI frame (controllers, D3Us, SPU and IBU) be cleared.

3. VARIABLE FIELD DEFINITIONS

- a Expanded Time Slot Interchange (XTSI) member number in decimal.
- b Controller request status code:
- ABORTED - FRAME ERROR Request for the given XTSI was aborted because of an error returned from the frame. Contact the Technical Assistance Center for further information.
- COMPLETE All breakpoints have been removed from the controller.
- DENIED - INV TSI TYPE OR UNEQ Request denied because only an XTSI, not TSI, can be specified, or the frame is unequipped, in growth, or special growth state.
- DENIED - ODD TSI MEMBER Request denied because only the even member number can be specified.
- DENIED - TSI DUPF Request denied because the frame is duplex failed.
- DENIED - TSI LOM Request denied because the frame controller is in listen-only mode. Retry later, as this condition should be cleared quickly.
- c D3U number in decimal (0-7).
- d D3U, SPU or IBU request status code:
- ABORTED - FRAME ERROR Request for the given D3U, SPU or IBU was aborted because of an error returned from XTSI frame. Contact the Technical Assistance Center for further information.
- ABORTED - MACRO ERROR Request was aborted because the given D3U, SPU or IBU failed in processing the clear command. Contact the Technical Assistance Center for further information.
- ABORTED - MACRO REJECTED Request for the given D3U, SPU or IBU was aborted because the XTSI frame rejected the clear command. Contact the Technical Assistance Center for further information.

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ABORTED - MACRO TIMEOUT Request for the given D3U, SPU or IBU was aborted because the XTSI frame did not reply to the clear command within the allotted time limit. Contact the Technical Assistance Center for further information.

COMPLETE All breakpoints have been removed from the D3U, SPU or IBU.

DENIED - INV TSI TYPE OR UNEQ Request denied because either a TSI, not XTSI, was specified, the frame or the D3U, SPU or IBU was unequipped, in growth, or special growth state.

DENIED - ODD TSI MEMBER Request denied because only the even member number can be specified.

DENIED - SUBUNIT IS OOS Request for the given D3U, SPU or IBU was denied because the D3U, SPU or IBU is out of service.

DENIED - TSI DUPF Request denied because the frame is duplex failed.

DENIED - TSI LOM Request denied because the frame controller is in listen-only mode. Retry later, as this condition should be cleared quickly.

e SPU number in decimal (0-11).

4. REFERENCES

PIDENT
XTSIBKPT

Input Messages
CLR:TSIBP
OP:TSIBP
SET:TSIBP

Output Messages
OP:TSIBP
REPT:TSIBP
SET:TSIBP

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ID CLR:UTIL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

CLR:UTIL COMPLETED

2. REASON FOR OUTPUT

To report the successful operation of the request to clear all generic utility flags. Active system generic utility flags have been cleared. Utility system matchers have been disabled, and utility execute instructions have been replaced by original instructions.

3. VARIABLE FIELD DEFINITIONS

If a failure occurred, one or more of the following actions may be taken:

1. Reenter the CLR:UTIL input message.
2. Activate the "CLR UTIL" key on the master control complex (MCC) on the emergency action interface (EAI) page and do a soft "a" (poke 02). This will clear active utilities.
3. Clear utility flags with the CLR:UTILFLG input message.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
GULPUTPP
GULPUTXP
GULRUTCR

Practice 234-301-003, *1B Processor Generic Utility Program (GULP) Application - Description*

PA-4A002-01, *4ESSTM User's Manual*, Generic Utility Section

Input Messages
CLR:UTIL
CLR:UTILFLG

SEE PROPRIETARY NOTICE ON COVER PAGE

ID CLR:UTILFLG
WORK CENTER.. MOC
GENERIC 4E21 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

- [1] CLR:UTILFLG,ADR a b CODE c
- [2] CLR:UTILFLG,XADR d b CODE c

2. REASON FOR OUTPUT

To report successful operation of request to clear a specific generic utility flag. Active system flag at specified address has been cleared. Format [1] prints if the ADR keyword was used in the CLR:UTILFLG input message. Format [2] prints if the XADR keyword was used in the CLR:UTILFLG input message.

3. VARIABLE FIELD DEFINITIONS

- a The eight digit octal address of utility flag cleared.
- b Status:
COMPLETED
FAIL
- c Response code:
0 — Success.
126 — No match in table for the input address.
- d The ten digit octal address of utility flag cleared.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
GULPUTPP
GULPUTXP
GULRUTCR

Input Message
CLR:UTILFLG

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ID COPY:A1B
WORK CENTER.. MOC
GENERIC 4E22 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

- [1] COPY:A1B, [XS]INDIR a, [ID b,][X]ADR c, INC de; ...
f, [XS]INDIR a, [ID b,][X]ADR c, INC de g [h]
- [2] COPY:A1B, [XS]INDIR a, [ID b,][X]ADR c, INC de; ...
f, INDIR a, UMEM i, INC de g [h]
- [3] COPY:A1B, [XS]INDIR a, [ID b,][X]ADR c, INC de; ...
f, [XS]INDIR a, j, INC de g [h]
- [4] COPY:A1B, [XS]INDIR a, [ID b,][X]ADR c, INC de; UMEM i g [h]
- [5] COPY:A1B, [XS]INDIR a, [ID b,][X]ADR c, INC de; ...
FS, ID k, ADR c, INC de g [h]
- [6] COPY:A1B, INDIR a, UMEM i, INC de; ...
f, [XS]INDIR a, [ID b,][X]ADR c, INC de g [h]
- [7] COPY:A1B, INDIR a, UMEM i, INC de; f, INDIR a, UMEM i, INC de g [h]
- [8] COPY:A1B, INDIR a, UMEM i, INC de; f, [XS]INDIR a, j, INC de g [h]
- [9] COPY:A1B, INDIR a, UMEM i, INC de; UMEM i g [h]
- [10] COPY:A1B, INDIR a, UMEM i, INC de; FS, ID k, ADR c, INC de g [h]
- [11] COPY:A1B, [XS]INDIR a, j, INC de; ...
f, [XS]INDIR a, [ID b,][X]ADR c, INC de g [h]
- [12] COPY:A1B, [XS]INDIR a, j, INC de; f, INDIR a, UMEM i, INC de g [h]
- [13] COPY:A1B, [XS]INDIR a, j, INC de; f, [XS]INDIR a, j, INC de g [h]
- [14] COPY:A1B, [XS]INDIR a, j, INC de; UMEM i g [h]

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2. REASON FOR OUTPUT

To report the results of the request to copy data from one data storage area to another.

Formats [1-5] are printed if the origin location is an address and the destination location is
an address, Format [1].
in a utility memory indicator, Format [2].
in a CC register, Format [3].
a utility memory indicator, Format [4].
in File Store (FS), Format [5].

Formats [6-10] are printed if the origin location is in a utility memory indicator and the destination location is:
an address, Format [6].
in a utility memory indicator, Format [7].
in a CC register, Format [8].
a utility memory indicator, Format [9].
in a File Store (FS), Format [10].

Formats [11-14] are printed if the origin location is in a CC register and the destination location is:
an address, Format [11].
in a utility memory indicator, Format [12].
in a CC register, Format [13].
a utility memory indicator, Format [14].

3. VARIABLE FIELD DEFINITIONS

A1B	Any 1B core memory.										
a	Level of indirectness.										
b	File system ID tag. (Must be in file segments 1 through 3 since this is used for extended memory access.)										
c	Base address.										
d	Sign of address increment.										
e	Address increment.										
f	Type of address: <table><tr><td>A1B</td><td>Any 1B core memory.</td></tr><tr><td>CS</td><td>Nonsecure call store.</td></tr><tr><td>CSS</td><td>Call store secure.</td></tr><tr><td>PSS</td><td>Program store secure.</td></tr><tr><td>XS</td><td>Extended nonsecure call store.</td></tr></table>	A1B	Any 1B core memory.	CS	Nonsecure call store.	CSS	Call store secure.	PSS	Program store secure.	XS	Extended nonsecure call store.
A1B	Any 1B core memory.										
CS	Nonsecure call store.										
CSS	Call store secure.										
PSS	Program store secure.										
XS	Extended nonsecure call store.										

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g	Disposition of the request: COMPLETED — Function successful. STOPPED — Function failed.
h	A fail code. This is an optional field that appears only if the disposition of the request is STOPPED. See Table 1 for fail code descriptions.
i	Utility memory indicator.
j	CC register indicator.
k	File system identification tag.

4. ACTION TO BE TAKEN

If the copy was not completed successfully, reenter the copy input request.

5. REFERENCES

PIDENTs
GULPIMDT
GULPUTPP
GULPUTXP
GULRUTCR

Table 1
FAIL CODE DESCRIPTIONS

Code	Meaning
51	Disk operation failure.
53	Maintenance Control Program (MACP) holding time exceeded.
54	Paging supervisor abort.
56	Interrupt while Generic Utility Program (GULP) in progress.
57	GULP terminated by request.
63	Write file header request rejected.
65	Write file header request failed.
66	Write request rejected.
67	Write request failed.
68	Write end of file request rejected.
69	Write end of file request failed.
70	Locate and read file header request rejected.

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Table 1
FAIL CODE DESCRIPTIONS (continued)

Code	Meaning
71	Locate and read file header request failed (hardware).
72	Forward space request failed.
73	Read request rejected.
74	Read request failed.
75	End of file detected.
76	Close input file request rejected.
77	Close input file request failed.
78	Forward space request rejected.
80	Disk read request rejected.
81	Disk read queue full.
82	Disk write request rejected.
83	Disk write queue full.
85	Illegal source / destination.
86	Data table mutilation.
87	Rewind request rejected.
88	Rewind request failed.
125	ID tag input and offset are invalid for the memory accessed. (As it pertains to the XSINDIR and ID tag options.)
127	Input address is invalid for address type specified, or address is not defined.
128	It is invalid to COPY/LOAD to BUFFER BUS, BOOTROM, or IFB memory.
129	Attempt to access an Extended Non-Secure Call Store (XS) address at G-LEVEL interrupt, but window was not enabled.
188	Address specified is not equipped.

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ID COPY:CS
WORK CENTER.. MOC
GENERIC 4E22 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

- [1] COPY:CS, INDIR a, [X]ADR b, INC cd;...
e, [XS]INDIR a, [ID f,][X]ADR b, INC cd g [h]
- [2] COPY:CS, INDIR a, [X]ADR b, INC cd;...
e, INDIR a, UMEM i, INC cd g [h]
- [3] COPY:CS, INDIR a, [X]ADR b, INC cd;...
e, [XS]INDIR a, j, INC cd g [h]
- [4] COPY:CS, INDIR a, [X]ADR b, INC cd; UMEM i g [h]
- [5] COPY:CS, INDIR a, [X]ADR b, INC cd;...
FS, ID k, ADR b, INC cd g [h]
- [6] COPY:CS, INDIR a, UMEM i, INC cd;...
e, [XS]INDIR a, [ID f,][X]ADR b, INC cd g [h]
- [7] COPY:CS, INDIR a, UMEM i, INC cd; e, INDIR a, UMEM i, INC cd g [h]
- [8] COPY:CS, INDIR a, UMEM i, INC cd; e, [XS]INDIR a, j, INC cd g [h]
- [9] COPY:CS, INDIR a, UMEM i, INC cd; UMEM i g [h]
- [10] COPY:CS, INDIR a, UMEM i, INC cd; FS, ID k, ADR b, INC cd g [h]
- [11] COPY:CS, INDIR a, j, INC cd;...
e, [XS]INDIR a, [ID f,][X]ADR b, INC cd g [h]
- [12] COPY:CS, INDIR a, j, INC cd; e, INDIR a, UMEM i, INC cd g [h]
- [13] COPY:CS, INDIR a, j, INC cd; e, [XS]INDIR a, j, INC cd g [h]
- [14] COPY:CS, INDIR a, j, INC cd; UMEM i g [h]

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2. REASON FOR OUTPUT

To report the results of the request to copy data from one data storage area to another.

Formats [1-5] are printed if the origin location is an address and the destination location is
an address, Format [1].
in a utility memory indicator, Format [2].
in a CC register, Format [3].
a utility memory indicator, Format [4].
in File Store (FS), Format [5].

Formats [6-10] are printed if the origin location is in a utility memory indicator and the destination location is:
an address, Format [6].
in a utility memory indicator, Format [7].
in a CC register, Format [8].
a utility memory indicator, Format [9].
in a File Store (FS), Format [10].

Formats [11-14] are printed if the origin location is in a CC register and the destination location is:
an address, Format [11].
in a utility memory indicator, Format [12].
in a CC register, Format [13].
a utility memory indicator, Format [14].

3. VARIABLE FIELD DEFINITIONS

CS	Nonsecure call store.
a	Level of indirectness.
b	Base address.
c	Sign of address increment.
d	Address increment.
e	Type of address: A1B Any 1B core memory. CS Nonsecure call store. CSS Call store secure. PSS Program store secure. XS Extended nonsecure call store.
f	File system ID tag. (Must be in file segments 1 through 3 since this is used for extended memory access.)

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g	Disposition of the request: COMPLETED — Function successful. STOPPED — Function failed.
h	A fail code. This is an optional field that appears only if the disposition of the request is STOPPED. See Table 1 for fail code descriptions.
i	Utility memory indicator.
j	CC register indicator.
k	File system identification tag.

4. ACTION TO BE TAKEN

If the copy was not completed successfully, reenter the copy input request.

5. REFERENCES

PIDENTs
GULPIMDT
GULPUTPP
GULPUTXP
GULRUTCR

Table 1
FAIL CODE DESCRIPTIONS

Code	Meaning
51	Disk operation failure.
53	Maintenance Control Program (MACP) holding time exceeded.
54	Paging supervisor abort.
56	Interrupt while Generic Utility Program (GULP) in progress.
57	GULP terminated by request.
63	Write file header request rejected.
65	Write file header request failed.
66	Write request rejected.
67	Write request failed.
68	Write end of file request rejected.
69	Write end of file request failed.
70	Locate and read file header request rejected.

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Table 1
FAIL CODE DESCRIPTIONS (continued)

Code	Meaning
71	Locate and read file header request failed (hardware).
72	Forward space request failed.
73	Read request rejected.
74	Read request failed.
75	End of file detected.
76	Close input file request rejected.
77	Close input file request failed.
78	Forward space request rejected.
80	Disk read request rejected.
81	Disk read queue full.
82	Disk write request rejected.
83	Disk write queue full.
85	Illegal source / destination.
86	Data table mutilation.
87	Rewind request rejected.
88	Rewind request failed.
125	ID tag input and offset are invalid for the memory accessed. (As it pertains to the XSINDIR and ID tag options.)
127	Input address is invalid for address type specified, or address is not defined.
128	It is invalid to COPY/LOAD to BUFFER BUS, BOOTROM, or IFB memory.
129	Attempt to access an Extended Non-Secure Call Store (XS) address at G-LEVEL interrupt, but window was not enabled.
188	Address specified is not equipped.

SEE PROPRIETARY NOTICE ON COVER PAGE

ID COPY:CSS
WORK CENTER.. MOC
GENERIC 4E22 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

- [1] COPY:CSS, INDIR a, [X]ADR b, INC cd;...
e, [XS]INDIR a, [ID f,][X]ADR b, INC cd g [h]
- [2] COPY:CSS, INDIR a, [X]ADR b, INC cd;...
e, INDIR a, UMEM i, INC cd g [h]
- [3] COPY:CSS, INDIR a, [X]ADR b, INC cd;...
e, [XS]INDIR a, j, INC cd g [h]
- [4] COPY:CSS, INDIR a, [X]ADR b, INC cd; UMEM i g [h]
- [5] COPY:CSS, INDIR a, [X]ADR b, INC cd;...
FS, ID k, ADR b, INC cd g [h]
- [6] COPY:CSS, INDIR a, UMEM i, INC cd;...
e, [XS]INDIR a, [ID f,][X]ADR b, INC cd g [h]
- [7] COPY:CSS, INDIR a, UMEM i, INC cd; e, INDIR a, UMEM i, INC cd g [h]
- [8] COPY:CSS, INDIR a, UMEM i, INC cd; e, [XS]INDIR a, j, INC cd g [h]
- [9] COPY:CSS, INDIR a, UMEM i, INC cd; UMEM i g [h]
- [10] COPY:CSS, INDIR a, UMEM i, INC cd; FS, ID k, ADR b, INC cd g [h]
- [11] COPY:CSS, INDIR a, j, INC cd;...
e, [XS]INDIR a, [ID f,][X]ADR b, INC cd g [h]
- [12] COPY:CSS, INDIR a, j, INC cd; e, INDIR a, UMEM i, INC cd g [h]
- [13] COPY:CSS, INDIR a, j, INC cd; e, [XS]INDIR a, j, INC cd g [h]
- [14] COPY:CSS, INDIR a, j, INC cd; UMEM i g [h]

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2. REASON FOR OUTPUT

To report the results of the request to copy data from one data storage area to another.

Formats [1-5] are printed if the origin location is an address and the destination location is
an address, Format [1].
in a utility memory indicator, Format [2].
in a CC register, Format [3].
a utility memory indicator, Format [4].
in File Store (FS), Format [5].

Formats [6-10] are printed if the origin location is in a utility memory indicator and the destination location is:
an address, Format [6].
in a utility memory indicator, Format [7].
in a CC register, Format [8].
a utility memory indicator, Format [9].
in a File Store (FS), Format [10].

Formats [11-14] are printed if the origin location is in a CC register and the destination location is:
an address, Format [11].
in a utility memory indicator, Format [12].
in a CC register, Format [13].
a utility memory indicator, Format [14].

3. VARIABLE FIELD DEFINITIONS

CSS	Call store secure.
a	Level of indirectness.
b	Base address.
c	Sign of address increment.
d	Address increment.
e	Type of address: A1B Any 1B core memory. CS Nonsecure call store. CSS Call store secure. PSS Program store secure. XS Extended nonsecure call store.
f	File system ID tag. (Must be in file segments 1 through 3 since this is used for extended memory access.)

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g	Disposition of the request: COMPLETED — Function successful. STOPPED — Function failed.
h	A fail code. This is an optional field that appears only if the disposition of the request is STOPPED. See Table 1 for fail code descriptions.
i	Utility memory indicator.
j	CC register indicator.
k	File system identification tag.

4. ACTION TO BE TAKEN

If the copy was not completed successfully, reenter the copy input request.

5. REFERENCES

PIDENTs
GULPIMDT
GULPUTPP
GULPUTXP
GULRUTCR

Table 1
FAIL CODE DESCRIPTIONS

Code	Meaning
51	Disk operation failure.
53	Maintenance Control Program (MACP) holding time exceeded.
54	Paging supervisor abort.
56	Interrupt while Generic Utility Program (GULP) in progress.
57	GULP terminated by request.
63	Write file header request rejected.
65	Write file header request failed.
66	Write request rejected.
67	Write request failed.
68	Write end of file request rejected.
69	Write end of file request failed.
70	Locate and read file header request rejected.

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Table 1
FAIL CODE DESCRIPTIONS (continued)

Code	Meaning
71	Locate and read file header request failed (hardware).
72	Forward space request failed.
73	Read request rejected.
74	Read request failed.
75	End of file detected.
76	Close input file request rejected.
77	Close input file request failed.
78	Forward space request rejected.
80	Disk read request rejected.
81	Disk read queue full.
82	Disk write request rejected.
83	Disk write queue full.
85	Illegal source / destination.
86	Data table mutilation.
87	Rewind request rejected.
88	Rewind request failed.
125	ID tag input and offset are invalid for the memory accessed. (As it pertains to the XSINDIR and ID tag options.)
127	Input address is invalid for address type specified, or address is not defined.
128	It is invalid to COPY/LOAD to BUFFER BUS, BOOTROM, or IFB memory.
129	Attempt to access an Extended Non-Secure Call Store (XS) address at G-LEVEL interrupt, but window was not enabled.
188	Address specified is not equipped.

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ID COPY:FS
WORK CENTER.. MOC
GENERIC 4E22 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

- [1] COPY:FS, ID a,ADR b,INC cd;e,[XS]INDIR f,[ID g,][X]ADR b,INC cd h [i]
- [2] COPY:FS, ID a,ADR b,INC cd;e,INDIR f,UMEM j,INC cd h [i]
- [3] COPY:FS, ID a,ADR b,INC cd;UMEM j h [i]
- [4] COPY:FS, ID a,ADR b,INC cd;FS, ID a ,ADR b,INC cd h [i]

2. REASON FOR OUTPUT

To report the results of the request to copy data from a File Store (FS) to another data storage area.

Format [1] prints if the destination location is an address.

Format [2] prints if the destination location is in a utility memory indicator.

Format [3] prints if the destination location is a utility memory indicator.

Format [4] prints if the destination location is in File Store (FS).

3. VARIABLE FIELD DEFINITIONS

- a File system identification tag.
- b Base address.
- c Sign of address increment.
- d Address increment.
- e Type of address:
 - A1B Any 1B core memory.
 - CS Nonsecure call store.
 - CSS Call store secure.
 - PSS Program store secure.
 - XS Extended nonsecure call store.
- f Level of indirectness.
- g File system ID tag. (Must be in file segments 1 through 3 since this is used for extended memory access.)

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- h Disposition of the request:
COMPLETED — Function successful.
STOPPED — Function failed.
- i A fail code. This is an optional field that appears only if the disposition of the request is STOPPED. See Table 1 for fail code descriptions.
- j Utility memory indicator.

4. ACTION TO BE TAKEN

If the copy was not completed successfully, reenter the copy input request.

5. REFERENCES

PIDENTs
GULPIMDT
GULPUTPP
GULPUTXP
GULRUTCR

Table 1
FAIL CODE DESCRIPTIONS

Code	Meaning
51	Disk operation failure.
53	Maintenance Control Program (MACP) holding time exceeded.
54	Paging supervisor abort.
56	Interrupt while Generic Utility Program (GULP) in progress.
57	GULP terminated by request.
63	Write file header request rejected.
65	Write file header request failed.
66	Write request rejected.
67	Write request failed.
68	Write end of file request rejected.
69	Write end of file request failed.
70	Locate and read file header request rejected.

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Table 1
FAIL CODE DESCRIPTIONS (continued)

Code	Meaning
71	Locate and read file header request failed (hardware).
72	Forward space request failed.
73	Read request rejected.
74	Read request failed.
75	End of file detected.
76	Close input file request rejected.
77	Close input file request failed.
78	Forward space request rejected.
80	Disk read request rejected.
81	Disk read queue full.
82	Disk write request rejected.
83	Disk write queue full.
85	Illegal source / destination.
86	Data table mutilation.
87	Rewind request rejected.
88	Rewind request failed.
125	ID tag input and offset are invalid for the memory accessed. (As it pertains to the XSINDIR and ID tag options.)
127	Input address is invalid for address type specified, or address is not defined.
128	It is invalid to COPY/LOAD to BUFFER BUS, BOOTROM, or IFB memory.
129	Attempt to access an Extended Non-Secure Call Store (XS) address at G-LEVEL interrupt, but window was not enabled.
188	Address specified is not equipped.

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ID COPY:OWBUF
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

COPY:OWBUF a

2. REASON FOR OUTPUT

To report the results of the request to place previously buffered overwrites into the test phase.

3. VARIABLE FIELD DEFINITIONS

a Status of request:

ABORTED QUEUE FULL — Attempt to write data to file system failed due to input error or queue full.

COMPLETED — Core overwrites have been written to core only, file system only overwrites have been written to both copies of file system. No hash sums have been affected.

NOT STARTED. FAC BUSY RETRY LATER (RL) — Generic utility program (GULP) is locked out by another client which uses hash tables or requires a temporary block on core changes. Tape writing program (TWRP), system audit of stores using tape (SAST), recent changes, network management changes, or traffic schedule change, system update program (SYUP) will block GULP overwrites.

4. ACTION TO BE TAKEN

If NOT STARTED wait until blocking client program completes and re-enter COPY:OWBUF.

If ABORTED, wait until file system activity decreases and re-enter COPY:OWBUF.

5. REFERENCES

PIDENTs
GULPOWRT
GULRUTCR

Practice 234-301-003, *1B Processor Generic Utility Program (GULP) Application - Description*

PA-4A002-01, *4ESSTM User's Manual*, Generic Utility Section

Input Message
COPY:OWBUF

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ID COPY:PSS
WORK CENTER.. MOC
GENERIC 4E22 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

- [1] COPY:PSS, INDIR a, [X]ADR b, INC cd;...
e, [XS]INDIR a, [ID f,][X]ADR b, INC cd g [h]
- [2] COPY:PSS, INDIR a, [X]ADR b, INC cd;...
e, INDIR a, UMEM i, INC cd g [h]
- [3] COPY:PSS, INDIR a, [X]ADR b, INC cd;...
e, [XS]INDIR a, j, INC cd g [h]
- [4] COPY:PSS, INDIR a, [X]ADR b, INC cd; UMEM i g [h]
- [5] COPY:PSS, INDIR a, [X]ADR b, INC cd;...
FS, ID k, ADR b, INC cd g [h]
- [6] COPY:PSS, INDIR a, UMEM i, INC cd;...
e, [XS]INDIR a, [ID f,][X]ADR b, INC cd g [h]
- [7] COPY:PSS, INDIR a, UMEM i, INC cd; e, INDIR a, UMEM i, INC cd g [h]
- [8] COPY:PSS, INDIR a, UMEM i, INC cd; e, [XS]INDIR a, j, INC cd g [h]
- [9] COPY:PSS, INDIR a, UMEM i, INC cd; UMEM i g [h]
- [10] COPY:PSS, INDIR a, UMEM i, INC cd; FS, ID k, ADR b, INC cd g [h]
- [11] COPY:PSS, INDIR a, j, INC cd;...
e, [XS]INDIR a, [ID f,][X]ADR b, INC cd g [h]
- [12] COPY:PSS, INDIR a, j, INC cd; e, INDIR a, UMEM i, INC cd g [h]
- [13] COPY:PSS, INDIR a, j, INC cd; e, [XS]INDIR a, j, INC cd g [h]
- [14] COPY:PSS, INDIR a, j, INC cd; UMEM i g [h]

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2. REASON FOR OUTPUT

To report the results of the request to copy data from one data storage area to another.

Formats [1-5] are printed if the origin location is an address and the destination location is
an address, Format [1].
in a utility memory indicator, Format [2].
in a CC register, Format [3].
a utility memory indicator, Format [4].
in File Store (FS), Format [5].

Formats [6-10] are printed if the origin location is in a utility memory indicator and the destination location is:
an address, Format [6].
in a utility memory indicator, Format [7].
in a CC register, Format [8].
a utility memory indicator, Format [9].
in a File Store (FS), Format [10].

Formats [11-14] are printed if the origin location is in a CC register and the destination location is:
an address, Format [11].
in a utility memory indicator, Format [12].
in a CC register, Format [13].
a utility memory indicator, Format [14].

3. VARIABLE FIELD DEFINITIONS

PSS	Program store secure.
a	Level of indirectness.
b	Base address.
c	Sign of address increment.
d	Address increment.
e	Type of address: A1B Any 1B core memory. CS Nonsecure call store. CSS Call store secure. PSS Program store secure. XS Extended nonsecure call store.
f	File system ID tag. (Must be in file segments 1 through 3 since this is used for extended memory access.)

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g	Disposition of the request: COMPLETED — Function successful. STOPPED — Function failed.
h	A fail code. This is an optional field that appears only if the disposition of the request is STOPPED. See Table 1 for fail code descriptions.
i	Utility memory indicator.
j	CC register indicator.
k	File system identification tag.

4. ACTION TO BE TAKEN

If the copy was not completed successfully, reenter the copy input request.

5. REFERENCES

PIDENTs
GULPIMDT
GULPUTPP
GULPUTXP
GULRUTCR

Table 1
FAIL CODE DESCRIPTIONS

Code	Meaning
51	Disk operation failure.
53	Maintenance Control Program (MACP) holding time exceeded.
54	Paging supervisor abort.
56	Interrupt while Generic Utility Program (GULP) in progress.
57	GULP terminated by request.
63	Write file header request rejected.
65	Write file header request failed.
66	Write request rejected.
67	Write request failed.
68	Write end of file request rejected.
69	Write end of file request failed.
70	Locate and read file header request rejected.

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Table 1
FAIL CODE DESCRIPTIONS (continued)

Code	Meaning
71	Locate and read file header request failed (hardware).
72	Forward space request failed.
73	Read request rejected.
74	Read request failed.
75	End of file detected.
76	Close input file request rejected.
77	Close input file request failed.
78	Forward space request rejected.
80	Disk read request rejected.
81	Disk read queue full.
82	Disk write request rejected.
83	Disk write queue full.
85	Illegal source / destination.
86	Data table mutilation.
87	Rewind request rejected.
88	Rewind request failed.
125	ID tag input and offset are invalid for the memory accessed. (As it pertains to the XSINDIR and ID tag options.)
127	Input address is invalid for address type specified, or address is not defined.
128	It is invalid to COPY/LOAD to BUFFER BUS, BOOTROM, or IFB memory.
129	Attempt to access an Extended Non-Secure Call Store (XS) address at G-LEVEL interrupt, but window was not enabled.
188	Address specified is not equipped.

SEE PROPRIETARY NOTICE ON COVER PAGE

ID COPY:REG
WORK CENTER.. MOC
GENERIC 4E21 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

- [1] COPY:aREG ;b, [XS]INDIR c,[ID d,] [X]ADR e, INC fg h [i]
- [2] COPY:aREG ;b, INDIR c, UMEM j, INC fg h [i]
- [3] COPY:aREG ;b, [XS]INDIR c, k, INC fg h [i]
- [4] COPY:aREG ;UMEM j h [i]

2. REASON FOR OUTPUT

To report the results of the request to copy data from a central control (CC) register to another data storage area.

Format [1] prints if the destination location is an address.

Format [2] prints if the destination location is in a utility memory indicator.

Format [3] prints if the destination location is in a CC register.

Format [4] prints if the destination location is a utility memory indicator.

3. VARIABLE FIELD DEFINITIONS

- a A central control (CC) register location, the possible values are:
B, F, G, J, K, L, X, Y, or Z.
- b Type of address:
 - A1B Any 1B core memory.
 - CS Nonsecure call store.
 - CSS Call store secure.
 - PSS Program store secure.
 - XS Extended nonsecure call store.
- c Level of indirectness.
- d File system ID tag. (Must be in file segments 1 through 3 since this is used for extended memory access.)
- e Base address.
- f Sign of address increment.
- g Address increment.

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h	Disposition of the request: COMPLETED — Function successful. STOPPED — Function failed.
i	A fail code. This is an optional field that appears only if the disposition of the request is STOPPED. See Table 1 for fail code descriptions.
j	Utility memory indicator.
k	CC register indicator.

4. ACTION TO BE TAKEN

If the copy was not completed successfully, reenter the copy input request.

5. REFERENCES

PIDENTs
GULPIMDT
GULPUTPP
GULPUTXP
GULRUTCR

Table 1
FAIL CODE DESCRIPTIONS

Code	Meaning
51	Disk operation failure.
53	Maintenance control program (MACP) holding time exceeded.
54	Paging supervisor abort.
56	Interrupt while generic utility program (GULP) in progress.
57	GULP terminated by request.
61	Secure tape request rejected.
62	Secure tape request failed.

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Table 1
FAIL CODE DESCRIPTIONS (continued)

Code	Meaning
63	Write file header request rejected.
64	End of tape marker passed.
65	Write file header request failed.
66	Write request rejected.
67	Write request failed.
68	Write end of file request rejected.
69	Write end of file request failed.
70	Locate and read file header request rejected.
71	Locate and read file header request failed (hardware).
72	Forward space request failed.
73	Read request rejected.
74	Read request failed.
75	End of file detected.
76	Close input file request rejected.
77	Close input file request failed.
78	Forward space request rejected.
79	File name not located on tape.
80	Disk read request rejected.
81	Disk read queue full.
82	Disk write request rejected.
83	Disk write queue full.
84	Tape file name not unique.
85	Illegal source/destination.
86	Data table mutilation.
87	Rewind request rejected.
88	Rewind request failed.
125	ID tag input and offset are invalid for the memory accessed. (As it pertains to the XSINDIR and ID tag options.)
127	Input address is invalid for address type specified, or address is not defined.
128	It is invalid to COPY/LOAD to BUFFER BUS, BOOTROM, or IFB memory.
129	Attempt to access an extended non-secure call store (XS) address at G-LEVEL interrupt, but window was not enabled.
188	Address specified is not equipped.

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ID COPY:SCS
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

COPY:SCS a {b|c}

2. REASON FOR OUTPUT

These messages are printed in response to an input message requesting one of the following operations.

Copy a file from the Attached Processor System (APS) to a single Service Circuit Unit (SCU).

Copy a file from all SCU's in a single Service Circuit System (SCS) frame.

Copy a file from all SCU's in all SCS frames.

Copy a file to another file in the same SCU (intra SCU file copy).

Copy a file from one SCU to a file in another SCU (inter SCU file copy).

Copy a disk to another disk in the same SCU (intra SCU disk copy).

3. VARIABLE FIELD DEFINITIONS

a SCS member number (0-7) containing the SCU.

b The following messages may be printed by an APS to SCU file copy.

ABORTED UNABLE TO SCHEDULE PMOS TASK — The file copy is controlled by the Peripheral Maintenance Operating System (PMOS). Two separate PMOS tasks are required. The program was unable to schedule one of the PMOS tasks.

COMPLETED — The file copy job has completed to all SCU's in one SCS frame. This message is printed if, and only if, the all option was specified in the input message. Copying to other SCS frames could still be in progress (see TASK COMPLETED).

FAILED UNABLE TO OPEN FILE ON APS — The APS file manager was unable to open the file on the APS disk.

FAILED UNABLE TO READ FILE FROM APS — An excessive number of read failures occurred while reading the file from the APS disk.

FAILED UNABLE TO TRANSMIT FILE TO ANY SCU — Unable to copy the complete file to any SCU in the SCS frame.

FAILED WRONG FILE TYPE FOUND ON APS — The file type in the file header does not match the file type in the input message.

SCU x FILE COPY FAILED — The complete file could not be copied to one SCU. The file is still being copied to the other SCU's.

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STOPPED ALL SCUS UNEQ OR OOS — All SCU's in the SCS frame are either unequipped or currently Out Of Service (OOS).

STOPPED ANNOUNCEMENT UPDATE IN PROGRESS —

An announcement update is in progress in one or more SCU's in the SCS. The APS to SCS file copy cannot run concurrently with an announcement update.

STOPPED GROWTH SCS — SCS frame is in the GROW/SGROW state.

STOPPED MANUAL REQUEST — The file copy to an SCS was terminated due to a manual Teletypewriter (TTY) request. The file could still be copied to other SCS's if the ALL option was specified in the original input message.

STOPPED NO ACTIVE CONTROLLER — Both controllers in the SCS are currently marked OOS.

STOPPED SCU x IS UNEQ — The file was to be copied to an unequipped SCU.

STOPPED SCU DISK IN USE — An inter/intra SCU file copy, intra SCU raw disk copy, or an SCU disk format job is already in progress in the SCS frame. The APS to SCS file copy cannot run concurrently with these jobs.

STOPPED UNEQ SCS — The specified SCS frame is unequipped. Also printed for each unequipped SCS in the office when the ALL option is specified in the input message.

TASK COMPLETED — The file has been copied to all SCU's requested in the input message and the copy job has terminated.

UNKNOWN SYSTEM ERROR — A data inconsistency or transient system error caused the file copy to terminate.

c The following messages can be printed by an inter/intra SCU file/disk copy.

SCU x COMPLETE — The inter/intra SCU copy has completed.

SCU x FAILED — The inter/intra SCU copy has failed.

SCU x IN PROGRESS — The inter/intra SCU copy is in progress.

SCU x STARTED — The inter/intra SCU copy has started.

SCU x STOPPED - ANN UPD IP — An announcement update is in progress in one or more SCU's in the SCS. The inter/intra SCU copy cannot run concurrently with an announcement update.

SCU x STOPPED - CONTR DUP FAIL OR UNEQ — Both controllers in the SCS frame are either unequipped or OOS.

SCU x STOPPED - DEST DISK UNEQ — The destination SCU disk pair is unequipped.

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- SCU x STOPPED - DEST SCU IN SERVICE — The destination SCU is in service (The destination SCU must be taken OOS prior to copy).
- SCU x STOPPED - DEST SCU UNEQ — The destination SCU is unequipped.
- SCU x STOPPED - DISK CAPACITY LOW — The disk capacity of the destinations disk pair is less than the disk capacity of the source disk pair in an intra disk copy.
- SCU x STOPPED - MACRO REJECTED — This SCS controller did not accept the inter/intra SCU copy macros.
- SCU x STOPPED - MACRO TIMEOUT — This SCS controller did not reply the inter/intra SCU copy macros.
- SCU x STOPPED - SCU DISK IN USE — An inter/intra SCU file copy, intra SCU raw disk copy, or an SCU disk format job is already in progress in the SCS frame. The inter/intra SCU file/disk copy cannot run concurrently with these jobs.
- SCU x STOPPED - SRC DISK UNEQ — The source SCU disk pair is unequipped.
- SCU x STOPPED - SRC SCU UNEQ — The source SCU is unequipped.

4. ACTION TO BE TAKEN

The following actions should be taken on messages printed by an APS to SCU file copy and if variable b is:

- ABORTED UNABLE TO SCHEDULE PMOST TASK Re-enter the input message when there is less activity in the office.
- COMPLETED No action required.
- FAILED UNABLE TO OPEN FILE ON APS Correct the SVN argument and re-enter the input message, or install the necessary file(s) on the APS disk.
- FAILED UNABLE TO READ FILE FROM APS — Check the APS for excessive disk activity or recovery actions. If necessary replace the file on the APS disk.
- FAILED UNABLE TO TRANSMIT FILE TO ANY SCU — Switch controllers in the SCS frame and re-enter the input message.
- FAILED WRONG FILE TYPE FOUND ON APS — Replace the file on the APS disk.
- SCU x FILE COPY FAILED — Re-enter the input message using the single SCU option after the current file copy job has completed.
- STOPPED ALL SCUS UNEQ OR OOS — Re-enter the input message and include the UCL option to copy to the OOS SCU's.

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STOPPED ANNOUNCEMENT UPDATE IN PROGRESS — Re-enter the input message after the announcement update has completed.

STOPPED GROWTH SCS — Re-enter the input message and include the UCL option.

STOPPED MANUAL REQUEST — No action required.

STOPPED NO ACTIVE CONTROLLER — Re-enter the input message and include the UCL option.

STOPPED SCU DISK IN USE — Re-enter the input message after the interfering job in the SCS has completed.

STOPPED SCU x IS UNEQ — Correct the SCU and/or SCS number and re-enter the input message.

STOPPED UNEQ SCS — Ignore this message if it was due to the ALL option in the input message. Otherwise, correct the SCS number and re-enter the message.

TASK COMPLETED — No action required.

UNKNOWN SYSTEM ERROR — Re-enter the input message.

The following actions should be taken on messages printed by an inter/intra SCU copy and if variable b is:

SCU x COMPLETE — No action required.

SCU x IN PROGRESS — No action required.

SCU x FAILED — Diagnose the source and destination SCUs and re-enter the input message.

SCU x STARTED — No action required.

SCU x STOPPED - ANN UPD IP — Re-enter the input message after the announcement update has completed.

SCU x STOPPED - CONTR DUP FAIL OR UNEQ — Equip the SCS or restore at least one of the controllers and re-enter the input message.

SCU x STOPPED - DEST DISK UNEQ — Correct the destination SCU disk pair number or equip the disk pair and re-enter the input message.

SCU x STOPPED - DEST SCU IN SERVICE — Use the RMV:SCS input message to remove the destination SCU and re-enter the input message.

SCU x STOPPED - DEST SCU UNEQ — Correct the destination SCU number or equip the SCU and re-enter the input message.

SCU x STOPPED - DISK CAPACITY LOW — Correct the destination SCU disk pair number or use a different disk pair with higher disk capacity and re-enter the input message.

SCU x STOPPED - MACRO REJECTED — Diagnose the active controller and re-enter the input message.

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- SCU x STOPPED - MACRO TIMEOUT — Diagnose the active controller and re-enter the input message.
- SCU x STOPPED - SCU DISK IN USE — Re-enter the input message after the interfering job in the SCS has completed or stop the interfering job.
- SCU x STOPPED - SRC DISK UNEQ — Correct the source SCU disk pair number or equip the disk pair and re-enter the input message.
- SCU x STOPPED - SRC SCU UNEQ — Correct the source SCU number or equip the SCU and re-enter the input message.

5. REFERENCES

PIDENTs
SCSCFSCU
SCSFPUMP

Input Messages
COPY:SCS
RMV:SCS
STOP:COPY

SEE PROPRIETARY NOTICE ON COVER PAGE

ID COPY:TSIFILE
WORK CENTER.. MOC, TEC
GENERIC 4E24 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

COPY:TSIFILE;XTSI a,[CONTR b,]{SFN c[,DFN d]|ALL}
e

2. REASON FOR OUTPUT

Prints in response to a COPY:TSIFILE input command. Indicates the status of Expanded Time Slot Interchange (XTSI) file copy request.

3. VARIABLE FIELD DEFINITIONS

- a XTSI member number (0-63). (Allows only even XTISIs).
- b XTSI controller number (0-1). Optional parameter. If simplex, the default is the active controller. If duplex failed, this parameter must be specified.
- c XTSI Source File Number (SFN) descriptor (0-127).
- d XTSI Destination File Number (DFN) descriptor (0-127). The default is set to the same as the Source File Number (SFN) descriptor. If SFN and DFN descriptors are identical, it is an inter-controller copy. If SFN and DFN descriptors are not identical, it is an intra-controller copy.
- e Dumped data:
- ABORTED - CANT CONFIG CONTR—The out of service XTSI controller cannot be brought into a state in which it will communicate with the 1B processor. One likely reason for this is that the controller is powered down.
- ABORTED - SOFTWARE ERROR—The status should never come up. If it does, please contact support.
- CHECKSUM ABORTED - FRAME ERROR - (error data)—The 1B processor has received an invalid error from the XTSI frame. Restore the destination file to it's original state using the COPY:XTSI input command and contact support with the error data.
- CHECKSUM ABORTED - MACRO ERROR - (error data)—The 1B processor returned an invalid error. Restore the destination file to it's original state using the COPY:XTSI input command and contact support with the error data.

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CHECKSUM ABORTED - MACRO REJECTED — The XTSI frame is not accepting the copy request. Restore the destination file to its original state using the **COPY:XTSI** input command. If the frame did not F-level when trying the copy request, try again, and if this status is seen again, restore the destination and source file to their original states and contact support.

CHECKSUM ABORTED - MACRO TIMEOUT — The 1B processor is not waiting long enough for the copy request to be completed. Restore the destination file to its original state using the **COPY:XTSI** input command. If the frame did not F-level when trying the copy request, try again, and if this status is seen again, restore the destination and source file to their original states and contact support.

CHECKSUM ABORTED - RESPONSE NOT READY — The 1B processor did not receive a response from the XTSI frame. Restore the destination file to its original state using the **COPY:XTSI** input command. If the frame did not F-level when trying the copy request, try again, and if this status is seen again, restore the destination and source file to their original states and contact support.

CHECKSUM FAILED - ERROR IN SOURCE FILE — The request to copy the file was completed but an examination of the file header indicates it is corrupted. If the frame did not F-level when trying the copy request, try again, and if this status is seen again, restore the destination and source file to their original states and contact support.

CHECKSUM FAILED - CHECKSUM MISMATCH EXPECTED CHECKSUM (xxxx) ACTUAL CHECKSUM (yyyy) — The request to copy the file was completed but a checksum verification indicates the copy is corrupted. The hexadecimal value of **EXPECTED CHECKSUM (xxxx)** from the file descriptor table does not match the **ACTUAL CHECKSUM (yyyy)** calculated on the copied file. If the frame did not F-level when trying the copy request, try again, and if this status is seen again, restore the destination file to its original state and contact support.

COMPLETE — The XTSI file copy request has completed.

COPY ABORTED - DEST FILE TOO SMALL — The destination file is not allocated enough space to hold the contents of the source file. Since the destination file is now erased, restore it using the **COPY:TSIFILE** input command.

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- COPY ABORTED - FLASH JOB FAILED**—The XTSI frame failed executing the copy command in the middle of the operation. Restore the destination file to its original state using the **COPY:TSIFILE** input command. If the frame did not F-level when trying the copy request, try again, and if this status is seen again, restore the destination file to its original state and contact support.
- COPY ABORTED - FRAME ERROR - (error data)**—The 1B processor has received an invalid error from the XTSI frame. Restore the destination file to its original state using the **COPY:XTSI** input command and contact support with the erroneous error data.
- COPY ABORTED - MACRO ERROR - (error data)**—The 1B processor returned an invalid error. Restore the destination file to its original state using the **COPY:XTSI** input command and contact support with the erroneous error data.
- COPY ABORTED - MACRO REJECTED**—The XTSI frame is not accepting the copy request. Restore the destination file to its original state using the **COPY:TSIFILE** input command. If the frame did not F-level when trying the copy request, try again, and if this status is seen again, restore the destination file to its original state and contact support.
- COPY ABORTED - MACRO TIMEOUT**—The 1B processor is not waiting long enough for the copy request to be completed. Restore the destination file to its original state using the **COPY:XTSI** input command. If the frame did not F-level when trying the copy request, try again, and if this status is seen again, restore the destination file to its original state and contact support.
- COPY ABORTED - RESPONSE NOT READY**—The 1B processor did not receive a response from the XTSI frame. Restore the destination file to its original state using the **COPY:XTSI** input command. If the frame did not F-level when trying the copy request, try again, and if this status is seen again, restore the destination file to its original state and contact support.
- COPY ABORTED - SRC FILE NOT ALLOCATED**—The source XTSI flash file was not allocated. Since the destination file is now erased, restore it using the **COPY:TSIFILE** input command.
- COPY ALL FILES - COMPLETE**—The XTSI "Copy All Files" request has completed.
- DENIED - CONTR CANT BE SPECIFIED**—The **CONTR** keyword and its argument must not be specified when the XTSI is in a duplex state.

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- DENIED - CONTR MUST BE SPECIFIED**—The **CONTR** keyword and its argument must be specified when the XTSI is in a duplex failed state.
- DENIED - DEST CONTR IN-SERV**—An inter-controller copy with the destination controller in service is not allowed.
- DENIED - FILE IS ACTIVE**—Single file copies to controller file versions (DFN 0-11) and Controller Signal Processor (CSP) file versions (DFN 28-31) that are active (meaning the unit translator has marked this version of a file as being currently in use) are disallowed.
- DENIED - INV TSI TYPE OR UNEQ**—This XTSI is not an XTSI, or is unequipped. The copy command must be sent to equipped XTSI frames only.
- DENIED - ODD TSI MEMBER**—This XTSI is an XTSI odd member. The copy command must be sent to even XTSI members only.
- DENIED - TSI LOM**—The XTSI is in Listen Only Mode (LOM). The copy command will be denied when either XTSI controller is in the LOM state.
- ERASE FLASH ABORTED - ERASE ERROR**—The XTSI frame failed executing the copy command in the middle of the operation. Restore the destination file to its original state using the **COPY:TSIFILE** input command. If the frame did not F-level when trying the copy request, try again, and if this status is seen again, restore the destination file to its original state and contact support.
- ERASE FLASH ABORTED - FILE NOT ALLOCATED**—The XTSI destination file specified in the copy command has an allocation size of zero and cannot be copied to using this command.
- ERASE FLASH ABORTED - UNUSED ADDRESS**—The destination file is either corrupted or has an allocation size of zero and cannot be copied to using this command.
- ERASE FLASH ABORTED - FRAME ERROR - (error data)**—
The 1B processor has received an invalid error from the XTSI frame. Restore the destination file to its original state using the **COPY:TSIFILE** input command and contact support with the erroneous error data.
- ERASE FLASH ABORTED - MACRO ERROR - (error data)**—
The 1B processor returned an invalid error. Restore the destination file to its original state using the **COPY:TSIFILE** input command and contact support with the erroneous error data.

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ERASE FLASH ABORTED - MACRO REJECTED — The XTSI frame is not accepting the copy request. Restore the destination file to its original state using the COPY:XTSI input command. If the frame did not F-level when trying the copy request, try again, and if this status is seen again, restore the destination file to its original state and contact support.

ERASE FLASH ABORTED - MACRO TIMEOUT — The 1B processor is not waiting long enough for the copy request to be completed. Restore the destination file to its original state using the COPY:XTSI input commands. If the frame did not F-level when trying the copy request, try again, and if this status is seen again, restore the destination file to its original state and contact support.

ERASE FLASH ABORTED - RESPONSE NOT READY — The 1B processor did not receive a response from the XTSI frame. Restore the destination file to its original state using the COPY:XTSI input commands. If the frame did not F-level when trying the copy request, try again, and if this status is seen again, restore the destination file to its original state and contact support.

FILE(n) - COMPLETE — The XTSI "Copy All Files" request is in progress and copy of file number (n) has completed.

STARTED — The XTSI "Copy All Files" request has begun.

4. ACTION TO BE TAKEN

Correct the message.

5. REFERENCES

PIDENT
XTSIFILU

Input Messages
COPY:TSIFILE
DUMP:TSIFILE
LOAD:TSIFILE

SEE PROPRIETARY NOTICE ON COVER PAGE

ID COPY:UMEM
WORK CENTER.. MOC
GENERIC 4E22 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

- [1] COPY:UMEM a ;b, [XS]INDIR c,[ID d,] [X]ADR e, INC fg h [i]
- [2] COPY:UMEM a ;b, INDIR c, UMEM a, INC fg h [i]
- [3] COPY:UMEM a ;b, [XS]INDIR c, j, INC fg h [i]
- [4] COPY:UMEM a ;UMEM a h [i]
- [5] COPY:UMEM a ;FS, ID k , ADR e, INC fg h [i]

2. REASON FOR OUTPUT

To report the results of the request to copy data from an Utility Memory (UMEM) indicator to another data storage area.

Format [1] prints if the destination location is an address.

Format [2] prints if the destination location is in a utility memory indicator.

Format [3] prints if the destination location is in a Central Control (CC) register.

Format [4] prints if the destination location is a utility memory indicator.

Format [5] prints if the destination location is in File Store (FS).

3. VARIABLE FIELD DEFINITIONS

- a Utility memory indicator.
- b Type of address:
 - A1B Any 1B core memory.
 - CS Nonsecure call store.
 - CSS Call store secure.
 - PSS Program store secure.
 - XS Extended nonsecure call store.
- c Level of indirectness.
- d File system ID tag. (Must be in file segments 1 through 3 since this is used for extended memory access.)
- e Base address.
- f Sign of address increment.
- g Address increment.

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h	Disposition of the request: COMPLETED — Function successful. STOPPED — Function failed.
i	A fail code. This is an optional field that appears only if the disposition of the request is STOPPED. See Table 1 for fail code descriptions.
j	CC register indicator.
k	File system identification tag.

4. ACTION TO BE TAKEN

If the copy was not completed successfully, reenter the copy input request.

5. REFERENCES

PIDENTs
GULPIMDT
GULPUTPP
GULPUTXP
GULRUTCR

Table 1
FAIL CODE DESCRIPTIONS

Code	Meaning
51	Disk operation failure.
53	Maintenance Control Program (MACP) holding time exceeded.
54	Paging supervisor abort.
56	Interrupt while Generic Utility Program (GULP) in progress.
57	GULP terminated by request.
63	Write file header request rejected.
65	Write file header request failed.
66	Write request rejected.
67	Write request failed.
68	Write end of file request rejected.
69	Write end of file request failed.
70	Locate and read file header request rejected.

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Table 1
FAIL CODE DESCRIPTIONS (continued)

Code	Meaning
71	Locate and read file header request failed (hardware).
72	Forward space request failed.
73	Read request rejected.
74	Read request failed.
75	End of file detected.
76	Close input file request rejected.
77	Close input file request failed.
78	Forward space request rejected.
80	Disk read request rejected.
81	Disk read queue full.
82	Disk write request rejected.
83	Disk write queue full.
85	Illegal source / destination.
86	Data table mutilation.
87	Rewind request rejected.
88	Rewind request failed.
125	ID tag input and offset are invalid for the memory accessed. (As it pertains to the XSINDIR and ID tag options.)
127	Input address is invalid for address type specified, or address is not defined.
128	It is invalid to COPY/LOAD to BUFFER BUS, BOOTROM, or IFB memory.
129	Attempt to access an Extended Non-Secure Call Store (XS) address at G-LEVEL interrupt, but window was not enabled.
188	Address specified is not equipped.

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ID COPY:XS
WORK CENTER.. MOC
GENERIC 4E22 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

- [1] COPY:XS,XSINDIR a,[ID b,][X]ADR c,INC de;...
f,[XS]INDIR a,[ID b,][X]ADR c,INC de g [h]
- [2] COPY:XS,XSINDIR a,[ID b,][X]ADR c,INC de;...
f,INDIR a,UMEM i,INC de g [h]
- [3] COPY:XS,XSINDIR a,[ID b,][X]ADR c,INC de;...
f,[XS]INDIR a,j,INC de g [h]
- [4] COPY:XS,XSINDIR a,[ID b,][X]ADR c,INC de;UMEM i g [h]
- [5] COPY:XS,XSINDIR a,[ID b,][X]ADR c,INC de;...
FS,ID k,ADR c,INC de g [h]
- [6] COPY:XS,XSINDIR a,j,INC de;...
f,[XS]INDIR a,[ID b,][X]ADR c,INC de g [h]
- [7] COPY:XS,XSINDIR a,j,INC de;f,INDIR a,UMEM i,INC de g [h]
- [8] COPY:XS,XSINDIR a,j,INC de;f,[XS]INDIR a,j,INC de g [h]
- [9] COPY:XS,XSINDIR a,j,INC de;UMEM i g [h]

2. REASON FOR OUTPUT

To report the results of the request to copy data from one data storage area to another.

Formats [1-5] are printed if the origin location is an address and the destination location is an address, Format [1].

in a utility memory indicator, Format [2].

in a CC register, Format [3].

a utility memory indicator, Format [4].

in File Store (FS), Format [5].

Formats [6-9] are printed if the origin location is in a CC register and the destination location is:

an address, Format [6].

in a utility memory indicator, Format [7].

in a CC register, Format [8].

a utility memory indicator, Format [9].

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3. VARIABLE FIELD DEFINITIONS

XS	Extended nonsecure call store.
a	Level of indirectness.
b	File system ID tag. (Must be in file segments 1 through 3 since this is used for extended memory access.)
c	Base address.
d	Sign of address increment.
e	Address increment.
f	Type of address: A1B Any 1B core memory. CS Nonsecure call store. CSS Call store secure. PSS Program store secure. XS Extended nonsecure call store.
g	Disposition of the request: COMPLETED — Function successful. STOPPED — Function failed.
h	A fail code. This is an optional field that appears only if the disposition of the request is STOPPED. See Table 1 for fail code descriptions.
i	Utility memory indicator.
j	CC register indicator.
k	File system identification tag.

4. ACTION TO BE TAKEN

If the copy was not completed successfully, reenter the copy input request.

5. REFERENCES

PIDENTs
GULPIMDT
GULPUTPP
GULPUTXP
GULRUTCR

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Table 1
FAIL CODE DESCRIPTIONS

Code	Meaning
51	Disk operation failure.
53	Maintenance Control Program (MACP) holding time exceeded.
54	Paging supervisor abort.
56	Interrupt while Generic Utility Program (GULP) in progress.
57	GULP terminated by request.
63	Write file header request rejected.
65	Write file header request failed.
66	Write request rejected.
67	Write request failed.
68	Write end of file request rejected.
69	Write end of file request failed.
70	Locate and read file header request rejected.
71	Locate and read file header request failed (hardware).
72	Forward space request failed.
73	Read request rejected.
74	Read request failed.
75	End of file detected.
76	Close input file request rejected.
77	Close input file request failed.
78	Forward space request rejected.
80	Disk read request rejected.
81	Disk read queue full.
82	Disk write request rejected.
83	Disk write queue full.
85	Illegal source / destination.
86	Data table mutilation.
87	Rewind request rejected.
88	Rewind request failed.
125	ID tag input and offset are invalid for the memory accessed. (As it pertains to the XSINDIR and ID tag options.)
127	Input address is invalid for address type specified, or address is not defined.
128	It is invalid to COPY/LOAD to BUFFER BUS, BOOTROM, or IFB memory.
129	Attempt to access an Extended Non-Secure Call Store (XS) address at G-LEVEL interrupt, but window was not enabled.
188	Address specified is not equipped.

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ID COPY:XTSI
WORK CENTER.. MOC
GENERIC 4E24 Rel. 2 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

COPY:XTSI a, [CONTR b,] c, SVN d, DVN e[;UCL]
f

2. REASON FOR OUTPUT

Printed in response to a COPY:XTSI input request to copy a file from the Attached Processor System (APS) to the flash memory(s) of an Expanded Time Slot Interchange (XTSI) frame.

3. VARIABLE FIELD DEFINITIONS

- a XTSI member number.
- b XTSI controller number.
- c Two-keyword field specifies the type of the file copied from the 3B APS to flash memory of the XTSI. The list shows the legal two-keyword combinations:
- IBU, DGN — File containing diagnostic software for the In-Band Unit (IBU).
- IBU, OPR — File containing software for the IBU.
- IBU, TEST — File containing test circuit software for the IBU.
- IBU, XCVR — File containing service circuit software for the IBU.
- D3U, DGN — File containing diagnostic software for the Digital Signal Level 3 (DS3) Unit (D3U).
- D3U, OPR — File containing software for the D3U.
- SPU, DGN — File containing diagnostic software for the Signal Processing Unit (SPU).
- SPU, OPR — File containing software for the SPU.
- XTC, CSP — File containing Signal Processor (SP) software for the XTSI controller.
- XTC, DGN — File containing diagnostic software for the XTSI controller.
- XTC, FDT — File containing file description table.
- XTC, OPR — File containing software for the XTSI controller.
- d Source file version store in the APS disk.

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- e Destination file version stored in the flash memory of the XTSI.
- f Disposition of the request:
- ABORTED UNABLE TO SCHEDULE PMOS TASK — The file copy is controlled by the Peripheral Maintenance Operating System (PMOS). Two separate PMOS tasks are required. The program was unable to schedule one of the PMOS tasks.
- DENIED - INV TSI TYPE OR UNEQ — The input TSI is not an Expanded Time Slot Interchange (XTSI) type of frame or is not equipped.
- DENIED CONTR FILE IS ACTIVE — The destination file version is currently marked active in translations.
- FAILED CHECKSUM CHECK EXPECTED:w ACTUAL:v — Failed to copy due to the checksum failure that was found. The checksum shown on the file header is a value of w, and the checksum calculated by the XTSI frame firmware is a value of v.
- FAILED CHECKSUM CHECK ON CONTR EXPECTED:w ACTUAL:v — Failed to copy to the controller y due to the checksum failure that was found. The checksum shown on the file header is a value of w, and the checksum calculated by the XTSI frame firmware is a value of v.
- FAILED ERROR FOUND IN FILE — During the copying of the file, flash memory file corruption was detected by the XTSI frame firmware.
- FAILED ERROR FOUND IN FILE ON CONTR y — During the copying of the file to controller y, flash memory file corruption was detected by the XTSI frame firmware.
- FAILED TO COPY FILE TO FLASH MEM ON BOTH CONTR — Unable to copy the complete file to the flash memory of both controllers of the XTSI frame due to system error. Note that only the last error type was shown for failing to send file to both controllers.
- FAILED TO COPY FILE TO FLASH MEM ON BOTH CONTR (ERR CODE: x) — Unable to copy the complete file to flash memory on both controllers of the Expanded Time Slot Interchange (XTSI) frame due to error detected by the XTSI frame firmware. Note that only the last error type was shown for failing to send file to both controllers.
- FAILED TO COPY FILE TO FLASH MEM ON BOTH CONTR (FRAME REJECT) — Unable to copy the complete file to flash memory on both controllers of the XTSI frame due to frame rejection. Note that only the last error type was shown for failing to send file to both controllers.

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- FAILED TO COPY FILE TO FLASH MEM ON BOTH CONTR**
(TIMEROUT) — Unable to copy the complete file to flash memory on both controllers of the XTSI frame due to timeout while waiting for a response from the XTSI frame firmware. Note that only the last error type was shown for failing to send file to both controllers.
- FAILED TO COPY FILE TO FLASH MEM ON CONTR b** — Unable to copy the complete file to the requested flash memory on the controller Y of the XTSI frame due to system error. Note that if the attempt was to copy file to both controllers of the XTSI frame, the file copy task for the mate controller Y was also terminated with the incomplete 3B data file on the flash memory.
- FAILED TO COPY FILE TO FLASH MEM ON CONTR b**
(ERR CODE: x)— Unable to copy the complete file to the flash memory on the controller Y of the XTSI frame due to error detected by XTSI frame firmware. Note that if the attempt was to copy file to both controllers of the XTSI frame, the file copy task for the mate controller Y was also terminated with the incomplete 3B data file on the flash memory.
- FAILED TO COPY FILE TO FLASH MEM ON CONTR b**
(FRAME REJECT) — Unable to copy the complete file to the requested flash memory on the controller Y of the XTSI frame due to frame rejection. Note that if the attempt was to copy file to both controllers of the XTSI frame, the file copy task for the mate controller Y was also terminated with the incomplete 3B data file on the flash memory.
- FAILED TO COPY FILE TO FLASH MEM ON CONTR b**
(TIMEOUT) — Unable to copy the complete file to the requested flash memory on the controller Y of the XTSI frame due to timeout while waiting response from the XTSI frame firmware. Note that if the attempt was to copy file to both controllers of the XTSI frame, the file copy task for the mate controller Y was also terminated with the incomplete 3B data file on the flash memory.
- FAILED TO ERASE FLASH MEM FILE ON BOTH CONTR** — Unable to erase the flash memory files on both controllers of the XTSI frame due to system error. Note that only the last error type was shown for failing to send file to both controllers.
- FAILED TO ERASE FLASH MEM FILE ON BOTH CONTR**
(ERR CODE: x) — Unable to erase the flash memory files on both controllers of the XTSI frame due to error detected by the XTSI frame firmware. Note that only the last error type was shown for failing to send file to both controllers.

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FAILED TO ERASE FLASH MEM FILE ON BOTH CONTR
(FRAME REJECT) — Unable to erase the flash memory files on both controllers of the XTSI frame due to frame reject. Note that only the last error type was shown for failing to send file to both controllers.

FAILED TO ERASE FLASH MEM FILE ON BOTH CONTR
(TIMEOUT) — Unable to erase the flash memory files on both controllers of the XTSI frame due to timeout while waiting for a response from the XTSI frame firmware. Note that only the last error type was shown for failing to send file to both controllers.

FAILED TO ERASE FLASH MEM FILE ON CONTR b — Unable to erase the flash memory files on the controller Y of the XTSI frame due to system error. Note that if the attempt was to copy file to both controllers of the XTSI frame, the file copy task for the mate controller Y was also terminated with the incomplete 3B data file on the flash memory.

FAILED TO ERASE FLASH MEM FILE ON CONTR b
(ERR CODE: x) — Unable to erase the flash memory files on the controller Y of the XTSI frame due to error detected by XTSI frame firmware. Note that if the attempt was to copy file to both controllers of the XTSI frame, the file copy task for the mate controller Y was also terminated with the incomplete 3B data file on the flash memory.

FAILED TO ERASE FLASH MEM FILE ON CONTR b
(FRAME REJECT) — Unable to erase the flash memory files on the controller Y of the XTSI frame due to frame rejection. Note that if the attempt was to copy file to both controllers of the XTSI frame, the file copy task for the mate controller Y was also terminated with the incomplete 3B data file on the flash memory.

FAILED TO ERASE FLASH MEM FILE ON CONTR b
(TIMEOUT) — Unable to erase the flash memory files on the controller Y of the XTSI frame due to timeout while waiting for a response from the XTSI frame firmware. Note that if the attempt was to copy file to both controllers of the XTSI frame, the file copy task for the mate controller Y was also terminated with the incomplete 3B data file on the flash memory.

FAILED TO SEND FILE VER QUERY — Failed to send the file verification query macro to the XTSI frame.

FAILED TO SEND FILE VER QUERY (FRAME REJECT) — Failed to send the file verification query macro to the XTSI frame due to a frame rejection.

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FAILED TO SEND FILE VER QUERY (TIMEOUT) — Failed to send the file verification query macro to the XTSI frame due to a timeout while waiting a response from the XTSI frame firmware.

FAILED TO SEND FILE VER QUERY ON CONTR y — Failed to send the file verification query macro to the XTSI frame on the controller y.

FAILED TO SEND FILE VER QUERY ON CONTR y (FRAME REJECT) — Failed to send the file verification query macro to the XTSI frame on the controller y due to a frame rejection.

FAILED TO SEND FILE VER QUERY ON CONTR y (TIMEOUT) — Failed to send the file verification query macro to the XTSI frame on the controller y due to a timeout while waiting a response from the XTSI frame firmware.

FAILED UNABLE TO OPEN FILE ON APS — The APS File Manager was unable to open the file on the APS disk. The file type may not be a legal file type for the APS disk.

FAILED UNABLE TO READ FILE FROM APS — An excessive number of read failures occurred while reading the file from the APS disk.

FAILED WRONG FILE TYPE FOUND ON APS — The file type in the file header does not match the file type in the input message.

STOPPED DUPLEX CONTROLLERS — Option with a specific controller can not work with duplex environment.

STOPPED GROWTH TSI — The XTSI frame(s) in the growth or special growth state.

STOPPED NO ACTIVE CONTROLLER — Both controllers in the XTSI are currently marked OOS.

STOPPED UNEQ TSI — The specified XTSI frame is unequipped.

TASK COMPLETED — The file has been copied to all requested XTSI frames and the copy job has completed.

UNKNOWN SYSTEM ERROR — A internal system error occurred.

4. ACTION TO BE TAKEN

If the disposition of the remove request is:

ABORTED UNABLE TO SCHEDULE PMOS TASK — Re-enter the input message when there is less activity in the office.

DENIED - INV TSI TYPE OR UNEQ — Re-enter the input message with a new XTSI number.

DENIED CONTR FILE IS ACTIVE — Use other destination file version or use UCL option to re-enter the input message.

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FAILED CHECKSUM CHECK EXPECTED:w ACTUAL:v — Re-enter the input message or use the other frame. If the error persists, check the file header on the Attached Processor System (APS) or use the other source file version on the APS.

FAILED CHECKSUM CHECK ON CONTR EXPECTED:v — Re-enter the input message after the error is fixed or use the other frame. If the error persists, check the file header on the APS or use the other source file version on the APS.

FAILED ERROR FOUND IN FILE — Use the other frame or re-enter the input message for the file just being copied may correct the previous file corruption on the flash memory.

FAILED ERROR FOUND IN FILE ON CONTR y — Use the other frame or re-enter the input message for the file just being copied may correct the previous file corruption on the flash memory.

FAILED TO COPY FILE TO FLASH MEM ON BOTH CONTR — Re-enter the input message after error is fixed or use the other frame.

FAILED TO COPY FILE TO FLASH MEM ON BOTH CONTR
(ERR CODE: x) — Re-enter the input message after error is fixed or use the other frame.

FAILED TO COPY FILE TO FLASH MEM ON BOTH CONTR
(FRAME REJECT) — Re-enter the input message after error is fixed or use the other frame.

FAILED TO COPY FILE TO FLASH MEM ON BOTH CONTR
(TIMEOUT) — Re-enter the input message after error is fixed or use the other frame.

FAILED TO COPY FILE TO FLASH MEM ON CONTR b — Re-enter the input message after error is fixed or use the other frame.

FAILED TO COPY FILE TO FLASH MEM ON CONTR b
(ERR CODE: x) — Re-enter the input message after error is fixed or use the other frame.

FAILED TO COPY FILE TO FLASH MEM ON CONTR b
(FRAME REJECT) — Re-enter the input message after error is fixed or use the other frame.

FAILED TO COPY FILE TO FLASH MEM ON CONTR b
(TIMEOUT) — Re-enter the input message after error is fixed or use the other frame.

FAILED TO ERASE FLASH MEM FILE ON BOTH CONTR — Re-enter the input message after error is fixed or use the other frame.

FAILED TO ERASE FLASH MEM FILE ON BOTH CONTR
(ERR CODE: x) — Re-enter the input message after error is fixed or use the other frame.

SEE PROPRIETARY NOTICE ON COVER PAGE

FAILED TO ERASE FLASH MEM FILE ON BOTH CONTR
(FRAME REJECT) — Re-enter the input message after error is fixed or use the other frame.

FAILED TO ERASE FLASH MEM FILE ON BOTH CONTR
(TIMEOUT) — Re-enter the input message after error is fixed or use the other frame.

FAILED TO ERASE FLASH MEM FILE ON CONTR b — Re-enter the input message after error is fixed or use the other frame.

FAILED TO ERASE FLASH MEM FILE ON CONTR b
(ERR CODE: x) — Re-enter the input message after error is fixed or use the other frame.

FAILED TO ERASE FLASH MEM FILE ON CONTR b
(FRAME REJECT) — Re-enter the input message after error is fixed or use the other frame.

FAILED TO ERASE FLASH MEM FILE ON CONTR b
(TIMEOUT) — Re-enter the input message after error is fixed or use the other frame.

FAILED TO SEND FILE VER QUERY — Re-enter the input message after the error is fixed or use the other frame.

FAILED TO SEND FILE VER QUERY (FRAME REJECT) — Re-enter the input message after the error is fixed or use the other frame.

FAILED TO SEND FILE VER QUERY (TIMEOUT) — Re-enter the input message after the error is fixed or use the other frame.

FAILED TO SEND FILE VER QUERY ON CONTR y — Re-enter the input message after the error is fixed or use the other frame.

FAILED TO SEND FILE VER QUERY ON CONTR y (FRAME REJECT) —
Re-enter the input message after the error is fixed or use the other frame.

FAILED TO SEND FILE VER QUERY ON CONTR y (TIMEOUT) — Re-enter the input message after the error is fixed or use the other frame.

FAILED UNABLE TO OPEN FILE ON APS — Verify whether the file exists on the APS, if the file is not on the APS, install the necessary file(s) on the APS disk then re-enter the input message. The file type may not be a legal file type for the APS disk, check the input message for legal inputs.

FAILED UNABLE TO READ FILE FROM APS — Check the APS for excessive disk activity or recovery actions. If necessary replace the file on the APS disk.

FAILED WRONG FILE TYPE FOUND ON APS — Replace the file on the APS and then re-enter the input message.

SEE PROPRIETARY NOTICE ON COVER PAGE

STOPPED DUPLEX CONTROLLERS — Re-enter the input message without specifying controller number

STOPPED GROWTH TSI — Re-enter the input message and include the UCL option.

STOPPED NO ACTIVE CONTROLLER — Re-enter the input message and include the UCL option.

STOPPED UNEQ TSI — Correct the XTSI frame number and then re-enter the input message.

TASK COMPLETED — Information only and no action required.

UNKNOWN SYSTEM ERROR — Re-enter the input message.

5. REFERENCES

PIDENTs
XTSI3BCP

Input Message
COPY:XTSI

SEE PROPRIETARY NOTICE ON COVER PAGE

1. FORMAT

2. REASON FOR OUTPUT

3. VARIABLE FIELD DEFINITIONS

STF-BOF — The number of failed tests has filled the buffer. Before any more tests are run, the system prints out the contents of the buffer and then clears it.

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- d An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (40000000 00000400), then tests were skipped for reasons 9 and 47.

The reasons are as follows:

Bit	Meaning
5	Kill request to 3B not accepted.
8	Diagnostic request to 3B not accepted.
9	3B attached processor diagnostic message interface (APDMI) process not started.
10	Diagnostic request message sent to the 3B timed out.
11	Diagnostics inhibited at the 3B.
12	Master control complex (MCC) / peripheral processor interface (PPI) configured out of service (OOS).
33	Generate control pulse (GCP) reply is all zeros.
43	Power monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).
46	Frame request for PWRMON active.
47	Unit not in normal state.

If STF, this field gives the number of test failures in addition to the reasons that the tests were skipped. For example, if d is (7,40000000 00000400), seven tests failed, plus tests were skipped for reasons 8 and 47.

If STF-BOF, the number of test failures is the number of the tests failures up to the point of buffer overflow.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service if possible so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

If a diagnostic is requested from the main frame, no power monitor tests are performed. At the completion of the diagnostic, the system will report the results via a DGN:API output message for the appropriate unit. In addition to reporting any other STF conditions, the DGN:API output message will contain a bit position 46 in the CATP field. This bit indicates that the power monitor tests were skipped, although text description of this bit does not identify it as such. When such a diagnostic is performed, the user should first clear any other problems indicated by CATP bits. The DGN:API input message must then be used to diagnose the power monitor unit.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs

APFRBASE

DCONMAIN

DCONTABL

APDG--; where -- represents all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=APDG, UTY=1XLUAPI

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, *4ESSTM User's Manual*

Input Messages

DGN:API

STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:API-ILL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1A-APS
TYPE Output

1. FORMAT

DGN:API a ILLEGAL PHASE

2. REASON FOR OUTPUT

To identify that one or more illegal diagnostic phases have been requested on a partial diagnostic request for an attached processor interface (API). The illegal phase will not be executed; however, all valid phases will be run.

3. VARIABLE FIELD DEFINITIONS

a The member number of the API being diagnosed (0-15).

4. ACTION TO BE TAKEN

Check PIDENT DCONTABL for PREFIX=APDG, UTY=1XLUAPI to obtain the list of valid phase numbers.

5. REFERENCES

PIDENTs
APFRBASE
DCONMAIN
DCONTABL
APDG--; where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=APDG, UTY=1XLUAPI

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Message
DGN:API

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:API-NOT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1A-APS
TYPE Output

1. FORMAT

DGN:API a NOT STARTED - b

2. REASON FOR OUTPUT

To report that the diagnostic request cannot be started. This usually occurs when the attached processor interface (API) for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the API being diagnosed (0-15).
- b The reason the diagnostics were not started.

4. ACTION TO BE TAKEN

If the specified API cannot be removed from service because there is no spare, restore a spare unit to service.

5. REFERENCES

PIDENTs
APFRBASE
DCONTABL
DCONMAIN

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages
DGN:API
RST:API

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:API-TERM
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1A-APS
TYPE Output

1. FORMAT

DGN:API a TERMINATED AT PH b ADR c AFTER TEST d [e]

2. REASON FOR OUTPUT

To report whenever a diagnostic terminates early for an attached processor interface (API). This early termination of execution will only occur if some tests have failed, and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the API being diagnosed (0-15).
- b The diagnostic phase (0-9) in which the termination occurred.
- c The address in the diagnostic phase at which the termination occurred.
- d The last test executed before the termination occurred.
- e (FORCED). This optional field will be printed only if the termination occurred and unconditional (UCL) was specified on the DGN:API input message. Termination in this way is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

Repair the faulty frame. If further diagnostic execution is desired, then specify UCL on the DGN:API input message. This will inhibit all early terminations except those that are forced. If a diagnostic is requested from the main frame, no power monitor tests are performed. At the completion of the diagnostic, the system will report the results via a DGN:API output message for the appropriate unit. In addition to reporting any other STF conditions, the DGN:API output message will contain a bit position 46 in the CATP field. See Table 1 of the DGN:API output message for a complete list of CATP bits and their descriptions. This bit indicates that the power monitor tests were skipped, although the current text description of this bit does not identify it as such.

When such a diagnostic is performed, the user should first clear any other problems indicated by CATP bits. The DGN:API input message must then be used to diagnose the power monitor unit.

5. REFERENCES

PIDENTs

APDG--, where -- represents all valid phases numbers

listed in PIDENT DCONTABL for PREFIX=APDG, UTY=1XLUAPI

SEE PROPRIETARY NOTICE ON COVER PAGE

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, *4ESSTM User's Manual*

Input Message
DGN:API

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:API-TEST
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1A-APS
TYPE Output

1. FORMAT

```
DGN:API a PH b c [d]
      [TEST      MISMATCH      SUPPLEMENTARY DATA
        ee        ffffffff      ggggggggg]
```

2. REASON FOR OUTPUT

To report whenever the diagnostic results are printed on a phase basis, which occurs in the case of a partial diagnosis, a test failure, or whenever RAW was requested on the input message.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the attached processor interface (API) being diagnosed (0-15).
- b The diagnostic phase number for which the results are reported.
- c The results of the diagnostic:
- ATP — All tests passed.
 - CATP — All tests passed; however, some tests were skipped because of the unavailability of a system resource that was needed to perform the tests.
 - NTR — No tests were executed.
 - STF — Some tests failed.
 - STF-BOF — Some tests failed and the test failure buffer overflowed.
- d An optional field that will appear only if the results are not ATP.
- If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (40000000 00001000), tests were skipped for reasons 9 and 47.

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The reasons are as follows:

Bit	Meaning
5	Kill request to 3B not accepted.
8	Diagnostic request to 3B not accepted.
9	3B attached processor diagnostic message interface (APDMI) process not started.
10	Diagnostic request message sent to the 3B timed out.
11	Diagnostics inhibited at the 3B.
12	Master control complex (MCC) / peripheral processor interface (PPI) configured out of service (OOS).
33	Generate control pulse (GCP) reply is all zeros.
43	Power monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).
46	Frame request for PWRMON active.
47	Unit not in normal state.

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, if d is (7,40000000 00001000), seven tests failed, plus tests were skipped for reasons 9 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

The following appear only if the diagnostic was STF:

e	Test number of the failing test.
f	The bits that were in error; that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.
g	Supplementary data concerning the failing test.

4. ACTION TO BE TAKEN

If the results are conditional all-tests-passed (CATP), restore the indicated system resource to service so that all tests may be executed. If some tests failed (STF), repair the unit as quickly as possible. Otherwise, no action is needed.

5. REFERENCES

PIDENTs

APDG--, where-- represents all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=APG, UTY=1XLUAPI

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

PA-4A002-01, *4ESSTM User's Manual*

Input Message
DGN:API

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:AUB
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:AUB a b c [d]

2. REASON FOR OUTPUT

To report both the diagnostic results and the termination mode at the conclusion of the diagnostic execution on an auxiliary unit bus (AUB).

3. VARIABLE FIELD DEFINITIONS

- a The member number (0 or 1).
- b The termination mode for the diagnostic:
- ABORTED — The diagnostic was abnormally stopped because of an interrupt, error in execution, or because of a STOP:MACLI input request.
 - COMPLETED — The diagnostic completed normally.
 - STOPPED — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution.
- c The results of the diagnostic:
- ATP — All tests passed.
 - CATP — All tests passed; however, some tests were skipped because of the unavailability of a system resource which was needed to perform the test.
 - NTR — No tests were executed.
 - STF — Some tests failed (STF).
 - STF-B0F — The number of failed tests has filled the buffer. Before any more tests are run, the system prints out the contents of the buffer and then clears it.

SEE PROPRIETARY NOTICE ON COVER PAGE

d An optional field appearing only if the results are not ATP.

CATP/NTR — Field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (00000000 40020000), then tests were skipped for reasons 13 and 23. The reason the tests were skipped.

Bit	Meaning
13	Auxiliary unit (AU) helper out of service.
20	Unit powered down or fuse alarmed.
21	Master control complex (MCC) override in effect (ON).
22	Auxiliary unit (AU) unit "KCODE trouble" bit set.
23	AU unit "Do not restore" bit set (unit removed via RMV: input message).

STF — The number of failing phases, failing tests, and trouble number. For example: (3,4,00101141) indicates 3 phases failed, 4 tests failed, with trouble number 00101141.

STF-BOF — The number of test failures up to the point of buffer overflow (BOF).

4. ACTION TO BE TAKEN

If the results are CATP, the indicated system resource should be restored to service if possible, so that all tests may be executed. If STF, the unit should be repaired as quickly as possible. Otherwise, no action is needed.

5. REFERENCES

PIDENTs

AUFRDFOR

DCONMAIN

MIRA

ABDG--, where -- all valid phase numbers

listed in PIDENT DCONTABLE for PREFIX=ABDG, UTYPE=1XLUAUB

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

Input Messages

RMV:AUB

STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:AUB-ILL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:AUB a ILLEGAL PHASE

2. REASON FOR OUTPUT

To identify that only illegal diagnostic phases have been requested on a partial diagnostic request for a auxiliary unit bus (AUB).

3. VARIABLE FIELD DEFINITIONS

a The member number of the AUB being diagnosed (0 or 1).

4. ACTION TO BE TAKEN

Check PIDENT DCONTABL for PREFIX=ABDG, UTYPE=1XLUAUB to obtain the list of valid phase numbers.

5. REFERENCES

PIDENTs
DCONTABL
ABDG--, where -- all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=ABDG, UTYPE=1XLUAUB

Input Message
DGN:AUB

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:AUB-NOT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:AUB a NOT STARTED - b

2. REASON FOR OUTPUT

To report that the diagnostic request cannot be started. This usually occurs when the auxiliary unit bus (AUB) for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the AUB being diagnosed (0 or 1).
- b The reason the diagnostic was not started.

4. ACTION TO BE TAKEN

If the specified AUB cannot be removed from service because there is no spare, restore a spare unit to service.

5. REFERENCES

PIDENT
AUFRDFOR

Input Messages
DGN:AUB
RST:AUB

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:AUB-TERM
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:AUB a TERMINATED AT PH b ADR c AFTER TEST d [e]

2. REASON FOR OUTPUT

To report whenever the diagnostic terminates early for an auxiliary unit bus (AUB). This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the AUB being diagnosed (0 or 1).
- b The diagnostic phase in which the termination occurred.
- c The address in the diagnostic phase at which the termination occurred.
- d The last test executed before the termination occurred.
- e (FORCED). This optional field will be printed only if the termination occurred and UCL (unconditional) was specified on the DGN:AUB input message. Termination in this way is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

Repair the faulty frame. If further diagnostic execution is desired, specify UCL on the DGN:AUB input message. This will inhibit all early terminations except those that are forced.

5. REFERENCES

PIDENTs

ABDG--, where -- represents all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=ABDG,UTYPE=1XUAUB

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Message

DGN:AUB

SEE PROPRIETARY NOTICE ON COVER PAGE

Output Message
DGN : AUB

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:AUB-TEST
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

```
DGN:AUB a PH b c [d]
[TEST   MISMATCH SUPPLEMENTARY DATA
 ee     ffffffff 99999999]
```

2. REASON FOR OUTPUT

To report whenever the diagnostic results are printed on a phase basis, which occurs in the case of a partial diagnosis, a test failure, or whenever RAW was requested on the input message.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the auxiliary unit bus (AUB) being diagnosed (0 or 1).
- b The diagnostic phase number for which the results are reported.
- c The results of the diagnostic:
- | | |
|---------|---|
| ATP | — All tests passed. |
| CATP | — All tests passed; however, some tests were skipped because of the unavailability of a system resource which was needed to perform the test. |
| NTR | — No tests were executed. |
| STF | — Some tests failed. |
| STF-BOF | — Some tests failed and the test failure buffer overflowed. |
- d An optional field that will appear only if the results are not ATP.

CATP/NTR — Field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (00000000 40020000), then tests were skipped for reasons 13 and 23.

SEE PROPRIETARY NOTICE ON COVER PAGE

The reasons are as follows:

Bit	Meaning
13	Auxiliary unit (AU) helper out of service.
20	Unit powered down or fuse alarmed.
21	Master control complex (MCC) override in effect (ON).
22	Auxiliary unit (AU) unit "KCODE trouble" bit set.
23	AU unit "Do not restore" bit set (unit removed via RMV: input message).

STF — The number of failing phases, failing tests, and trouble number. For example: (3,4,00101141) indicates 3 phases failed, 4 tests failed, with trouble number 00101141.

STF-BOF — The number of test failures up to the point of buffer overflow (BOF).

The following appear only if the diagnostic was STF:

- e Test number of the failing test.
- f The bits that were in error; that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.
- g Supplementary data concerning the failing test.

4. ACTION TO BE TAKEN

If the results are CATP, the indicated system resource should be restored to service so that all tests may be executed. If STF, the unit should be repaired as quickly as possible. Otherwise, no action is needed.

5. REFERENCES

PIDENTs

ABDG--, where -- represent all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=ABDG,UTYPE=1XLUAUB

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages

DGN:AUB

RMV:AUB

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:AUI
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:AUI a b c [d]

2. REASON FOR OUTPUT

To specify both the diagnostic results and the termination mode. This output message is printed at the conclusion of the diagnostic execution for an auxiliary unit interface (AUI).

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit under diagnosis (0 or 1).
- b The termination mode for the diagnostic:
- ABORTED — The diagnostic was abnormally stopped due to an interrupt, error in execution, or due to a STOP:MACLI input request.
- COMPLETED — The diagnostic completed normally.
- STOPPED — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution.
- c The results of the diagnostic:
- ATP — All tests passed.
- CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.
- NTR — No tests were executed.
- STF — Some tests failed.
- d An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (40000000 00010000), then tests were skipped for reasons 12 and 47.

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The reasons are as follows:

Bit	Meaning
12	Scan and signal distributor (SSD) out-of-service (OOS).
43	Power monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).
46	Frame request for PWRMON active.
47	Unit not in normal state.

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, if d is (7,40000000 00010000), seven tests failed, plus tests were skipped for reasons 12 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service if possible, so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs

AIDG --, where --= all valid phase members
listed in PIDENT DCONTABL for PREFIX=AIDG, UTYPE=1XLUAUI

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages

DGN:AUI

STOP:MACLI

Output Message

DGN:AUI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:AUI-ILL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:AUI a ILLEGAL PHASE

2. REASON FOR OUTPUT

To print whenever only illegal diagnostic phases have been requested on a partial diagnostic requested for an auxiliary unit interface (AUI).

3. VARIABLE FIELD DEFINITIONS

a The member number of the unit being diagnosed (0 or 1).

4. ACTION TO BE TAKEN

Check PIDENT DCONTABL for PREFIX=AIDG, UTYPE=1XLUAUI to obtain the list of valid phase numbers.

5. REFERENCES

PIDENTs

DCONTABL

AIDG --, where --= all valid phase members

listed in PIDENT DCONTABL for PREFIX=AIDG, UTYPE=1XLUAUI

Input Message

DGN:AUI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:AUI-NOT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:AUI a NOT STARTED - b

2. REASON FOR OUTPUT

To print whenever the diagnostic request cannot be started for an auxiliary unit interface (AUI). This is usually whenever the unit for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The reason the diagnostic was not started.

4. ACTION TO BE TAKEN

If the specified unit cannot be removed from service because there is no spare, restore a spare unit to service. If b equals FROZEN, bus status indicates a store is frozen. That store must be conditionally restored to service.

5. REFERENCES

PIDENTs
AUFRTAUI
AIDG --, where --= all valid phase members
listed in PIDENT DCONTABL for PREFIX=AIDG, UTYPE=1XLUAUI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:AUI-TERM
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:AUI a TERMINATED AT PH b ADR c AFTER TEST d [e]

2. REASON FOR OUTPUT

To print whenever the diagnostic terminates early for an auxiliary unit interface (AUI). This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The diagnostic phase in which the termination occurred.
- c The address in the diagnostic phase at which the termination occurred.
- d The last test executed before the termination occurred.
- e (FORCED). This optional field will be printed only if the termination occurred and UCL (unconditional) was specified on the DGN input message. The use of terminating in this way is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service if possible, so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs

AIDG --, where --= all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=AIDG, UTYPE=1XLUAUI

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Message
DGN:AUI

Output Message
DGN:AUI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:AUI-TEST
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:AUI a PH b c [d]
[TEST MISMATCH SUPPLEMENTARY DATA
ee ffffffff gggggggg]

2. REASON FOR OUTPUT

To print whenever the diagnostic results are printed on a phase basis for a auxiliary unit interface (AUI). This occurs in the case of a partial diagnosis, a test failure, or whenever RAW was requested on the input message.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The diagnostic phase number for which the results are reported.
- c The results of the diagnostic:
 - ATP — All tests passed.
 - CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.
 - NTR — No tests were executed.
 - STF — Some tests failed.
 - STF-BOF — Some tests failed and the test failure buffer overflowed.
- d An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (40000000 00010000), then tests were skipped for reasons 12 and 47.

The reasons are as follows:

Bit	Meaning
12	Scan and signal distributor (SSD) out-of-service (OOS).
43	Power monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).

SEE PROPRIETARY NOTICE ON COVER PAGE

Bit	Meaning
46	Frame request for PWRMON active.
47	Unit not in normal state.

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, if d is (7,40000000 00010000), seven tests failed, plus tests were skipped for reasons 12 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

The following appear only if the diagnostic was STF.

- e Test number of the failing test.
- f The bits that were in error; that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.
- g Supplementary data concerning the failing test.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service if possible, so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs

AIDG --, where --= all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=AIDG, UTYPE=1XLUAUI

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages

DGN:AUI

STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

4ESS
OM-4B000-01

DGN:AUI

Output Message
DGN:AUI

SEE PROPRIETARY NOTICE ON COVER PAGE

DGN:AUI-TEST-3

Issue 1.8
September 2001

ID DGN:CC
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:CC a b c [d]

2. REASON FOR OUTPUT

To specify both the diagnostic results and the termination mode. This output message is printed at the conclusion of the diagnostic execution for a central control (CC).

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit under diagnosis (0 or 1).
- b The termination mode for the diagnostic:
- ABORTED — The diagnostic was abnormally stopped due to an interrupt, error in execution, or due to a STOP:MACLI input request.
- COMPLETED — The diagnostic completed normally.
- STOPPED — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution.
- c The results of the diagnostic:
- ATP — All tests passed.
- CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.
- NTR — No tests were executed.
- STF — Some tests failed.
- d An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (40000000 00010000), then tests were skipped for reasons 12 and 47.

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The reasons are as follows:

Bit	Meaning
0	Call store bus (CSB) 0 out of service.
1	CSB 1 out of service.
2	Duplex master control complex (MCC) and utility processor (MUP) failure.
3	Program store bus (PSB) 0 out of service.
4	PSB 1 out of service.
6	Auxiliary unit interface (AUI) 0 helper out of service.
7	Auxiliary unit bus (AUB) 1 helper out of service.
8	Direct memory access (DMA) failure on active MUP.
12	Scan and signal distributor (SSD) out of service (OOS).
13	SSD 0 helper out of service.
14	SSD 1 helper out of service.
16	Interface bus (IFB) 0 helper out of service.
17	IFB 1 helper out of service.
18	MUP 0 helper out of service.
19	MUP 1 helper out of service.
20	CC forces in effect.
22	MUP forces in effect.
24	MUP executed code reports CATP.
25	Reserved for utility system diagnose (DGN).
26	Call store helper unit not available.
27	Program store helper unit not available.
43	Power monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).
46	Frame request for PWRMON active (try again).
47	Unit not in normal state.

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, if d is (7,40000000 00010000), seven tests failed, plus tests were skipped for reasons 12 and 47. If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service if possible, so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

SEE PROPRIETARY NOTICE ON COVER PAGE

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs

CCDG --, where --= all valid phase members

listed in PIDENT DCONTABL for PREFIX=CCDG, UTYPE=1XLUCC

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, *4ESSTM User's Manual*

Input Messages

DGN:CC

STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:CC-ILL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:CC a ILLEGAL PHASE

2. REASON FOR OUTPUT

To print whenever only illegal diagnostic phases have been requested on a partial diagnostic has been requested.

3. VARIABLE FIELD DEFINITIONS

a The member number of the unit being diagnosed (0 or 1).

4. ACTION TO BE TAKEN

Check PIDENT DCONTABL for PREFIX=CCDG, UTYPE=1XLUCC to obtain the list of valid phase numbers.

5. REFERENCES

PIDENTs
DCONTABL
CCDG--, where -- = all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=CCDG, UTYPE=1XLUCC

Input Message
DGN:CC

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:CC-NOT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:CC a NOT STARTED - b

2. REASON FOR OUTPUT

To print whenever the diagnostic request cannot be started. This is usually whenever the unit for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The reason the diagnostic was not started.

4. ACTION TO BE TAKEN

If the specified unit cannot be removed from service because there is no spare, restore a spare unit to service. If b equals FROZEN, bus status indicates a store is frozen. That store must be conditionally restored to service.

5. REFERENCES

PIDENT
CCFRTEST

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:CC-TERM
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:CC a TERMINATED AT PH b ADR c AFTER TEST d [e]

2. REASON FOR OUTPUT

To print whenever the diagnostic terminates early. This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The diagnostic phase in which the termination occurred.
- c The address in the diagnostic phase at which the termination occurred.
- d The last test executed before the termination occurred.
- e (FORCED). This optional field will be printed only if the termination occurred and UCL (unconditional) was specified on the DGN input message. The use of terminating in this way is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service if possible, so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs

CCDG --, where --= all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=CCDG, UTYPE=1XLUCC

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Message
DGN:CC

Output Message
DGN:CC

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:CC-TEST
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

```
DGN:CC a PH b c [d]
      [TEST   MISMATCH SUPPLEMENTARY DATA
        ee     ffffffff gggggggg]
```

2. REASON FOR OUTPUT

To print whenever the diagnostic results are printed on a phase basis for a central control (CC). This occurs in the case of a partial diagnosis, a test failure, or whenever RAW was requested on the input message.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The diagnostic phase number for which the results are reported.
- c The results of the diagnostic:
 - ATP — All tests passed.
 - CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.
 - NTR — No tests were executed.
 - STF — Some tests failed.
 - STF-BOF — Some tests failed and the test failure buffer overflowed.
- d An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (40000000 00010000), then tests were skipped for reasons 12 and 47.

The reasons are as follows:

Bit	Meaning
0	Call store bus (CSB) 0 out of service.
1	CSB 1 out of service.
2	Duplex master control complex (MCC) and utility processor (MUP) failure.

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Bit	Meaning
3	Program store bus (PSB) 0 out of service.
4	PSB 1 out of service.
6	Auxiliary unit interface (AUI) 0 helper out of service.
7	Auxiliary unit bus (AUB) 1 helper out of service.
8	Direct memory access (DMA) failure on active MUP.
11	CC under test is powered down.
12	Scan and signal distributor (SSD) out of service (OOS).
13	SSD 0 helper out of service.
14	SSD 1 helper out of service.
16	Interface bus (IFB) 0 helper out of service.
17	IFB 1 helper out of service.
18	MUP 0 helper out of service.
19	MUP 1 helper out of service.
20	CC forces in effect.
22	MUP forces in effect.
24	MUP executed code reports CATP.
25	Reserved for utility system diagnose (DGN).
26	Call store helper unit not available.
27	Program store helper unit not available.
43	Power monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).
46	Frame request for PWRMON active (try again).
47	Unit not in normal state.

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, if d is (7,40000000 00010000), seven tests failed, plus tests were skipped for reasons 12 and 47. If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

The following appear only if the diagnostic was STF.

- e Test number of the failing test.
- f The bits that were in error; that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.
- g Supplementary data concerning the failing test.

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service if possible, so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs

CCDG --, where --= all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=CCDG, UTYPE=1XLUCC

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, *4ESSTM User's Manual*

Input Messages

DGN:CC

STOP:MACLI

Output Message

DGN:CC

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:CS
WORK CENTER.. MOC
GENERIC 4E20 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

[1] DGN:CS a b c [d]

[2] DGN:CS a b

2. REASON FOR OUTPUT

There are two possible formats for this message:

Format [1] specifies both the diagnostic results and the termination mode at the conclusion of the diagnostic execution on a call store (CS).

Format [2] reports acceptance or denial of a master control complex (MCC) request to execute diagnostics on a CS. A message reporting the results of the diagnostic will print later.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the call store under diagnosis (0-39).
- b The termination mode for the diagnostic or the MCC request disposition:
- ABORTED — The diagnostic was abnormally stopped because of an interrupt, error in execution, or because of a STOP:MACLI input request.
- COMPLETED — The diagnostic completed normally.
- REQUEST ACCEPTED — The MCC request has been accepted and the maintenance job has been scheduled.
- REQUEST DENIED - DISK ACCESS DUPLEX FAILED — The MCC request has been denied because diagnostic paging was not available.
- REQUEST DENIED - FAC BUSY RETRY LATER — The MCC request has been denied because the job queue was full.
- REQUEST DENIED - INVALID MEMBER NUMBER — The MCC request has been denied because the member number (MEMN) was invalid.
- REQUEST DENIED - UNEQ UNIT — The MCC request has been denied because the member number was unequipped.
- STOPPED — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution.

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c The results of the diagnostic (This field will appear at the conclusion of diagnostic execution.):

ATP	— All tests passed.
CATP	— All tests passed; however, some tests were skipped because of the unavailability of a system resource which was needed to perform the test.
NTR	— No tests were executed.
STF	— Some tests failed.
STF-BOF	— The number of failed tests has filled the buffer. Before any more tests are run, the system prints out the contents of the buffer and then clears it.

d An optional field that will appear only if the results are not ATP.

If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit positions in the 16-digit octal number that is printed. For example, if d is (40000000 00010000), then tests were skipped for reasons 12 and 47.

The reasons are as follows:

Bit	Meaning
0	Call store bus (CSB) 0 out of service (OOS).
1	CSB 1 OOS.
12	Scan and signal distributor (SSD) OOS.
15	Standby central control (CC) out of service.
21	Master control complex (MCC) override in effect (ON).
43	Power monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).
46	Frame request for PWRMON active (try again).
47	Unit not in normal state.

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, if d is (7,40000000 00010000), seven tests failed, plus tests were skipped for reasons 12 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service, if possible, so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

If a diagnostic is requested from the main frame, no power monitor tests are performed.

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At the completion of the diagnostic, the system will report the results via a DGN:CS output message for the appropriate unit. In addition to reporting any other STF conditions, the DGN:CS output message will contain a bit position 46 in the CATP field. This bit indicates that the power monitor tests were skipped, although the current text description of this bit does not identify it as such.

When such a diagnostic is performed, the user should first clear any other problems indicated by CATP bits. The DGN:CS input message must then be used to execute the power monitor tests.

If the output is the result of an MCC request for diagnostic execution:

REQUEST ACCEPTED — Wait for final disposition message.

REQUEST DENIED - DISK ACCESS DUPLEX FAILED — Resolve the problem with diagnostic paging and try again.

REQUEST DENIED - FAC BUSY RETRY LATER — Try again later.

REQUEST DENIED - INVALID MEMBER NUMBER — Verify the member number (MEMN) and try again.

REQUEST DENIED - UNEQ UNIT — Verify the member number (MEMN) and try again.

5. REFERENCES

PIDENTs

MIRA

MUDG--, where -- = all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=MUDG, UTYPE=1XLUCS - core store

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages

DGN:CS

STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:CS-ILL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:CS a ILLEGAL PHASE

2. REASON FOR OUTPUT

To identify that only illegal diagnostic phases have been requested on a partial diagnostic request.

3. VARIABLE FIELD DEFINITIONS

a The member number of the call store (CS) being diagnosed (0-39).

4. ACTION TO BE TAKEN

Check PIDENT DCONTABL for PREFIX=MUDG, UTYPE=1XLUCS to obtain the list of valid phase numbers if core store.

5. REFERENCES

PIDENTs
DCONTABL
MUDG--, where -- = all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=MUDG, UTYPE=1XLUCS - core store

Input Message
DGN:CS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:CS-NOT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:CS a NOT STARTED - b

2. REASON FOR OUTPUT

To report that the diagnostic request cannot be started. This usually occurs when the call store (CS) for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the CS being diagnosed (0-39).
- b The reason the diagnostic was not started.

4. ACTION TO BE TAKEN

If the specified call store cannot be removed from service because there is no spare, restore a spare unit to service. If b equals FROZEN, the frozen store must be conditionally restored before any other diagnostic requests are made.

5. REFERENCES

PIDENT
CSFRNORM

Input Messages
DGN:CS
RST:CS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:CS-TERM
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:CS a TERMINATED AT PH b ADR c AFTER TEST d [e]

2. REASON FOR OUTPUT

To report whenever the diagnostic terminates early for a call store (CS). This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the call store being diagnosed (0-39).
- b The diagnostic phase in which the termination occurred.
- c The address in the diagnostic phase at which the termination occurred.
- d The last test executed before the termination occurred.
- e (FORCED). This optional field will be printed only if the termination occurred and UCL (unconditional) was specified on the DGN input message. Termination in this way is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

Repair faulty frame.

If a diagnostic is requested from the main frame, no power monitor tests are performed. At the completion of the diagnostic, the system will report the results via a DGN:CS output message for the appropriate unit. In addition to reporting any other STF conditions, the DGN:CS output message will contain a bit position 46 in the CATP field. This bit indicates that the power monitor tests were skipped, although the current text description of this bit does not identify it as such.

When such a diagnostic is performed, the user should first clear any other problems indicated by CATP bits. The DGN:CS input message must then be used to execute the power monitor tests.

5. REFERENCES

PIDENTs

MUDG--, where -- represents all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=MUDG,UTYPE=1XLUCS - core store

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Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, *4ESSTM User's Manual*

Input Message
DGN:CS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:CS-TEST
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

```
DGN:CS a PH b c [d]
[TEST   MISMATCH  SUPPLEMENTARY DATA
 ee     ffffffff  ggggggggg]
```

2. REASON FOR OUTPUT

To report whenever the diagnostic results are printed on a phase basis on a call store (CS), which occurs in the case of a partial diagnosis, a test failure, or whenever RAW was requested on the input message.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the call store being diagnosed (0-39).
- b The diagnostic phase number for which the results are reported.
- c The results of the diagnostic:
- | | |
|---------|--|
| ATP | — All tests passed. |
| CATP | — All tests passed; however some tests were skipped because of the unavailability of a system resource which was needed to perform the test. |
| NTR | — No tests were executed. |
| STF | — Some tests failed. |
| STF-BOF | — Some tests failed and the test failure buffer overflowed. |
- d An optional field that will appear only if the results are not ATP.
- If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit positions in the 16-digit octal number that is printed. For example, if d is (40000000 00010000), then tests were skipped for reasons 12 and 47.

SEE PROPRIETARY NOTICE ON COVER PAGE

The reasons are as follows:

Bit	Meaning
0	Call store bus (CSB) 0 out of service (OOS).
1	CSB 1 OOS.
12	Scan and signal distributor (SSD) OOS.
15	Standby central control (CC) out of service.
21	Master control complex (MCC) override in effect (ON).
43	Power monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).
46	Frame request for PWRMON active (try again).
47	Unit not in normal state.

If STF, this field gives the number of tests failures in addition to the reasons that tests were skipped. For example, if d is (7,40000000 00010000), seven tests failed, plus tests were skipped for reasons 12 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

The following appear only if the diagnostic was STF:

- e Test number of the failing test.
- f The bits that were in error; that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.
- g Supplementary data concerning the failing test.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service if possible, that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs

MUDG--, where -- represents all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=MUDG,UTYPE=1XLUCS - core store

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Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, *4ESSTM User's Manual*

Input Message
DGN:CS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:CSB
WORK CENTER.. MOC
GENERIC 4E20 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

[1] DGN:CSB a b c [d]

[2] DGN:CSB a b

2. REASON FOR OUTPUT

There are two possible formats for this message:

Format [1] specifies both the diagnostic results and the termination mode at the conclusion of the diagnostic execution on a call store bus (CSB).

Format [2] reports acceptance or denial of a master control complex (MCC) request to execute diagnostics on a CSB. A message reporting the results of the diagnostic will print later.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the CSB under diagnosis (0 or 1).
- b The termination mode for the diagnostic or the MCC request disposition:
- ABORTED — The diagnostic was abnormally stopped because of an interrupt, error in execution, or because of a STOP:MACLI input request.
- COMPLETED— The diagnostic completed normally.
- REQUEST ACCEPTED — The MCC request has been accepted and the maintenance job has been scheduled.
- REQUEST DENIED - DISK ACCESS DUPLEX FAILED — The MCC request has been denied because diagnostic paging was not available.
- REQUEST DENIED - FAC BUSY RETRY LATER — The MCC request has been denied because the job queue was full.
- REQUEST DENIED - INVALID MEMBER NUMBER — The MCC request has been denied because the member number (MEMN) was invalid.
- REQUEST DENIED - UNEQ UNIT — The MCC request has been denied because the member number was unequipped.
- STOPPED — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution.

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c The results of the diagnostic (This field will appear at the conclusion of diagnostic execution.):

- ATP — All tests passed.
- CATP — All tests passed; however, some tests were skipped because of the unavailability of a system resource which was needed to perform the test.
- NTR — No tests were executed.
- STF — Some tests failed.
- STF-BOF — The number of failed tests has filled the buffer. Before any more tests are run, the system prints out the contents of the buffer and then clears it.

d An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (40000000 00010000), tests were skipped for reasons 12 and 47.

The reasons are as follows:

Bit	Meaning
12	Scan and signal distributor (SSD) out of service (OOS).
13	SSD 0 is OOS.
14	SSD 1 is OOS.
15	Standby central control (CC) out of service.
23	Disable auto peripheral controller (PC) in effect.
36	Call store helper not available.
43	Power monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).
46	Frame request for PWRMON active (try again).
47	Unit not in normal state.

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, if d is (7,40000000 00010000), seven tests failed, plus tests were skipped for reasons 12 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service if possible, so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

If a diagnostic is requested from the main frame, no power monitor tests are performed.

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At the completion of the diagnostic, the system will report the results via a DGN:CSB output message for the appropriate unit. In addition to reporting any other STF conditions, the DGN:CSB output message will contain a bit position 46 in the CATP field. This bit indicates that the power monitor tests were skipped although the current text description of this bit does not identify it as such.

When such a diagnostic is performed, the user should first clear any other problems indicated by CATP bits. The DGN:CSB input message must then be used to execute the power monitor tests.

If the output is the result of an MCC request for diagnostic execution:

REQUEST ACCEPTED — Wait for final disposition message.

REQUEST DENIED - DISK ACCESS DUPLEX FAILED — Resolve the problem with diagnostic paging and try again.

REQUEST DENIED - FAC BUSY RETRY LATER — Try again later.

REQUEST DENIED - INVALID MEMBER NUMBER — Verify the member number (MEMN) and try again.

REQUEST DENIED - UNEQ UNIT — Verify the member number (MEMN) and try again.

5. REFERENCES

PIDENTs
MBDG01
MIRA

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages
DGN:CSB
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:CSB-ILL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:CSB a ILLEGAL PHASE

2. REASON FOR OUTPUT

To identify that only illegal diagnostic phases have been requested on a partial diagnostic request for the call store bus (CSB).

3. VARIABLE FIELD DEFINITIONS

a The member number of the unit being diagnosed (0 or 1).

4. ACTION TO BE TAKEN

Check PIDENT DCONTABL for PREFIX=MBDG,UTYPE=1XLUCSB to obtain the list of valid phase numbers.

5. REFERENCES

PIDENTs
DCONTABL
MBDG01 lists all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=MBDG01, UTYPE=1XLUCSB

Input Message
DGN:CSB

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:CSB-NOT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:CSB a NOT STARTED - b

2. REASON FOR OUTPUT

To report that the diagnostic request cannot be started. This usually occurs when the call store bus (CSB) for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the CSB being diagnosed (0 or 1).
- b The reason the diagnostic was not started.

4. ACTION TO BE TAKEN

If the specified unit cannot be removed from service because there is no spare, restore a spare unit to service. If b equals FROZEN, the frozen store must be conditionally restored before any other diagnostic request is attempted.

5. REFERENCES

PIDENT
CSFRNORM

Input Messages
DGN:CSB
RST:CSB

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:CSB-TERM
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:CSB a TERMINATED AT PH b ADR c AFTER TEST d [e]

2. REASON FOR OUTPUT

To report that the diagnostic for the call store bus (CSB) terminated early. This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the CSB being diagnosed (0 or 1).
- b The diagnostic phase in which the termination occurred.
- c The address in the diagnostic phase at which the termination occurred.
- d The last test executed before the termination occurred.
- e (FORCED). This optional field will be printed only if the termination occurred and UCL (unconditional) was specified on the DGN input message. Termination in this way is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

Repair faulty frame. If further diagnostic execution is desired, specify UCL on the DGN input message. This will inhibit all early terminations except those that are forced.

If a diagnostic is requested from the main frame, no power monitor tests are performed. At the completion of the diagnostic, the system will report the results via a DGN:CSB output message for the appropriate unit. In addition to reporting any other STF conditions, the DGN:CSB output message will contain a bit position 46 in the CATP field. This bit indicates that the power monitor tests were skipped, although the current text description of this bit does not identify it as such.

When such a diagnostic is performed, the user should first clear any other problems indicated by CATP bits. The DGN:CSB input message must then be used to execute the power monitor tests.

5. REFERENCES

PIDENT
MBDG01

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Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, *4ESSTM User's Manual*

Input Message
DGN:CSB

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:CSB-TEST
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

```
DGN:CSB a PH b c [d]
      [TEST   MISMATCH  SUPPLEMENTARY DATA
        ee     ffffffff  ggggggggg]
```

2. REASON FOR OUTPUT

To report that the diagnostic results are printed on a phase basis for the call store bus (CSB). This occurs in the case of a partial diagnosis, a test failure, or whenever RAW was requested on the input message.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the CSB being diagnosed (0 or 1).
- b The diagnostic phase number for which the results are reported.
- c The results of the diagnostic:
 - ATP — All tests passed.
 - CATP — All tests passed; however, some tests were skipped because of the unavailability of a system resource which was needed to perform the test.
 - NTR — No tests were executed.
 - STF — Some tests failed.
 - STF-BOF — Some tests failed and the test failure buffer overflowed.
- d An optional field that will appear only if the results are not ATP.

If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (4000000 00010000), then tests were skipped for reasons 12 and 47. The reasons are as follows:

Bit	Meaning
12	Scan and signal distributor (SSD) out of service (OOS).
13	SSD 0 is OOS.
14	SSD 1 is OOS.
15	Standby central control (CC) out of service.

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Bit	Meaning
23	Disable auto peripheral controller (PC) in effect.
36	Call store helper not available.
43	Power monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).
46	Frame request for PWRMON active (try again).
47	Unit not in normal state.

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, if d is (7,40000000 00010000), seven tests failed, plus tests were skipped for reasons 12 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

The following appear only if the diagnostic was STF:

- e Test number of the failing test.
- f The bits that were in error; that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.
- g Supplementary data concerning the failing test.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service if possible, so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENT
MBDG01

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Message
DGN:CSB

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:DIF-ILL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:DIF a,b c:d e ILLEGAL PHASE

2. REASON FOR OUTPUT

To identify that one or more illegal diagnostic phases have been requested on a partial diagnostic request. The illegal phase will not be executed; however, all valid phases will be run.

3. VARIABLE FIELD DEFINITIONS

a	Member of the DIF being diagnosed.
b	Subunit number of the subunit being diagnosed.
c	Submember number of the subunit being diagnosed.
d	Helper unit type.
e	Helper member number.

4. ACTION TO BE TAKEN

Check the DGN:DIF input message for the list of valid phase numbers.

5. REFERENCES

PIDENT
DCONTOLL

Input Message
DGN:DIF

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:DIF-MIS
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

```
DGN:DIF a,b c:d e PH f g [h]
[TEST   MISMATCH   SUPPLEMENTARY DATA
 i      jjjjjjjj   kkkkkkk lllllll mmmmmmm nnnnnnn ooooooo
                    ppppppp qqqqqqq rrrrrrr]
```

2. REASON FOR OUTPUT

To print out diagnostic results on a phase basis. This occurs in the case of a partial diagnosis, a test failure, or whenever RAW was requested on the input message.

3. VARIABLE FIELD DEFINITIONS

- a Member number of the Digital Interface Frame (DIF) being diagnosed.
- b Subunit type being diagnosed.
- c Submember number of the subunit being diagnosed.
- d Helper unit type, if specified.
- e Helper member number, if specified.
- f Diagnostic phase number for which the results are reported.
- g Results of the diagnostic:
 - ATP — All tests passed.
 - CATP — All tests passed; however, some tests were skipped because of the unavailability of a system resource which was needed to perform the test.
 - NTR — No tests were executed.
 - STF — Some tests failed.
 - STF-BOF — Some tests failed and the raw data buffer overflowed. Phase has not been completed.
- h An optional field that will appear only if the results were not ATP.

If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if h is (40000000 00001000) then tests were skipped for reasons 9 and 47. The reasons are listed in Table 1.

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If subunit type is BUS, see DGN:PUB output message for CATP reasons.

If STF, this field gives the number of test failures, in addition to the reasons that tests were skipped. For example, if h is (7,40000000 00001000), seven tests failed, plus tests were skipped for reasons 9 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

The following appear only if the diagnostic was STF:

i	Test number of the failing test.
j	Bits which were in error, that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.
k	RAW response from the unit or firmware diagnostic RAW response.
l, m	Information concerning the test being executed. Details of l and m are specified in the diagnostic listing.
n	Address in the phase (or subroutine) of the test that failed.
o	Bits 14-0 contain information for the TLP programs. Bits 23-21 contain the count of the number of words of supplementary data that follows. Bits 20-18 contain the count of the number of words of DOLOOP data that follows. Bits 17-15 contain the count of the number of words of subroutine data that follows.
p	Supplementary data words. p is repeated x times, where x is bits 23-21 of o. This data supplies information about the test being executed. The last supplementary data word specified is printed first.
q	DOLOOP data words. q is repeated y times, where y is bits 20-18 of o. This data is the value of the DOLOOP variables at the time of the test failure. The value of the innermost DOLOOP is printed first.
r	Subroutine data words. r is repeated z times, where z is bits 17-15 of o. This data is the address of the callsubs which led up to this point in the diagnostic. The address of the last callsub is printed first.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

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5. REFERENCES

PIDENTs

PUDGDC - if subunit type is CONTR

PUDGDU - if subunit type is DIU

PUDGDC99 - if subunit type is IPUB

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Message

DGN:DIF

Output Message

DGN:PUB

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TABLE 1. DIF DIAGNOSTIC CATP CODES

Memory Word: DG1CATP1

BIT	MEANING	FUNCTION
0	DG4CATPPUB0	Peripheral Unit Bus (PUB) 0 out-of-service
1	DG4CATPPUB1	PUB 1 out-of-service
2	DG4CATPSP0	Base SP frame out-of-service
3	DG4CATPSP1	Duplicated SP frame out-of-service
4	DG4CATPMATE	Mate out-of-service
5	DG4CATPROS	Power converter in request out-of-service state
6	DG4CATPCC0	Central Controller (CC) 0 out-of-service
7	DG4CATPCC1	CC 1 out-of-service
8	DG4CATPCI	Other frame responding to clock interrogation
9	DG4CATPMI	Other frame responding to this frame's member interrogation
10	DG4CATPGI	Other frame responding to this frame's group interrogation
11	DG4CATPPUBD	PUB not duplex
12	DZ4CATPAPUF	Other frame responding to Autonomous Peripheral Unit Failure (APUF) clock interrogation
13	DZ4CATPAPUT	Other frame responding to Autonomous Peripheral Unit Trouble (APUT) clock interrogation
14	DZ4CATPCONTRSM	Controller (CONTR) not duplex
15	DZ4CATPAPUB	Other frame responding to Autonomous Peripheral Unit Bus (APUB) clock interrogation
16	DZ4CATPPSW	Protection switch has taken place
17	DZ4CATPPHP	Other frame responding to high priority polling
18	DZ4CATPPLP	Other frame responding to low priority polling
19	DZ4CATPPDG	Other frame responding to digit buffer polling
20	DZ4CATPPSZ	Other frame responding to seizure polling
21	DZ4CATPPSWKEY	Protection Switch (PSW) Teletypewriter (TTY) keyword for requesting PSW tests is not specified
22	DZ4CATPC0OS	Controller 0 out-of-service
23	DZ4CATPC1OS	Controller 1 out-of-service
26		Interface Peripheral Unit Bus (IPUB) out-of-service

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Memory Word: DG1CATP2

BIT	SYMBOL	FUNCTION
0	DG4CATPSPS	Signaling Processor (SP) frame duplex failure
1	DG4CATPSPB	SP frame configuration failure
20	DZ4CATPNODIU	No active Digital Interface Unit (DIU)
23	DZ4CATPSELKEY	Select TTY keyword for requesting DIU bus selection tests is not specified

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ID DGN:DIF-NOT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:DIF a,b c:d e NOT STARTED - f

2. REASON FOR OUTPUT

To report that the diagnostic request cannot be started. This is usually when the Digital Interface Frame (DIF) for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | Member number of the DIF being diagnosed. |
| b | Subunit type being diagnosed. |
| c | Submember number of the subunit being diagnosed. |
| d | Helper unit type. |
| e | Helper member number. |
| f | Reason the diagnostic was not started. |

4. ACTION TO BE TAKEN

If the specified DIF cannot be removed from service because there is no spare, restore a spare unit to service.

5. REFERENCES

Input Messages
DGN:DIF
RST:DIF

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:DIF-PUB
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:DIF a b c:PUB d e f [g]

2. REASON FOR OUTPUT

To specify both the diagnostic results and the termination mode at the conclusion of the diagnostic execution on a Digital Interface Frame (DIF).

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | Member number of the DIF under diagnosis. |
| b | Type of subunit for which the diagnostic was requested. |
| c | Number of the subunit under diagnosis. |
| d | Helper Peripheral Unit Bus (PUB) that was requested. |
| e | Termination mode for the diagnostic:

ABORTED — Diagnostic abnormally stopped because of an interrupt, error in execution, or a STOP:MACLI input request.

COMPLETED — Diagnostic completed normally.

STOPPED — Diagnostic terminated under program control since further testing would not improve diagnostic resolution. |
| f | The results of the diagnostic:

ATP — All tests passed.

CATP — All tests passed; however, some tests were skipped because of the unavailability of a system resource which was needed to perform the test.

NTR — No tests were executed.

STF — Some tests failed.

STF-BOF — The number of failed tests has filled the buffer; before any more tests are run the system prints out the contents of the buffer and then clears it. |
| g | An optional field that will appear only if the results are not ATP. |

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If CATP or NTR, this field identifies the reason that the tests were skipped. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if g is (40000000 00001000), tests were skipped for reasons 9 and 47. A complete list of CATP bits and their description is contained in the DGN:DIF-MIS output message.

If STF, this field gives the number of failing phases, number of failing tests, trouble number. For example, (2,9, 00101545) indicates 2 phases failed, 9 tests failed, and a trouble number of 0010545.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

If a diagnostic is requested from the main frame, no power monitor tests are performed. At the completion of the diagnostic, the system will report the results via a DGN:DIF-PUB output message for the appropriate unit. In addition to reporting any other STF conditions, the DGN:DIF-PUB output message will contain a bit position 46 in the CATP field. This bit indicates that the power monitor tests were skipped, although the current text description of this bit does not identify it as such.

When such a diagnostic is performed, the user should first clear any other problems indicated by CATP bits. The DGN:DIF input message must then be used to diagnose the power monitor unit.

5. REFERENCES

PIDENTs

PUDGDC - if subunit type is CONTR

PUDGDU - if subunit type is DIU

PUDGDC99 - if subunit type is IPUB

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Messages

DGN:DIF

STOP:MACLI

Output Message

DGN:DIF-MIS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:DIF-TERM
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:DIF a,b c:d e TERMINATED AT PH f ADR g AFTER TEST h [FORCED]

2. REASON FOR OUTPUT

To report that the diagnostic terminates early for the Digital Interface Frame (DIF). This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

a	Member number of the DIF being diagnosed.
b	Subunit type being diagnosed.
c	Submember number of the subunit being diagnosed.
d	Helper unit type if specified.
e	Helper member number if specified.
f	Diagnostic phase in which the termination occurred.
g	Address in the diagnostic phase (or subroutine) at which the termination occurred.
h	Last test executed before the termination occurred.
FORCED	This optional field will be printed only if the termination occurred and Unconditional (UCL) was specified on the DGN:DIF input message. Termination in this way is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

Repair faulty frame. If further diagnostic execution is desired, specify UCL on the DGN:DIF input message. This will inhibit all early terminations except those that are forced.

If a diagnostic is requested from the main frame, no power monitor tests are performed. At the completion of the diagnostic, the system will report the results via a DGN:DIF-PUB output message for the appropriate unit. In addition to reporting any other STF conditions, the DGN:DIF-PUB output message will contain a bit position 46 in the CATP field. This bit indicates that the power monitor tests were skipped, although the current text description of this bit does not identify it as such.

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When such a diagnostic is performed, the user should first clear any other problems indicated by CATP bits. The DGN:DIF input message must then be used to diagnose the power monitor unit.

5. REFERENCES

PIDENTs

PUDGDC - if subunit type is CONTR

PUDGDU - if subunit type is DIU

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Message

DGN:DIF

Output Message

DGN:DIF-PUB

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ID DGN:DT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:DT a b c d e [f]

2. REASON FOR OUTPUT

To specify both the diagnostic results and the termination mode at the conclusion of the diagnostic execution on a digroup terminal (DT).

3. VARIABLE FIELD DEFINITIONS

- a The member number of the DT under diagnosis.
- b The type of subunit for which the diagnostic was requested. If defaulted, the diagnostic was executed on the entire DT.
- c If subunit was specified, this field identifies which subunit the diagnostic is to be executed on.
- d The termination mode for the diagnostic:
- ABORTED — The diagnostic was abnormally stopped because of an interrupt, error in execution, or because of a STOP:MACLI input request.
- COMPLETED — The diagnostic was completed normally.
- STOPPED — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution.
- e The results of the diagnostic:
- ATP — All tests passed.
- CATP — All tests passed; however, some tests were skipped because of the unavailability of a system resource which was needed to perform the test.
- NTR — No tests were executed.
- STF — Some tests failed.
- STF-BOF — The number of failed tests has filled the buffer. Before any more tests are run, the system prints out the contents of the buffer and then clears it.

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- f An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if f is (40000000 00001000), then tests were skipped for reasons 9 and 47.

The reasons are as follows:

Bit	Reasons for Tests Skipped
0	PUB 0 out-of-service
1	PUB 1 out-of-service
2	Primary SP pulse points out-of-service
3	Secondary SP pulse points out-of-service
4	Mate unit out-of-service
5	Power control switch in ROS position
6	CC 0 out-of-service
7	CC 1 out-of-service
8	CI has other units responding
9	MI has other units responding
10	GI has other units responding
11	PUB not duplex
24	SP scan / distribute points out-of-service
36	DTSP2 link not in normal configuration
37	TST controller out-of-service
38	DTU protection switched
46	Power monitor tests skipped

If STF, this field gives the number of failing phases, number of failing tests, trouble number of tests that failed. For example, (2,9,00101545) indicates 2 phases failed, 9 tests failed, and a trouble number of 00101545.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

If a diagnostic is requested from the main frame, no power monitor tests are performed. At the completion of the diagnostic, the system will report the results via a DGN:DT output message for the appropriate unit. In addition to reporting any other STF conditions, the DGN:DT output message will contain a bit position 46 in the CATP field. This bit indicates that the power monitor tests were skipped, although the current text description of this bit does not identify it as such.

When such a diagnostic is performed, the user should first clear any other problems indicated by CATP bits. The DGN:DT input message must then be used to diagnose the power monitor unit.

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5. REFERENCES

PIDENT
PUDGDT

Practice 234-180-020, *Diagnostic Language - DIAL*
Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Messages
DGN:DT
STOP:MACLI

Output Message
DGN:DT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:DT-ILL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:DT a,b c[:d] [e] ILLEGAL PHASE

2. REASON FOR OUTPUT

To identify that one or more illegal diagnostic phases have been requested on a partial diagnostic request for the digroup terminal (DT). The illegal phase will not be executed; however, all valid phases will be run.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the DT being diagnosed.
b	The subunit type being diagnosed.
c	The submember number of the subunit being diagnosed.
d	The helper DT type, if specified.
e	The helper member number, if specified.

4. ACTION TO BE TAKEN

Check the *Input Message Document* for the list of valid phase numbers.

5. REFERENCES

PIDENT
DCONTOLL

Input Message
DGN:DT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:DT-NOT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:DT a,b c:d e NOT STARTED - f

2. REASON FOR OUTPUT

To report that the diagnostic request cannot be started for the digroup terminal (DT). This is usually when the unit for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the DT being diagnosed.
b	The subunit type being diagnosed.
c	The submember number of the subunit being diagnosed.
d	The helper unit type.
e	The helper member number.
f	The reason the diagnostic was not started.

4. ACTION TO BE TAKEN

If the specified DT cannot be removed from service because there is no spare, restore a spare unit to service.

5. REFERENCES

PIDENT
MCFWPEMO

Input Messages
DGN:DT
RST:DT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:DT-TERM
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:DT a,b c:d e TERMINATED AT PH f ADR g AFTER TEST h [i]

2. REASON FOR OUTPUT

To report that the diagnostic for the digroup terminal (DT) terminated early. This early execution termination will only occur if some tests have failed, and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | The member number of the DT being diagnosed. |
| b | The subunit type being diagnosed. |
| c | The submember number of the subunit being diagnosed. |
| d | The helper unit type, if specified. |
| e | The helper member number, if specified. |
| f | The diagnostic phase in which the termination occurred. |
| g | The address in the diagnostic phase or subroutine at which the termination occurred. |
| h | The last test executed before the termination occurred. |
| i | (FORCED). This optional field will be printed only if the termination occurred and unconditional (UCL) was specified on the DGN:DT input message. The use of terminating in this way is restricted to cases where further diagnostic execution will cause system problems. |

4. ACTION TO BE TAKEN

Repair the faulty frame. If further diagnostic execution is desired, specify UCL on the DGN:DT input message. This will inhibit all early termination except those that are forced.

If a diagnostic is requested from the main frame, no power monitor tests are performed. At the completion of the diagnostic, the system will report the results via a DGN:DT output message for the appropriate unit. In addition to reporting any other STF conditions, the DGN:DT output message will contain a bit position 46 in the CATP field. This bit indicates that the power monitor tests were skipped although the current text description of this bit does not identify it as such.

When such a diagnostic is performed, the user should first clear any other problems indicated by CATP bits. The DGN:DT input message must then be used to diagnose the power monitor unit.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENT
PUDGDT

Practice 254-180-020, *Diagnostic Language - DIAL*
Practice 254-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Message
DGN:DT

Output Message
DGN:DT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:DT-TEST
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

```
DGN:DT a,b c:d e PH f g [h]
[TEST      MISMATCH      SUPPLEMENTARY DATA
  i      jkkkkkkk      llllllll llllllll llllllll llllllll llllllll
                        mmmmmmmm nnnnnnnn oooooooooo

      i+1      jppppppp      llllllll llllllll llllllll llllllll llllllll
                        mmmmmmmm nnnnnnnn oooooooooo]
```

2. REASON FOR OUTPUT

To report that the diagnostic results are printed on a phase basis for the digroup terminal (DT). This occurs in the case of a partial diagnosis, a test failure, or whenever RAW was requested on the input message.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the DT being diagnosed.
- b The type of subunit for which the diagnostic was requested. If defaulted, the diagnostic was executed on the entire DT.
- c If the subunit was specified, this field identifies which subunit the diagnostic is to be executed on.
- d The helper unit type, if specified.
- e The helper member number, if specified.
- f The diagnostic phase number for which the results are reported.
- g The results of the diagnostic:
 - ATP — All tests passed.
 - CATP — All tests passed; however, some tests were skipped because of the unavailability of a system resource needed to perform the test.
 - NTR — No tests were executed.
 - STF — Some tests failed.
 - STF-BOF — Some tests failed and the raw data buffer overflowed; the phase has not been completed.

SEE PROPRIETARY NOTICE ON COVER PAGE

h An optional field that will appear only if the results were not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if h is (40000000 00001000), tests were skipped for reasons 9 and 47.

The reasons are as follows:

Bit	Reasons for Tests Skipped
0	Peripheral unit bus (PUB) 0 out of service
1	PUB 1 out-of-service
2	Primary signaling processor (SP) pulse points out-of-service
3	Secondary SP pulse points out-of-service
4	Mate unit out-of-service
5	Power control switch in ROS position or diagnostic requested from power control switch
6	Central controller (CC) 0 out-of-service
7	CC 1 out-of-service
8	CI has other units responding
9	MI has other units responding
10	GI has other units responding
11	PUB not duplex
12	DTSP2 link not in normal configuration
13	Test (TST) controller out-of-service
14	DTU protection switched
24	SP scan / distribute points out-of-service
27	DT returned failed from ignore request

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, if h is (7,40000000 00001000), seven tests failed, plus tests were skipped for reasons 9 and 47.

If STF-BOF, this number of test failures is the number of test failures up to the point of buffer overflow.

SEE PROPRIETARY NOTICE ON COVER PAGE

The following appear only if the diagnostic was STF. The data must be analyzed in pairs of tests failed.

i, i+1	The test numbers of the failing tests to be analyzed together.
j	Identifier for message received: 0 Expected message. 1 Message half not received. 2 Unexpected message half. 3 Start word mismatch. 4 Link configuration denied. 5 Configuration failure. 6 Unused. 7 Test sequence number.
k	If j=7, k is the sequence number. If j=0, 1, or 2, k is the time of unit and function number. If j=3, k is to be ignored. If j=4 or 5, k contains SP2 CONT 0 ESR 3 results.
l	Data to be ignored.
m	Received message half 1.
n	Expected message half 1.
o	Offset into task table DT4DTkTBLXX in diagnostic program.
p	If j=7, p is to be ignored. If j=0, 1, 2, or 3, p is the mismatch data for message half 1. If j=4 or 5, p contains SP2 CONT1 ESR3 results.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

5. REFERENCES

PIDENT
PUDGDT

Practice 234-180-020, *Diagnostic Language - DIAL*
Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Message
DGN:DT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:EST-ILL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:EST a,b c:d e ILLEGAL PHASE

2. REASON FOR OUTPUT

To identify that one or more illegal diagnostic phases have been requested on a partial diagnostic request for a echo suppressor terminal (EST). The illegal phase will not be executed; however, all valid phases will be run.

3. VARIABLE FIELD DEFINITIONS

a	Member of the EST being diagnosed.
b	Subunit number of the subunit being diagnosed.
c	Submember number of the subunit being diagnosed.
d	Helper unit type.
e	Helper member number.

4. ACTION TO BE TAKEN

Check the *Input Message Document* for the list of valid phase numbers.

5. REFERENCES

PIDENT
DCONTOLL

Input Message
DGN:EST

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:EST-MIS
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

```
DGN:EST a,b c:d e PH f g [h]
[TEST MISMATCH SUPPLEMENTARY DATA
i  j j j j j j j j k k k k k k l l l l l l m m m m m m n n n n n n o o o o o o o
p p p p p p q q q q q q r r r r r r r]
```

2. REASON FOR OUTPUT

To print out diagnostic results on a phase basis for a echo suppressor terminal (EST). This occurs in the case of a partial diagnosis, a test failure, or whenever RAW was requested on the input message.

3. VARIABLE FIELD DEFINITIONS

- a Member number of the EST being diagnosed.
- b Subunit type being diagnosed.
- c Submember number of the subunit being diagnosed.
- d Helper unit type, if specified.
- e Helper member number, if specified.
- f Diagnostic phase number for which the results are reported.
- g Results of the diagnostic:
 - ATP — All tests passed.
 - CATP — All tests passed; however, some tests were skipped because of the unavailability of a system resource which was needed to perform the test.
 - NTR — No tests were executed.
 - STF — Some tests failed.
 - STF-BOF — Some tests failed and the raw data buffer overflowed. Phase has not been completed.
- h An optional field that will appear only if the results were not ATP.
 If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if h is (40000000 00001000) then tests were skipped for reason 9 and 47.

SEE PROPRIETARY NOTICE ON COVER PAGE

The reasons are as follows:

BIT	REASONS FOR TESTS SKIPPED
0	PUB 0 out-of-service
1	PUB 1 out-of-service
2	Primary SP pulse points out-of-service
3	Secondary SP pulse points out-of-service
5	Power control switch in ROS position or diagnostic requested from power control switch
8	CI has other units responding
9	MI has other units responding
10	GI has other units responding
11	PUB not duplex
12	APUF tests skipped
13	APUT tests skipped
14	Mate ESC out-of-service
15	UESR saved by EUFR not zero
16	PSW occurred
17	TSI out-of-service
26	Interface peripheral unit bus (IPUB) out-of-service

If subunit type is BUS, see DGN:PUB output message for CATP reasons.

If STF, this field gives the number of test failures, in addition to the reasons that tests were skipped. For example, if h is (7,40000000 00001000), seven tests failed, plus tests were skipped for reasons 9 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

The following appear only is the diagnostic was STF:

i	Test number of the failing test.
j	Bits which were in error, that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.
k	RAW response from the unit.
l, m	Information concerning the test being executed. Details of l and m are specified in the diagnostic listing.
n	Address in the phase (or subroutine) of the test that failed.
o	Bits 14-0 contain information for the TLP programs. Bits 23-21 contain the count of the number of words of supplementary data that follows. Bits 20-18 contain the count of the number of words of DOLOOP data that follows. Bits 17-15 contain the count of the number of words of subroutine data that follows.

SEE PROPRIETARY NOTICE ON COVER PAGE

- p Supplementary data words. p is repeated x times, where x is bits 23-21 of o. This data supplies information about the test being executed. The last supplementary data word specified is printed first.
- q DOLOOP data words. q is repeated y times, where y is bits 20-18 of o. This data is the value of the DOLOOP variables at the time of the test failure. The value of the innermost DOLOOP is printed first.
- r Subroutine data words. r is repeated z times, where z is bits 17-15 of o. This data is the address of the callsubs which led up to this point in the diagnostic. The address of the last callsub is printed first.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

5. REFERENCES

PIDENTs

PUDGEK - if subunit is CONTR

PUDGEU - if subunit is ESU

PUDGEK99 - if subunit is IPUB

Practice 254-180-020, *Diagnostic Language - DIAL*

Practice 254-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Message

DGN:EST

Output Message

DGN:EST-PUB

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:EST-NOT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:EST a,b c:d e NOT STARTED - f

2. REASON FOR OUTPUT

To report that the diagnostic request cannot be started. This is usually when the echo suppressor terminal (EST) for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

a	Member number of the EST being diagnosed.
b	Subunit type being diagnosed.
c	Submember number of the subunit being diagnosed.
d	Helper unit type.
e	Helper member number.
f	Reason the diagnostic was not started.

4. ACTION TO BE TAKEN

If the specified EST cannot be removed from service because there is no spare, restore a spare unit to service.

5. REFERENCES

PIDENT
MCFWPEMO

Input Messages
DGN:EST
RST:EST

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:EST-PUB
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:EST a b c:PUB d e f [g]

2. REASON FOR OUTPUT

To specify both the diagnostic results and the termination mode at the conclusion of the diagnostic execution on an echo suppressor terminal (EST).

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | Member number of the EST under diagnosis. |
| b | Type of subunit for which the diagnostic was requested. |
| c | Number of the subunit under diagnosis. |
| d | Helper PUB that was requested. |
| e | Termination mode for the diagnostic:

ABORTED — Diagnostic abnormally stopped because of an interrupt, error in execution, or a STOP:MACLI input request.

COMPLETED — Diagnostic completed normally.

STOPPED — Diagnostic terminated under program control since further testing would not improve diagnostic resolution. |
| f | The results of the diagnostic:

ATP — All tests passed.

CATP — All tests passed; however, some test were skipped because of the unavailability of a system resource which was needed to perform the test.

NTR — No tests were executed.

STF — Some tests failed.

STF-BOF — The number of failed tests has filled the buffer; before any more tests are run the system prints out the contents of the button and then clears it. |
| g | An optional field that will appear only if the results are not ATP. |

SEE PROPRIETARY NOTICE ON COVER PAGE

If CATP or NTR, this field identifies the reason that the tests were skipped. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if g is (40000000 000010000), tests were skipped for reasons 9 and 47. A complete list of CATP bits and their description is contained in the DGN:EST input message.

If STF, this field gives the number of failing phases, number of failing tests, trouble number. For example, (2,9, 00101545) indicates 2 phases failed, 9 tests failed, and a trouble number of 0010545.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

If a diagnostic is requested from the main frame, no power monitor tests are performed. At the completion of the diagnostic, the system will report the results via a DGN:EST-PUB output message for the appropriate unit. In addition to reporting any other STF conditions, the DGN:EST-PUB output message will contain a bit position 46 in the CATP field. This bit indicates that the power monitor tests were skipped, although the current text description of this bit does not identify it as such.

When such a diagnostic is performed, the user should first clear any other problems indicated by CATP bits. The DGN:EST input message must then be used to diagnose the power monitor unit.

5. REFERENCES

PIDENTs

PUDGEK - if subunit type is CONTR

PUDGEU - if subunit type is ESU

PUDGEK99 - if subunit type is IPUB

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Messages

DGN:EST

STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:EST-TERM
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:EST a,b c:d e TERMINATED AT PH f ADR g AFTER TEST h [i]

2. REASON FOR OUTPUT

To report that the diagnostic terminates early for the echo suppressor terminal (EST). This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | Member number of the EST being diagnosed. |
| b | Subunit type being diagnosed. |
| c | Submember number of the subunit being diagnosed. |
| d | Helper unit type, if specified. |
| e | Helper member number, if specified. |
| f | Diagnostic phase in which the termination occurred. |
| g | Address in the diagnostic phase (or subroutine) at which the termination occurred. |
| h | Last test executed before the termination occurred. |
| i | (FORCED). This optional field will be printed only if the termination occurred and unconditional (UCL) was specified on the DGN:EST input message. Termination in this way is restricted to cases where further diagnostic execution will cause system problems. |

4. ACTION TO BE TAKEN

Repair the faulty frame. If further diagnostic execution is desired, then UCL should be specified on the DGN:EST input message. This will inhibit all early terminations except those that are forced.

If a diagnostic is requested from the main frame, no power monitor tests are performed. At the completion of the diagnostic, the system will report the results via a DGN:EST-PUB output message for the appropriate unit. In addition to reporting any other STF conditions, the DGN:EST-PUB output message will contain a bit position 46 in the CATP field. This bit indicates that the power monitor tests were skipped, although the current text description of this bit does not identify it as such.

When such a diagnostic is performed, the user should first clear any other problems indicated by CATP bits. The DGN:EST input message must then be used to diagnose the power monitor unit.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs

PUDGE_C - if subunit type is CONTR

PUDGE_U - if subunit type is ESU

Practice 254-180-020, *Diagnostic Language - DIAL*

Practice 254-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Message

DGN:EST

Output Message

DGN:EST-PUB

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:IFB
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:IFB a b c [d]

2. REASON FOR OUTPUT

To specify both the diagnostic results and the termination mode. This output message is printed at the conclusion of the diagnostic execution for an interface bus (IFB).

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit under diagnosis (0 or 1).
- b The termination mode for the diagnostic:
- ABORTED — The diagnostic was abnormally stopped due to an interrupt, error in execution, or due to a STOP:MACLI input request.
- COMPLETED — The diagnostic completed normally.
- STOPPED — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution.
- c The results of the diagnostic:
- ATP — All tests passed.
- CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.
- NTR — No tests were executed.
- STF — Some tests failed.
- d An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (40000000 00010000), then tests were skipped for reasons 12 and 47.

SEE PROPRIETARY NOTICE ON COVER PAGE

The reasons are as follows:

Bit	Meaning
12	Scan and signal distributor (SSD) out of service (OOS).
43	Power monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).
46	Frame request for PWRMON active (try again).
47	Unit not in normal state.

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, if d is (7,40000000 00010000), seven tests failed, plus tests were skipped for reasons 12 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service if possible, so that all tests may be executed. If some tests failed (STF) and the trouble location procedures (TLP) indicates the most suspect unit is an IFB client, a diagnostic run job is automatically requested on that IFB client. If the IFB TLP indicates a unit other than an IFB client, repair the unit as quickly as possible.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs

IFFRBASE

IFDG --, where --= all valid phase members

listed in PIDENT DCONTABL for PREFIX=IFDG, UTYPE=1XLUIFB

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM User's Manual

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Messages
DGN: IFB
STOP: MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:IFB-ILL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:IFB a ILLEGAL PHASE

2. REASON FOR OUTPUT

To print whenever only illegal diagnostic phases have been requested on a partial diagnostic requested for an interface bus (IFB).

3. VARIABLE FIELD DEFINITIONS

a The member number of the unit being diagnosed (0 or 1).

4. ACTION TO BE TAKEN

Check PIDENT DCONTABL for PREFIX=IFDG, UTYPE=1XLUIFB to obtain the list of valid phase numbers.

5. REFERENCES

PIDENTs
DCONTABL
IFDG--, where -- = all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=IFDG, UTYPE=1XLUIFB

Input Message
DGN:IFB

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:IFB-NOT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:IFB a NOT STARTED - b

2. REASON FOR OUTPUT

To print whenever the diagnostic request cannot be started for an interface bus (IFB). This is usually whenever the unit for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The reason the diagnostic was not started.

4. ACTION TO BE TAKEN

If the specified unit cannot be removed from service because there is no spare, restore a spare unit to service. If b equals FROZEN, bus status indicates a store is frozen. That store must be conditionally restored to service.

5. REFERENCES

PIDENT
IFFRBASE

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:IFB-TERM
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:IFB a TERMINATED AT PH b ADR c AFTER TEST d [e]

2. REASON FOR OUTPUT

To print whenever the diagnostic terminates early for an interface bus (IFB). This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The diagnostic phase in which the termination occurred.
- c The address in the diagnostic phase at which the termination occurred.
- d The last test executed before the termination occurred.
- e (FORCED). This optional field will be printed only if the termination occurred and UCL (unconditional) was specified on the DGN input message. The use of terminating in this way is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service if possible, so that all tests may be executed. If some tests failed (STF) and the trouble location procedures (TLP) indicates the most suspect unit is an IFB client, a diagnostic run job is automatically requested on that IFB client. If the IFB TLP indicates a unit other than an IFB client, repair the unit as quickly as possible.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs

IFDG --, where --= all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=IFDG, UTYPE=1XLUIFB

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

PA-4A002-01, *4ESSTM User's Manual*

Input Message
DGN:IFB

Output Message
DGN:IFB

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:IFB-TEST
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

```
DGN:IFB a PH b c [d]
      [TEST   MISMATCH   SUPPLEMENTARY DATA
        ee     ffffffff   ggggggggg]
```

2. REASON FOR OUTPUT

To print whenever the diagnostic results are printed on a phase basis for an interface bus (IFB). This occurs in the case of a partial diagnosis, a test failure, or whenever RAW was requested on the input message.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The diagnostic phase number for which the results are reported.
- c The results of the diagnostic:
- ATP — All tests passed.
 - CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.
 - NTR — No tests were executed.
 - STF — Some tests failed.
 - STF-BOF — Some tests failed and the test failure buffer overflowed.
- d An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (40000000 00010000), then tests were skipped for reasons 12 and 47.

SEE PROPRIETARY NOTICE ON COVER PAGE

The reasons are as follows:

Bit	Meaning
12	Scan and signal distributor (SSD) out of service (OOS).
43	Power monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).
46	Frame request for PWRMON active (try again).
47	Unit not in normal state.

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, if d is (7,40000000 00010000), seven tests failed, plus tests were skipped for reasons 12 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

The following appear only if the diagnostic was STF.

- e Test number of the failing test.
- f The bits that were in error; that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.
- g Supplementary data concerning the failing test.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service if possible, so that all tests may be executed. If some tests failed (STF) and the trouble location procedures (TLP) indicates the most suspect unit is an IFB client, a diagnostic run job is automatically requested on that IFB client. If the IFB TLP indicates a unit other than an IFB client, repair the unit as quickly as possible.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs

IFDG --, where --= all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=IFDG, UTYPE=1XLUIFB

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Input Messages

DGN:IFB

STOP:MACLI

Output Message

DGN:IFB

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ID DGN:IOUS-BUS
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:IOUS a[{IOUC b|IPUB c|IOMP d}] e f [g]

2. REASON FOR OUTPUT

To report both the diagnostics results and the termination mode for an input/output (I/O) unit selector (IOUS). This message is printed at the conclusion of the diagnostic execution.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the IOUS (0-7).
- b The I/O channel member number (0-15).
- c The interface peripheral unit bus (IPUB) member number (0 or 1).
- d The I/O processor (IOP) microprocessor number (0 or 1).
- e The termination mode for the diagnostic:
- ABORTED — The diagnostic was abnormally stopped due to an interrupt, error in execution, or due to a STOP:MACLI input request.
- COMPLETED — The diagnostic completed normally.
- STOPPED — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution.
- f The results of the diagnostic:
- ATP — All tests passed.
- CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.
- NTR — No tests were executed.
- STF — Some tests failed.
- STF-BOF — The number of failed tests has filled the buffer. Before any more tests are run, the system prints out the contents of the buffer and then clears it.

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g An optional field that will appear only if the results are not ATP.

CATP/NTR — this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if e is (40000000 00001000), then tests were skipped for reasons 9 and 47.

The reasons are as follows:

Bit	Meaning
5	Invalid peripheral controller circuit pack.
7	TN82 processor configuration (PC) port equipage is incorrect - on board DGN not run.
9	Peripheral unit bus (PUB) 0 out of service.
10	PUB 1 out of service.
11	Peripheral unit all seems well error summary (ASWEPU) inhibit set.
12	Master control complex (MCC) / peripheral processor interface (PPI) configured out of service (OOS).
13	Central pulse distributor (CPD) control pulse order caused F-SRC (expanded input/output processor [IOP]).
15	Standby central control (CC) out of service.
33	Both input/output unit controller (IOUC) helpers out of service.
34	IOUC port is in trouble.
35	Requires duplex PUB's.
41	Helper PUB not out of service.
42	Cannot configure all in service input/output unit selectors (IOUS) to same PUB.
43	Power monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).
46	Frame request for PWRMON active.
47	Unit not in normal state.

STF-BOF — this field gives the number of test failures in addition to the reasons that tests were skipped. For example, if e is (7,40000000 00001000), seven tests failed, plus tests were skipped for reasons 9 and 47.

4. ACTION TO BE TAKEN

If the results are CATP, the indicated system resource should be restored to service if possible, so that all tests may be executed. If STF, the unit should be repaired as quickly as possible. Otherwise, no action is needed.

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NOTE: If a diagnostic request is made from the unit power switch, power monitor tests are NOT run. This condition is shown by bit 46 in the CATP field on the output message. To run the power monitor test, request the diagnostic via the teletypewriter (TTY).

Any problems indicated by the CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs

DCONMAIN

MIRA

PFLRDGNH

IODG-- where-- represents all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=IODG, UTP=1XLUIOUS for IOF

I2DG-- where-- represents all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=I2DG, UTP=1XLUIOUS for IOP

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Input Messages

DGN:IOUS

STOP:MACLI

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ID DGN:IOUS-ILL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:IOUS a [, {IPUB b|IOUC c|IOMP d}] ILLEGAL PHASE

2. REASON FOR OUTPUT

To report that one or more illegal diagnostic phases have been requested on a partial diagnostic request for a input/output (I/O) unit selector (IOUS). The illegal phase will not be executed; however, all valid phases will be run.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | The member number of the IOUS (0-7). |
| b | The interface peripheral unit pus (IPUB) member number (0 or 1). |
| c | The I/O channel member number (0-15). |
| d | The input/output processor (IOP) microprocessor number (0 or 1). |

4. ACTION TO BE TAKEN

Check PIDENT DCONTABL for PIDENT=IODG, UTP=1XLUIOUS to obtain the list of valid phase numbers for IOF.

Check PIDENT DCONTABL for PIDENT=IODG, UTP=1XLUIOUS to obtain the list of valid phase numbers for IOP.

5. REFERENCES

PIDENTs
DCONMAIN
MIRA
PFLRDGNH

IODG-- where-- represents all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=IODG, UTP=1XLUIOUS for IOF

I2DG-- where-- represents all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=I2DG, UTP=1XLUIOUS for IOP

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ID DGN:IOUS-NOT
WORK CENTER.. MOC
GENERIC 4E19 Rel. 3 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:IOUS a[, {IPUB b|IOUC c|IOMP d}] NOT STARTED - e

2. REASON FOR OUTPUT

To report that the diagnostic request cannot be started. This usually occurs when the input/output (I/O) unit selector (IOUS) for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | The member number of the IOUS (0-7). |
| b | The I/O channel member number (0-15). |
| c | The interface peripheral unit bus (IPUB) member number (0 or 1). |
| d | The input/output processor (IOP) microprocessor number (0 or 1). |
| e | The reason the diagnostic was not started. |

4. ACTION TO BE TAKEN

If the specified unit cannot be removed from service because there is no spare, restore a spare unit to service.

5. REFERENCES

PIDENTs
DCONMAIN
IOCPIOH4
MIRA
PFLRDGNH
IODG-- where-- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=IODG, UTY=1XLUIOUS for IOP
I2DG-- where-- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=I2DG, UTY=1XLUIOUS for IOP

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ID DGN:IOUS-TERM
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:IOUS a[{IPUB b|IOUC c|IOMP d}] TERMINATED AT PH e ADR f
AFTER TEST g h

2. REASON FOR OUTPUT

To report whenever the diagnostic terminates early for an input/output (I/O) unit selector (IOUS). This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the IOUS (0-7).
- b The I/O channel member number (0-15).
- c The interface peripheral unit bus (IPUB) member number (0 or 1).
- d The input/output processor (IOP) microprocessor number (0 or 1).
- e The diagnostic phase in which the termination occurred.
- f The address in the diagnostic phase at which the termination occurred.
- g The last test executed before the termination occurred.
- h (FORCED). This optional field will be printed only if the termination occurred and unconditional (UCL) was specified on the DGN:IOUS input message. The use of terminating in this way is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

The faulty unit should be repaired. If further diagnostic execution is desired, then UCL should be specified on the DGN:IOUS input message. This will inhibit all early terminations except those that are forced.

5. REFERENCES

PIDENTs
DCONMAIN
MIRA
PFLRDGNH
IODG-- where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=IODG, UTY=1XLUIOUS for IOF
I2DG-- where-- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=I2DG, UTY=1XLUIOUS for IOP

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Input Message
DGN: IOUS

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ID DGN:IOUS-TEST
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:IOUS a[{IOMP b|IPUB c|IOUC d}] PH e f [g]
[TEST MISMATCH SUPPLEMENTARY DATA
hh iiiiiiii jjjjjjjj]

2. REASON FOR OUTPUT

To report whenever the diagnostic results are on a phase basis for a input/output (I/O) unit selector (IOUS). This occurs in the case of a partial diagnosis, a test failure, or whenever RAW was requested on the input message.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the IOUS (0-7).
- b The I/O channel member number (0-15).
- c The interface peripheral unit bus (IPUB) member number (0 or 1).
- d The input/output processor (IOP) microprocessor number (0 or 1).
- e The diagnostic phase number for which the results are reported.
- f The results of the diagnostic:
 - ATP — All tests passed.
 - CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.
 - NTR — No tests were executed.
 - STF — Some tests failed.
 - STF-BOF — Some tests failed and the test failure buffer overflowed.
- g An optional field that will appear only if the results are not ATP.

CATP/NTR — this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if e is (40000000 00001000), then tests were skipped for reasons 9 and 47.

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The reasons are as follows:

Bit	Meaning
5	Invalid peripheral controller circuit pack.
7	TN82 processor configuration (PC) port equipage is incorrect - on board DGN not run.
9	Peripheral unit bus (PUB) 0 out of service.
10	PUB 1 out of service.
11	Peripheral unit all seems well error summary (ASWEPU) inhibit set.
12	Master control complex (MCC) / peripheral processor interface (PPI) configured out of service (OOS).
13	Central pulse distributor (CPD) control pulse order caused F-SRC (expanded input/output processor [IOP]).
15	Standby central control (CC) out of service.
33	Both input/output unit controller (IOUC) helpers out of service.
34	IOUC port is in trouble.
35	Requires duplex PUB's.
41	Helper PUB not out of service.
42	Cannot configure all in service input/output unit selectors (IOUS) to same PUB.
43	Power monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).
46	Frame request for PWRMON active.
47	Unit not in normal state.

STF[-BOF] — this field gives the number of test failures in addition to the reasons that tests were skipped. For example, if e is (7,40000000 00001000), seven tests failed, plus tests were skipped for reasons 9 and 47.

The following appear only if the diagnostic was STF:

- h The number of the failing test.
- i The bits that were in error; that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.
- j An optional field containing supplementary data concerning the failing test if available.
NOTE: This field may contain up to seven words. See diagnostic PIDENT for an explanation of the data.

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4. ACTION TO BE TAKEN

If the results are CATP, the indicated system resource should be restored to service so that all tests may be executed. If STF, the unit should be repaired as quickly as possible. Otherwise, no action is needed.

NOTE: If a diagnostic request is made from the unit power switch, power monitor tests are NOT run. This condition is shown by bit 46 in the CATP field on the output message. To run the power monitor test, request the diagnostic via the teletypewriter (TTY).

Any problems indicated by the CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs

DCONMAIN

MIRA

PFLRDGNH

IODG-- where -- represents all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=IODG, UTP=1XLUIOUS for IOF

I2DG-- where-- represents all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=I2DG, UTP=1XLUIOUS for IOP

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Input Message

DGN:IOUS

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ID DGN:MUP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:MUP a b c [d]

2. REASON FOR OUTPUT

To specify both the diagnostic results and the termination mode. This output message is printed at the conclusion of the diagnostic execution for a master control complex (MCC) and utility processor (MUP).

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit under diagnosis (0 or 1).
- b The termination mode for the diagnostic:
- ABORTED — The diagnostic was abnormally stopped due to an interrupt, error in execution, or due to a STOP:MACLI input request.
- COMPLETED — The diagnostic completed normally.
- STOPPED — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution.
- c The results of the diagnostic:
- ATP — All tests passed.
- CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.
- NTR — No tests were executed.
- STF — Some tests failed.
- d An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (40000000 00010000), then tests were skipped for reasons 12 and 47.

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The reasons are as follows:

Bit	Meaning
6	Auxiliary unit interface (AUI) 0 helper out of service (OOS).
7	AUI 1 helper out of service.
8	Direct memory access (DMA) failure on active MUP.
12	Scan and signal distributor (SSD) out of service.
13	SSD 0 helper out of service.
14	SSD 1 helper out of service.
22	MUP forces in effect.
43	Power monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).
46	Frame request for PWRMON active (try again).
47	Unit not in normal state.

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, if d is (7,40000000 00010000), seven tests failed, plus tests were skipped for reasons 12 and 47. If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service if possible, so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs

MCDG --, where --= all valid phase members
listed in PIDENT DCONTABL for PREFIX=MCDG, UTYPE=1XLUMUP

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Input Messages

DGN:MUP

STOP:MACLI

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Output Message
DGN:MUP

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ID DGN:MUP-ILL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:MUP a ILLEGAL PHASE

2. REASON FOR OUTPUT

To print whenever only illegal diagnostic phases have been requested on a partial diagnostic requested for a master control complex (MCC) and utility processor (MUP).

3. VARIABLE FIELD DEFINITIONS

a The member number of the unit being diagnosed (0 or 1).

4. ACTION TO BE TAKEN

Check PIDENT DCONTABL for PREFIX=MCDG,UTYPE=1XLUMUP to obtain the list of valid phase numbers.

5. REFERENCES

PIDENTs
DCONTABL
MCDG--, where -- = all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=MCDG, UTYPE=1XLUMUP

Input Message
DGN:MUP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:MUP-NOT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:MUP a NOT STARTED - b

2. REASON FOR OUTPUT

To print whenever the diagnostic request cannot be started for a master control complex (MCC) and utility processor (MUP). This is usually whenever the unit for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The reason the diagnostic was not started.

4. ACTION TO BE TAKEN

If the specified unit cannot be removed from service because there is no spare, restore a spare unit to service. If b equals FROZEN, bus status indicates a store is frozen. That store must be conditionally restored to service.

5. REFERENCES

PIDENT
MCFRTEST

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ID DGN:MUP-TERM
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:MUP a TERMINATED AT PH b ADR c AFTER TEST d [e]

2. REASON FOR OUTPUT

To print whenever the diagnostic terminates early for a master control complex (MCC) and utility processor (MUP). This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The diagnostic phase in which the termination occurred.
- c The address in the diagnostic phase at which the termination occurred.
- d The last test executed before the termination occurred.
- e (FORCED). This optional field will be printed only if the termination occurred and UCL (unconditional) was specified on the DGN input message. The use of terminating in this way is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service if possible, so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs

MCDG --, where --= all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=MCDG, UTYPE=1XLUMUP

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Input Message
DGN:MUP

Output Message
DGN:MUP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:MUP-TEST
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

```
DGN:MUP a PH b c [d]
      [TEST   MISMATCH  SUPPLEMENTARY DATA
        ee     ffffffff  ggggggggg]
```

2. REASON FOR OUTPUT

To print whenever the diagnostic results are printed on a phase basis for a master control complex (MCC) and utility processor (MUP). This occurs in the case of a partial diagnosis, a test failure, or whenever RAW was requested on the input message.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The diagnostic phase number for which the results are reported.
- c The results of the diagnostic:
 - ATP — All tests passed.
 - CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.
 - NTR — No tests were executed.
 - STF — Some tests failed.
 - STF-BOF — Some tests failed and the test failure buffer overflowed.
- d An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (40000000 00010000), then tests were skipped for reasons 12 and 47.

The reasons are as follows:

Bit	Meaning
6	Auxiliary unit interface (AUI) 0 helper out of service (OOS).
7	AUI 1 helper out of service.

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Bit	Meaning
8	Direct memory access (DMA) failure on active MUP.
12	Scan and signal distributor (SSD) out of service.
13	SSD 0 helper out of service.
14	SSD 1 helper out of service.
22	MUP forces in effect.
43	Power monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).
46	Frame request for PWRMON active (try again).
47	Unit not in normal state.

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, if d is (7,40000000 00010000), seven tests failed, plus tests were skipped for reasons 12 and 47. If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

The following appear only if the diagnostic was STF.

- e Test number of the failing test.
- f The bits that were in error; that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.
- g Supplementary data concerning the failing test.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service if possible, so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs

MCDG --, where --= all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=MCDG, UTYPE=1XLUMUP

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Input Messages
DGN:MUP
STOP:MACLI

Output Message
DGN:MUP

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ID DGN:NCLK
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:NCLK 0 CHAIN a b c [d]

2. REASON FOR OUTPUT

To specify both the diagnostic results and the termination mode for a network clock (NCLK) chain. This message is printed at the conclusion of the diagnostic execution.

3. VARIABLE FIELD DEFINITIONS

- a The number of the NCLK under diagnosis.
- b The termination mode for the diagnostic:
- ABORTED — The diagnostic was abnormally stopped due to an interrupt, error in execution, or due to a STOP:MACLI input request.
- COMPLETED — The diagnostic completed normally.
- STOPPED — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution.
- c The results of the diagnostic:
- ATP — All tests passed.
- CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.
- NTR — No tests were executed.
- STF — Some tests failed.
- STF-BOF — The number of failed tests has filled the buffer. Before any more tests are run, the system prints out the contents of the buffer and then clears it.
- d An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reasons that the tests were skipped. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (40000000 00001000), then tests were skipped for reasons 9 and 47.

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The reasons are as follows:

BIT	REASONS FOR TESTS SKIPPED
0	Peripheral unit bus (PUB) 0 out-of-service
1	PUB 1 out-of-service
2	Primary signaling processor (SP) pulse points out-of-service
3	Secondary SP pulse points out-of-service
4	Mate unit out-of-service
5	Power control switch in ROS position
6	Central controller (CC) 0 out-of-service
7	CC 1 out-of-service
8	CI has other units responding
9	MI has other units responding
10	GI has other units responding
11	PUB not duplex
12	Chain 0 not available
13	Chain 1 not available
14	Chain 2 not available
15	Chain 3 not available
16	Chain 3 test skipped, bad OSC.
17	Chain 2,3 tests skipped, bad OSC.
18	Chain 1,2,3 tests skipped, bad OSC.
24	SP scan / distribute points out-of-service
25	SP bus out-of-service

If STF, this field gives the number of phases and number of tests that failed, and a trouble number. For example, (3,5,07312762) indicates 3 phases failed, 5 tests failed, and a trouble number of 07312762.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENT
PUDGNC--

Practice 234-180-020, *Diagnostic Language - DIAL*
Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Messages
DGN:NCLK
STOP:MACLI

Output Message
DGN:NCLK

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:NCLK-ILL
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:NCLK 0,CHAIN a ILLEGAL PHASE

2. REASON FOR OUTPUT

To print whenever one or more illegal diagnostic phases have been requested on a partial diagnostic request for a network clock (NCLK) chain. The illegal phase will not be executed; however, all valid phases will be run.

3. VARIABLE FIELD DEFINITIONS

a The NCLK being diagnosed.

4. ACTION TO BE TAKEN

Check the *Input Message Document* for the list of valid phase numbers.

5. REFERENCES

PIDENT
DCONTOLL

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:NCLK-NOT
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:NCLK 0,CHAIN a NOT STARTED - b

2. REASON FOR OUTPUT

To print whenever the diagnostic request cannot be started for a network clock (NCLK) chain. This is usually when the unit for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

- a The NCLK being diagnosed.
- b The reason the diagnostic was not started.

4. ACTION TO BE TAKEN

If the specified unit cannot be removed from service because there is no spare, restore a spare unit to service.

5. REFERENCES

PIDENT
MCFWPOMO

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:NCLK-PH
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

```
DGN:NCLK 0 CHAIN a PH b c [d]
[TEST    MISMATCH    SUPPLEMENTARY DATA
 e      ffffffff      ggggggg hhhhhh iiiiijjjjjj kkkkkkk
                        llllll mmmmmm nnnnnn]
```

2. REASON FOR OUTPUT

To print whenever the diagnostic results are printed on a phase basis for a network clock (NCLK) chain. This occurs in the case of a partial diagnosis, a test failure, or whenever RAW was requested on the input message.

3. VARIABLE FIELD DEFINITIONS

- a The number of the chain under diagnosis.
- b The diagnostic phase number for which the results are reported.
- c The results of the diagnostic:
 - ATP — All tests passed.
 - CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.
 - NTR — No tests were executed.
 - STF — Some tests failed.
 - STF-BOF — Some tests failed and the test failure buffer overflowed; the phase has not been completed.
- d An optional field that will appear only if the results were not ATP. If CATP or NTR, this field identifies the reasons that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (40000000 00001000), then tests were skipped for reasons 9 and 47. The reasons are as follows:
 - BIT REASONS FOR TESTS SKIPPED
 - 0 Peripheral unit bus (PUB) 0 out-of-service
 - 1 PUB 1 out-of-service
 - 2 Primary signaling processor (SP) pulse points out-of-service

SEE PROPRIETARY NOTICE ON COVER PAGE

BIT	REASONS FOR TESTS SKIPPED
3	Secondary SP pulse points out-of-service
4	Mate unit out-of-service
5	Power control switch in request out-of-service (ROS) position or diagnostic requested from power control switch
6	Central controller (CC) 0 out-of-service
7	CC 1 out-of-service
9	MI has other units responding
10	GI has other units responding
11	PUB not duplex
12	Chain 0 not available
13	Chain 1 not available
14	Chain 2 not available
15	Chain 3 not available
16	Chain 3 tests skipped, bad OSC.
17	Chain 2,3 tests skipped, bad OSC.
18	Chain 1,2,3 tests skipped, bad OSC.
24	SP scan / distribute points out-of-service
25	SP bus out-of-service

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, if c is (7,40000000 00001000), seven tests failed, plus tests were skipped for reasons 9 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

The following appear only if the diagnostic was STF :

- e The test number of the failing test.
- f The bits which were in error; that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.
- g Raw response from the unit.
- h Bits 11-0 contain the reply bus used in the test. Bits 23-12 contain the 'fault' chain.
- i The address of the central control (CC) pulse used to access the network clock.
- j The address in the phase (or subroutine) of the test that failed.
- k Bits 14-0 contain information for the TLP programs. Bits 23-21 contain the count of the number of words of supplementary data that follows. Bits 20-18 contain the count of the number of words of DOLOOP data that follows. Bits 17-15 contain the count of the number of words of subroutine data that follows.

SEE PROPRIETARY NOTICE ON COVER PAGE

l	Supplementary data words. Variable l is repeated x times, where x is bits 20-18 of k. This data supplies information about the test being executed. The last supplementary data word is printed first.
m	DOLOOP data words. Variable m is repeated y times, where y is bits 20-18 of k. This data is the value of the DOLOOP variables at the time of the test failures. The value of the inner most DOLOOP is printed first.
n	Subroutine data words. Variable n is repeated z times, where z is bits 17-15 of k. This data is the address of the callsubs which led up to this point in the diagnostic. The address of the last callsub is printed first.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENT
PUDGNC--

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

WARNING
INAPPROPRIATE USE OF THIS
MESSAGE MAY INTERRUPT OR
DEGRADE SERVICE. READ PURPOSE
CAREFULLY.

ID DGN:NCLK-TERM
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

WARNING
Make sure power is applied on all chains before entering the UCL
request.

1. FORMAT

DGN:NCLK 0,CHAIN a TERMINATED AT PH b ADR c AFTER TEST d [e]

2. REASON FOR OUTPUT

To print whenever the diagnostic terminates early for a network clock (NCLK) chain. This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

- a The network clock chain being diagnosed.
- b The diagnostic phase in which the termination occurred.
- c The address in the diagnostic phase (or subroutine) at which the termination occurred.
- d The last test executed before the termination occurred.
- e (FORCED). This optional field will be printed only if the termination occurred and unconditional (UCL) was specified on the DGN:NCLK input message. The use of terminating in this way is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

Repair the faulty frame. If further diagnostic execution is desired, specify UCL on the DGN:NCLK input message. This will inhibit all early terminations except those that are forced.

5. REFERENCES

PIDENT
PUDGNC--

Practice 234-180-020, *Diagnostic Language - DIAL*
Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Message
DGN:NCLK

SEE PROPRIETARY NOTICE ON COVER PAGE

Output Message
DGN:NCLK

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:PCD
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:PCD a b c d [e]

2. REASON FOR OUTPUT

To report both the diagnostic results and the termination mode at the conclusion of the diagnostic execution on an power control distribution (PCD) frame.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the PCD (0 or 1).
- b Subunit:
 CONV
 DAMON
- c The termination mode for the diagnostic:
 ABORTED — The diagnostic was abnormally stopped because
 of an interrupt, error in execution, or because of a
 STOP:MACLI input request.
 COMPLETED — The diagnostic completed normally.
 STOPPED — The diagnostic was terminated under program
 control since further testing would not improve
 diagnostic resolution.
- d The results of the diagnostic:
 ATP — All tests passed.
 CATP — All tests passed; however, some tests were skipped
 because of the unavailability of a system resource
 which was needed to perform the test.
 NTR — No tests were executed.
 STF — Some tests failed.
 STF-BOF — The number of failed tests has filled the buffer;
 before any more tests are run, the system prints out
 the contents of the buffer and then clears it.
- e An optional field that will appear only if the results are not ATP.

SEE PROPRIETARY NOTICE ON COVER PAGE

CATP/NTR — this field identifies the reasons that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if e is (40000000 00010000), then tests were skipped for reasons 12 and 47.

The reasons are as follows:

Bit	Meaning
12	Master control complex (MCC) / peripheral processor interface (PPI) configured out of service (OOS).
43	Power monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).
46	Frame request for PWRMON active.
47	Unit not in normal state.

STF-[BOF] — this field gives the number of test failures in addition to the reasons that tests were skipped. For example, if e is (7,40000000 00010000), seven tests failed, plus tests were skipped for reasons 12 and 47.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service if possible, so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

NOTE: If a diagnostic request is made from the unit power switch, power monitor tests are NOT run. This condition is shown by bit 46 in the CATP field on the output message. To run the power monitor test, request the diagnostic via the teletypewriter (TTY).

Any problems indicated by the CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs

DCONMAIN

MIRA

PDFR

PDDG--; where -- represents all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=PDDG, UTP=1XLUPDF

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM User's Manual

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Messages
DGN:PCD
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:PCD-ILL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:PCD a b ILLEGAL PHASE

2. REASON FOR OUTPUT

To report that one or more illegal diagnostic phases have been requested on a partial diagnostic request for a power control distribution (PCD) frame. The illegal phase will not be executed; however, all valid phases will be run.

3. VARIABLE FIELD DEFINITIONS

a The member number of the PCD (0 or 1).
b Subunit:
 CONV
 DAMON

4. ACTION TO BE TAKEN

Check DCONTABL for PREFIX=PDDG, UTP=1XLPUDF to obtain the list of valid phase numbers.

5. REFERENCES

PIDENTs
 DCONMAIN
 MIRA
 PDFR
 PDDG--; where -- represents all valid phase numbers
 listed in PIDENT DCONTABL for PREFIX=PDDG, UTP=1XLPUDF

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM User's Manual

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:PCD-NOT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:PCD a b NOT STARTED - c

2. REASON FOR OUTPUT

To report that the diagnostic request cannot be started. This usually occurs when the power control distribution (PCD) frame for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | The member number of the PCD (0 or 1). |
| b | Subunit:

CONV

DAMON |
| c | The reason the diagnostic was not started. |

4. ACTION TO BE TAKEN

If the specified PCD cannot be removed from service because there is no spare, restore a spare unit to service.

5. REFERENCES

PIDENTs
DCONMAIN
MIRA
PDFR
PDDG--; where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=PDDG, UTP=1XLUPDF

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages
DGN:PCD
RST:PCD

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:PCD-TERM
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:PCD a b TERMINATED AT PH c ADR d AFTER TEST e [f]

2. REASON FOR OUTPUT

To report whenever the diagnostic terminates early for an power control distribution (PCD) frame. This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | The member number of the PCD (0 or 1). |
| b | Subunit:

CONV

DAMON |
| c | The diagnostic phase in which the termination occurred. |
| d | The address in the diagnostic phase at which the termination occurred. |
| e | The last test executed before the termination occurred. |
| f | (FORCED). This optional field will be printed only if the termination occurred and unconditional (UCL) was specified on the DGN:PCD input message. Termination in this way is restricted to cases where further diagnostic execution will cause system problems. |

4. ACTION TO BE TAKEN

Repair the faulty unit. If further diagnostic execution is desired, specify UCL on the DGN:PCD input message. This will inhibit all early termination except those that are forced.

NOTE: If a diagnostic request is made from the unit power switch, power monitor tests are NOT run. This condition is shown by bit 46 in the CATP field on the output message. To run the power monitor test, request the diagnostic via the teletypewriter (TTY).

Any problems indicated by the CATP bits should be cleared before running the diagnostic again.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
DCONMAIN
MIRA
PDFR
PDDG--, where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=PDDG, UTP=1LUPDF.

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Message
DGN:PCD

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:PCD-TEST
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:PCD a b PH c d [e]
[TEST MISMATCH SUPPLEMENTARY DATA
ff gggggggg hhhhhhhh]

2. REASON FOR OUTPUT

To report whenever the diagnostic results are on a phase basis for a power control distribution (PCD) frame. This occurs in the case of a partial diagnosis, a test failure, or whenever RAW was requested on the input message.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the PCD (0 or 1).
- b Subunit:
CONV
DAMON
- c The diagnostic phase number for which the results are reported.
- d The results of the diagnostic:
ATP — All tests passed.
CATP — All tests passed; however, some tests were skipped because of the unavailability of a system resource which was needed to perform the test.
NTR — No tests were executed.
STF — Some tests failed.
STF-BOF — Some tests failed and the test failure buffer overflowed.
- e An optional field that will appear only if the results are not ATP.

CATP/NTR — this field identifies the reasons that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if h is (40000000 00010000), then tests were skipped for reasons 12 and 47.

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The reasons are as follows:

Bit	Meaning
12	Master control complex (MCC) / peripheral processor interface (PPI) configured out of service (OOS).
43	Power monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).
46	Frame request for PWRMON active.
47	Unit not in normal state.

STF[-BOF] — this field gives the number of test failures in addition to the reasons that tests were skipped. For example, if h is (7,40000000 00010000), seven tests failed, plus tests were skipped for reasons 12 and 47.

The following appears only if the diagnostic was STF :

f	The number of the failing test.
g	The bits that were in error; that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.
h	An optional field containing supplementary data concerning the failing test if available. NOTE: This field may contain up to seven words. See diagnostic PIDENT for an explanation of the data.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

NOTE: If a diagnostic request is made from the unit power switch, power monitor tests are NOT run. This condition is shown by bit 46 in the CATP field on the output message. To run the power monitor test, request the diagnostic via the teletypewriter (TTY).

Any problems indicated by the CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs
DCONMAIN
MIRA
PDFR
PDDG--, where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=PDDG, UTY=1XLUPDF

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*
PA-4A002-01, 4ESSTM User's Manual

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Message
DGN : PCD

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:PS
WORK CENTER.. MOC
GENERIC 4E20 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

[1] DGN:PS a b c [d]

[2] DGN:PS a b

2. REASON FOR OUTPUT

There are two possible formats for this message:

Format [1] specifies both the diagnostic results and the termination mode at the conclusion of the diagnostic execution on a program store (PS).

Format [2] reports acceptance or denial of a master control complex (MCC) request to execute diagnostics on a PS. A message reporting the results of the diagnostic will print later.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the program store under diagnosis (0-13).
- b The termination mode for the diagnostic or the MCC request disposition:
- ABORTED — The diagnostic was abnormally stopped because of an interrupt, error in execution, or because of a STOP:MACLI input request.
- COMPLETED— The diagnostic completed normally.
- REQUEST ACCEPTED — The MCC request has been accepted and the maintenance job has been scheduled.
- REQUEST DENIED - DISK ACCESS DUPLEX FAILED — The MCC request has been denied because diagnostic paging was not available.
- REQUEST DENIED - FAC BUSY RETRY LATER — The MCC request has been denied because the job queue was full.
- REQUEST DENIED - INVALID MEMBER NUMBER — The MCC request has been denied because the member number (MEMN) was invalid.
- REQUEST DENIED - UNEQ UNIT — The MCC request has been denied because the member number was unequipped.
- STOPPED — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution.

SEE PROPRIETARY NOTICE ON COVER PAGE

c The results of the diagnostic (This field will appear at the conclusion of diagnostic execution.):

- ATP — All tests passed.
- CATP — All tests passed; however, some tests were skipped because of the unavailability of a system resource which was needed to perform the test.
- NTR — No tests were executed.
- STF — Some tests failed.
- STF-BOF — The number of failed tests has filled the buffer. Before any more tests are run, the system prints out the contents of the buffer and then clears it.

d An optional field that will appear only if the results are not ATP.

If CATP or NTR, this field identifies the reasons that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (40000000 00010000), then tests were skipped for reasons 12 and 47.

The reasons are as follows:

Bit	Meaning
3	Program store bus (PSB) 0 is out of service (OOS).
4	PSB 1 is out of service.
12	Scan and signal distributor (SSD) out of service.
15	Standby central control (CC) out of service.
21	Master control complex (MCC) override in effect (ON).
43	Power monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).
46	Frame request for PWRMON active (try again).
47	Unit not in normal state.

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, if d is (7,40000000 00010000), seven tests failed, plus tests were skipped for reasons 12 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service if possible, so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

SEE PROPRIETARY NOTICE ON COVER PAGE

If a diagnostic is requested from the main frame, no power monitor tests are performed. At the completion of the diagnostic, the system will report the results via a DGN:PS output message for the appropriate unit. In addition to reporting any other STF conditions, the DGN:PS output message will contain a bit position 46 in the CATP field. This bit indicates that the power monitor tests were skipped, although the current text description of this bit does not identify it as such.

When such a diagnostic is performed, the communications technician should first clear any other problems indicated by CATP bits. The DGN:PS input message must then be used to execute the power monitor tests.

If the output is the result of an MCC request for diagnostic execution:

REQUEST ACCEPTED — Wait for final disposition message.

REQUEST DENIED - DISK ACCESS DUPLEX FAILED — Resolve the problem with diagnostic paging and try again.

REQUEST DENIED - FAC BUSY RETRY LATER — Try again later.

REQUEST DENIED - INVALID MEMBER NUMBER — Verify the member number (MEMN) and try again.

REQUEST DENIED - UNEQ UNIT — Verify the member number (MEMN) and try again.

5. REFERENCES

PIDENTs

MIRA

MUDG--; where -- represents all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=MUDG,UTYPE=1XLUPS - core store

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages

DGN:PS

STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:PS-ILL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:PS a ILLEGAL PHASE

2. REASON FOR OUTPUT

To identify that only illegal diagnostic phases have been requested on a partial diagnostic request for a program store (PS).

3. VARIABLE FIELD DEFINITIONS

a The member number of the program store being diagnosed (0-13).

4. ACTION TO BE TAKEN

Check PIDENT DCONTABL for PREFIX=MUDG, UTYPE=1XLUPS to obtain the list of valid phase numbers for core store.

5. REFERENCES

PIDENTs
DCONTABL
MUDG--, where -- = all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=MUDG, UTYPE=1XLUPS

Input Message
DGN:PS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:PS-NOT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:PS a NOT STARTED - b

2. REASON FOR OUTPUT

To report that the diagnostic request cannot be started. This usually occurs when the program store (PS) for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the program store being diagnosed (0-13).
- b The reason the diagnostic was not started.

4. ACTION TO BE TAKEN

If the specified PS cannot be removed from service because there is no spare, restore a spare unit to service. If b equals FROZEN, the frozen store must be conditionally restored before any other diagnostic request is attempted.

5. REFERENCES

PIDENT
PSFRPSPG

Input Messages
DGN:PS
RST:PS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:PS-TERM
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:PS a TERMINATED AT PH b ADR c AFTER TEST d [e]

2. REASON FOR OUTPUT

To report whenever the diagnostic terminates early for a program store. This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the program store being diagnosed (0-13).
- b The diagnostic phase in which the termination occurred.
- c The address in the diagnostic phase at which the termination occurred.
- d The last test executed before the termination occurred.
- e (FORCED). This optional field will be printed only if the termination occurred and UCL (unconditional) was specified on the DGN: input message. Termination in this way is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

Repair the faulty frame.

If a diagnostic is requested from the main frame, no power monitor tests are performed. At the completion of the diagnostic, the system will report the results via a DGN:PS output message for the appropriate unit. In addition to reporting any other STF conditions, the DGN:PS output message will contain a bit position 46 in the CATP field. This bit indicates that the power monitor tests were skipped, although the current text description of this bit does not identify it as such.

When such a diagnostic is performed, the user should first clear any other problems indicated by CATP bits. The DGN:PS input message must then be used to diagnose the power monitor unit.

5. REFERENCES

PIDENTs

MUDG--, where -- represents all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=MUDG,UTYPE=1XLUPS

Practice 254-280-040, *Diagnostic Language - DL-1*

SEE PROPRIETARY NOTICE ON COVER PAGE

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, *4ESSTM User's Manual*

Input Message
DGN:PS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:PS-TEST
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

```
DGN:PS a PH b c [d]
      [TEST   MISMATCH SUPPLEMENTARY DATA
        ee     ffffffff ggggggggg]
```

2. REASON FOR OUTPUT

To report whenever the diagnostic results are printed on a phase basis on a program store (PS), which occurs in the case of a partial diagnosis, a test failure, or whenever RAW was requested on the input message.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the program store being diagnosed (0-13).
- b The diagnostic phase number for which the results are reported.
- c The results of the diagnostic:
 - ATP — All tests passed.
 - CATP — All tests passed; however, some tests were skipped because of the unavailability of a system resource which was needed to perform the test.
 - NTR — No tests were executed.
 - STF — Some tests failed.
 - STF-BOF — Some tests failed and the test failure buffer overflowed.
- d An optional field that will appear only if the results are not ATP.

If CATP or NTR, this field identifies the reasons that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (40000000 00010000), tests were skipped for reasons 12 and 47.

The reasons are as follows:

Bit	Meaning
3	Program store bus (PSB) 0 is out of service (OOS).
4	PSB 1 is out of service.
12	Scan and signal distributor (SSD) is out of service.

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Bit	Meaning
15	Standby central control (CC) out of service.
21	Master control complex (MCC) override in effect (ON).
43	Power monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).
46	Frame request for PWRMON active (try again).
47	Unit not in normal state.

If STF, this field gives the number of test failures in addition to the reasons that the tests were skipped. For example, if d is (7,40000000 00010000), seven tests failed, plus tests were skipped for reasons 12 and 47.

If STF-B0F, the number of test failures is the number of test failures up to the point of buffer overflow.

The following appear only if the diagnostic was STF:

- e Test number of the failing test.
- f The bits that were in error; that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.
- g Supplementary data concerning the failing test.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service if possible, so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs

MUDG--, where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=MUDG,UTYPE=1XLUPS

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

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SEE PROPRIETARY NOTICE ON COVER PAGE

Input Message
DGN:PS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:PSB
WORK CENTER.. MOC
GENERIC 4E20 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

[1] DGN:PSB a b c [d]

[2] DGN:PSB a b

2. REASON FOR OUTPUT

There are two possible formats for this message:

Format [1] specifies both the diagnostic results and the termination mode at the conclusion of the diagnostic execution on a program store bus (PSB).

Format [2] reports acceptance or denial of a master control complex (MCC) request to execute diagnostics on a PSB. A message reporting the results of the diagnostic will print later.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit under diagnosis (0 or 1).
- b The termination mode for the diagnostic or the MCC request disposition:
- ABORTED — The diagnostic was abnormally stopped because of an interrupt, error in execution, or because of a STOP:MACLI input request.
- COMPLETED— The diagnostic completed normally.
- REQUEST ACCEPTED — The MCC request has been accepted and the maintenance job has been scheduled.
- REQUEST DENIED - DISK ACCESS DUPLEX FAILED — The MCC request has been denied because diagnostic paging was not available.
- REQUEST DENIED - FAC BUSY RETRY LATER — The MCC request has been denied because the job queue was full.
- REQUEST DENIED - INVALID MEMBER NUMBER — The MCC request has been denied because the member number (MEMN) was invalid.
- REQUEST DENIED - UNEQ UNIT — The MCC request has been denied because the member number was unequipped.
- STOPPED — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution.

SEE PROPRIETARY NOTICE ON COVER PAGE

c The results of the diagnostic (This field will appear at the conclusion of diagnostic execution.):

- ATP — All tests passed.
- CATP — All tests passed; however, some tests were skipped because of the unavailability of a system resource which was needed to perform the test.
- NTR — No tests were executed.
- STF — Some tests failed.
- STF-BOF — The number of failed tests has filled the buffer. Before any more tests are run, the system prints out the contents of the buffer and then clears it.

d An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (40000000 00010000), then tests were skipped for reasons 12 and 47.

The reasons are as follows:

Bit	Meaning
12	Scan and signal distributor (SSD) out of service (OOS).
13	SSD 0 is out of service.
14	SSD 1 is out of service.
15	Standby central control (CC) out of service.
23	Disable auto peripheral controller (PC) in effect.
36	Store helper not available.
43	Power monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).
46	Frame request for PWRMON active (try again).
47	Unit not in normal state.

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, d is (7,40000000, 00010000), seven tests failed, plus tests were skipped for reasons 12 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service if possible, so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

If a diagnostic is requested from the main frame, no power monitor tests are performed.

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At the completion of the diagnostic, the system will report the results via a DGN:PSB output message for the appropriate unit. In addition to reporting any other STF conditions, the DGN:PSB output message will contain a bit position 46 in the CATP field. This bit indicates that the power monitor tests were skipped, although the current text description of this bit does not identify it as such.

When such a diagnostic is performed, the user should first clear any other problems indicated by CATP bits. The DGN:PSB input message must then be used to diagnose the power monitor unit.

If the output is the result of an MCC request for diagnostic execution:

REQUEST ACCEPTED — Wait for final disposition message.

REQUEST DENIED - DISK ACCESS DUPLEX FAILED — Resolve the problem with diagnostic paging and try again.

REQUEST DENIED - FAC BUSY RETRY LATER — Try again later.

REQUEST DENIED - INVALID MEMBER NUMBER — Verify the member number (MEMN) and try again.

REQUEST DENIED - UNEQ UNIT — Verify the member number (MEMN) and try again.

5. REFERENCES

PIDENTs
MBDG01
MIRA

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

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Input Messages
DGN:PSB
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:PSB-ILL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:PSB a ILLEGAL PHASE

2. REASON FOR OUTPUT

To identify that only illegal diagnostic phases have been requested on a partial diagnostic request for a program store bus (PSB).

3. VARIABLE FIELD DEFINITIONS

a The member number of the program store bus being diagnosed (0 or 1).

4. ACTION TO BE TAKEN

Check PIDENT DCONTABL for PREFIX=MBDG,UTYPE=1XLUPSB to obtain the list of valid phase numbers.

5. REFERENCES

PIDENTs
DCONTABL
MBDG01 lists all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=MBDG01, UTYPE=1XLUCSB

Input Message
DGN:PSB

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:PSB-NOT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:PSB a NOT STARTED - b

2. REASON FOR OUTPUT

To report that the diagnostic request cannot be started. This usually occurs when the program store bus (PSB) for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the PSB being diagnosed (0 or 1).
- b The reason the diagnostic was not started.

4. ACTION TO BE TAKEN

If the specified program store bus cannot be removed from service because there is no spare, restore a spare unit to service. If b equals FROZEN, the frozen store must be conditionally restored before attempting any other diagnostic request.

5. REFERENCES

PIDENT
PSFRPSPG

Input Messages
DGN:PSB
RST:PSB

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:PSB-TERM
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:PSB a TERMINATED AT PH b ADR c AFTER TEST d [e]

2. REASON FOR OUTPUT

To report whenever the diagnostic terminates early for a program store bus (PSB). This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the PSB being diagnosed (0 or 1).
- b The diagnostic phase in which the termination occurred.
- c The address in the diagnostic phase at which the termination occurred.
- d The last test executed before the termination occurred.
- e (FORCED). This optional field will be printed only if the termination occurred and UCL (unconditional) was specified on the DGN: input message. Termination in this way is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

Repair the faulty frame. If further diagnostic execution is desired, specify UCL on the DGN: input message. This will inhibit all early terminations except those that are forced.

If a diagnostic is requested from the main frame, no power monitor tests are performed. At the completion of the diagnostic, the system will report the results via a DGN:PSB output message for the appropriate unit. In addition to reporting any other STF conditions, the DGN:PSB output message will contain a bit position 46 in the CATP field. This bit indicates that the power monitor tests were skipped, although the current text description of this bit does not identify it as such.

When such a diagnostic is performed, the user should first clear any other problems indicated by CATP bits. The DGN:PSB input message must then be used to diagnose the power monitor unit.

5. REFERENCES

PIDENT
MBDG01

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

PA-4A002-01, *4ESSTM User's Manual*

Input Message
DGN:PSB

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:PSB-TEST
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

```
DGN:PSB a PH b c [d]
[TEST   MISMATCH SUPPLEMENTARY DATA
 ee     ffffffff  ggggggggg]
```

2. REASON FOR OUTPUT

To report whenever the diagnostic results are printed on a phase basis on a program store bus (PSB), which occurs in the case of a partial diagnosis, a test failure, or whenever RAW was requested on the input message.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the program store bus being diagnosed (0 or 1).
- b The diagnostic phase number for which the results are reported.
- c The results of the diagnostic:
- ATP — All tests passed.
 - CATP — All tests passed; however, some tests were skipped because of the unavailability of a system resource which was needed to perform the test.
 - NTR — No tests were executed.
 - STF — Some tests failed.
 - STF-BOF — Some tests failed and the test failure buffer overflowed.
- d An optional field that will appear only if the results are not ATP.
- If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (40000000 00010000), then tests were skipped for reasons 12 and 47.

SEE PROPRIETARY NOTICE ON COVER PAGE

The reasons are as follows:

Bit	Meaning
12	Scan and signal distributor (SSD) out of service (OOS).
13	SSD 0 out of service.
14	SSD 1 out of service.
15	Standby central control (CC) out of service.
23	Disable auto peripheral controller (PC) in effect.
36	Store helper not available.
43	Power monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).
46	Frame request for PWRMON active (try again).
47	Unit not in normal state.

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, d is (7,40000000 00010000), seven tests failed, plus tests were skipped for reasons 12 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

The following appear only if the diagnostic was STF:

- e Test number of the failing test.
- f The bits that were in error; that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.
- g Supplementary data concerning the failing test.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service if possible, so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENT
MBDG01

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

PA-4A002-01, *4ESSTM User's Manual*

Input Message
DGN:PSB

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:PUB
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:PUB a:b c d e [f]

2. REASON FOR OUTPUT

To specify both the diagnostic results and the termination mode for a Peripheral Unit Bus (PUB). This message is printed at the conclusion of the diagnostic execution.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | The member number of the PUB under diagnosis. |
| b | The helper unit type. |
| c | The helper member number. |
| d | <p>The termination mode for the diagnostic:</p> <p>ABORTED — The diagnostic was abnormally stopped due to an interrupt, error in execution, or due to a STOP:MACLI input request.</p> <p>COMPLETED — The diagnostic completed normally.</p> <p>STOPPED — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution.</p> |
| e | <p>The results of the diagnostic:</p> <p>ATP — All tests passed.</p> <p>CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.</p> <p>NTR — No tests were executed.</p> <p>STF — Some tests failed.</p> <p>STF-BOF — The number of failed tests has filled the buffer. Before any more tests are run the system prints out the contents of the buffer and then clears it.</p> |
| f | <p>An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if f is (40000000 00001000), then tests were skipped for reasons 9 and 47.</p> |

SEE PROPRIETARY NOTICE ON COVER PAGE

The reasons are as follows:

BIT REASONS FOR TESTS SKIPPED

- | | |
|----|---|
| 0 | Peripheral Unit Bus (PUB) 0 out-of-service |
| 1 | PUB 1 out-of-service |
| 2 | Primary Signaling Processor (SP) pulse points out-of-service |
| 3 | Secondary SP pulse points out-of-service |
| 4 | Mate unit out-of-service |
| 5 | Power control switch in Request Out-Of-Service (ROS) position or diagnostic requested from power control switch |
| 6 | Central Controller (CC) 0 out-of-service |
| 7 | CC 1 out-of-service |
| 12 | Helper controller 0 out-of-service |
| 13 | Helper controller 1 out-of-service |
| 24 | SP scan / distribute points out-of-service |
| 25 | SP bus out-of-service |

IPUB

- | | |
|----|---|
| 26 | Interface Peripheral Unit Bus (IPUB) out-of-service |
| 27 | DTFRIGAL return failed |

If STF, this field gives the number of failing phases, number of failing tests, and trouble number. For example, (2,9,00101545) indicates 2 phases failed, 9 tests failed, and a trouble number of 00101545.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the Teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENT
PUDGPB--

Practice 234-180-020, *Diagnostic Language - DIAL*
Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Messages
DGN:PUB-RPT
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:PUB-ILL
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:PUB a:b c ILLEGAL PHASE

2. REASON FOR OUTPUT

To print whenever one or more illegal diagnostic phases have been requested on a partial diagnostic request for a peripheral unit bus (PUB). The illegal phase will not be executed; however, all valid phases will be run.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the PUB being diagnosed.
- b The helper unit type.
- c The helper member number.

4. ACTION TO BE TAKEN

Check the *Input Message Document* for the list of valid phase numbers.

5. REFERENCES

PIDENT
DCONTOLL

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:PUB-NOT
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:PUB a:b c NOT STARTED - d

2. REASON FOR OUTPUT

To print whenever the diagnostic request cannot be started for a peripheral unit bus (PUB). This is usually when the unit for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | The member number of the PUB being diagnosed. |
| b | The helper unit type. |
| c | The helper member number. |
| d | The reason the diagnostic was not started. |

4. ACTION TO BE TAKEN

If the specified unit cannot be removed from service because there is no spare, restore a spare unit to service.

5. REFERENCES

PIDENT
MCFWPEMO

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:PUB-PH
WORK CENTER.. MOC, TEC, TOC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

```
DGN:PUB a:b c PH d e [f]
[TEST    MISMATCH    SUPPLEMENTARY DATA
 g      hhhhhhhh      iiiiii jjjjjjj kkkkkkk lllllll mmmmmm
                          nnnnnn ooooooo ppppppp]
```

2. REASON FOR OUTPUT

To print whenever the diagnostic results are printed on a phase basis for a peripheral unit bus (PUB). This occurs in the case of a partial diagnosis, a test failure, or whenever RAW was requested on the input message.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | The member number of the PUB being diagnosed. |
| b | The helper unit type if specified. |
| c | The helper member number if specified. |
| d | The diagnostic phase number for which the results are reported. |
| e | The results of the diagnostic:
<div style="margin-left: 20px;">ATP — All tests passed.
CATP — All tests passed; however, some tests were skipped
 due to the unavailability of a system resource which
 was needed to perform the test.
NTR — No tests were executed.
STF — Some tests failed.
STF-BOF — Some tests failed and the raw data buffer overflowed.
 The phase has not been completed.</div> |
| f | An optional field that will appear only if the results were not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if f is (40000000 00001000), then tests were skipped for reasons 9 and 47. |

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The reasons are as follows:

BIT	REASONS FOR TESTS SKIPPED
0	Peripheral unit bus (PUB) 0 out-of-service
1	PUB 1 out-of-service
2	Primary signaling processor (SP) pulse points out-of-service
3	Secondary SP pulse points out-of-service
4	Mate unit out-of-service
5	Power control switch in request out-of-service (ROS) position or diagnostic requested from power control switch
6	Central controller (CC) 0 out-of-service
7	CC 1 out-of-service
11	PUB not duplex
12	Helper controller 0 out-of-service
13	Helper controller 1 out-of-service
24	SP scan / distribute points out-of-service
25	SP bus out-of-service
26	Interface peripheral unit bus (IPUB) out-of-service

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, **f** is (7,40000000 00001000), seven tests failed, plus tests were skipped for reasons 9 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

The following appear only if the diagnostic was STF.

g	The test number of the failing test.
h	The bits which were in error; that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.
i	RAW response from the unit.
j, k	Information concerning the test being executed. Details of j and k are specified in the diagnostic listing.
l	The address in the phase (or subroutine) of the test that failed.
m	Bits 14-0 contain information for the TLP programs. Bits 23-21 contain the count of the number of words of supplementary data that follows. Bits 20-18 contain the count of the number of words of DOLOOP data that follows. Bits 17-15 contain the count of the number of words of subroutine data that follows.
n	Supplementary data words. Variable n is repeated x times, where x is bits 23-21 of m . This data supplies information about the test being executed. The last supplementary data word specified is printed first.

SEE PROPRIETARY NOTICE ON COVER PAGE

- o DOLOOP data words. Variable o is repeated y times, where y is bits 20-18 of m. This data is the value of the DOLOOP variables at the time of the test failure. The value of the innermost DOLOOP is printed first.
- p Subroutine data words. Variable p is repeated z times, where z is bits 17-15 of m. This data is the address of the callsubs which led up to this point in the diagnostic. The address of the last callsub is printed first.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENT
PUDGPB--

Practice 234-180-020, *Diagnostic Language - DIAL*
Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:PUB-TERM
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:PUB a:b c TERMINATED AT PH d ADR e AFTER TEST f [g]

2. REASON FOR OUTPUT

To print whenever the diagnostic terminates early. This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | The member number of the unit being diagnosed. |
| b | The helper unit type, if specified. |
| c | The helper member number, if specified. |
| d | The diagnostic phase in which the termination occurred. |
| e | The address in the diagnostic phase (or subroutine) at which the termination occurred. |
| f | The last test executed before the termination occurred. |
| g | (FORCED). This optional field will be printed only if the termination occurred and unconditional (UCL) was specified on the DGN:PUB-RPT input message. The use of terminating in this way is restricted to cases where further diagnostic execution will cause system problems. |

4. ACTION TO BE TAKEN

Repair the faulty frame. If further diagnostic execution is desired, specify UCL on the DGN:PUB-RPT input message. This will inhibit all early terminations except those that are forced.

5. REFERENCES

PIDENT
PUDGPB--

Practice 234-180-020, *Diagnostic Language - DIAL*
Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Message
DGN:PUB-RPT

SEE PROPRIETARY NOTICE ON COVER PAGE

Output Message
DGN : PUB

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:SCLK
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:SCLK 0, a b c d [e]

2. REASON FOR OUTPUT

To specify both the diagnostics results and the termination mode. This message prints at the conclusion of the diagnostic execution.

3. VARIABLE FIELD DEFINITIONS

- a The type of subunit for which the diagnostic was requested.
- b The number of the subunit under diagnosis.
- c The termination mode for the diagnostic:
- ABORTED — The diagnostic was abnormally stopped due to an interrupt, error in execution, or due to a STOP:MACLI input request.
- COMPLETED — The diagnostic completed normally.
- STOPPED — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution.
- d The results of the diagnostic:
- ATP — All tests passed.
- CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.
- NTR — No tests were executed.
- STF — Some tests failed.
- STF-BOF — The number of failed tests has filled the buffer. Before any more tests are run the system prints out the contents of the buffer and then clears it.
- e An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if e is (40000000 00001000), then tests were skipped for reasons 9 and 47.

SEE PROPRIETARY NOTICE ON COVER PAGE

The reasons are as follows:

Bit	Meaning
0	Peripheral unit bus (PUB) 0 out-of-service
1	PUB 1 out-of-service
2	Primary signaling processor (SP) pulse points out-of-service
3	Secondary SP pulse points out-of-service
4	Mate unit out-of-service
5	Power control switch in request out-of-service (ROS) position or diagnostic requested from power control switch
11	PUB not duplex
19	NCLK MATE/CHAIN 2-3 out-of-service
20	DS1A T1 line unequipped
21	DS1B T1 line unequipped
22	BSRF unequipped
24	SP scan/distribute points out-of-service
25	SP bus out-of-service

If subunit type is IPUB:

BIT	REASONS FOR TESTS SKIPPED
6	Central controller (CC) 0 out of service
7	CC 1 out-of-service
12	Helper controller 0 out-of-service
13	Helper controller 1 out-of-service
26	Interface peripheral unit bus (IPUB) out-of-service
27	DTFRIGAL return failed

If STF, this field gives the number of failing phases, number of failing tests, trouble number. For example, (2,9,00101545) indicates 2 phases failed, 9 tests failed, and a trouble number of 00101545.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

5. REFERENCES

PIDENTs

PUDGSC-- if subunit type is CONTR

PUDGSC99 if subunit type is IPUB

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Messages
DGN:SCLK-NCSU
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:SCLK-ILL
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:SCLK 0,a b ILLEGAL PHASE

2. REASON FOR OUTPUT

To print whenever one or more illegal diagnostic phases have been requested on a partial diagnostic request. The illegal phase will not be executed; however, all valid phases will be run.

3. VARIABLE FIELD DEFINITIONS

a The subunit type being diagnosed.
b The submember number of the subunit being diagnosed.

4. ACTION TO BE TAKEN

Check the DGN:SCLK-NCSU input message for the list of valid phase numbers.

5. REFERENCES

PIDENT
DCONTOLL

Input Message
DGN:SCLK-NCSU

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:SCLK-NOT
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:SCLK 0,a b NOT STARTED - c

2. REASON FOR OUTPUT

To print whenever the diagnostic request cannot be started. This is usually when the unit for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

- a The subunit type being diagnosed.
- b The submember number of the subunit being diagnosed.
- c The reasons the diagnostic was not started.

4. ACTION TO BE TAKEN

If the specified unit cannot be removed from service because there is no spare, restore a spare unit to service.

5. REFERENCES

PIDENT
MCFWPEDO

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:SCLK-TERM
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:SCLK 0,a b TERMINATED AT PH c ADR d AFTER TEST e [f]

2. REASON FOR OUTPUT

To print whenever the diagnostic early terminates. This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

- a The subunit type being diagnosed.
- b The submember number of the subunit being diagnosed.
- c The diagnostic phase in which the termination occurred.
- d The address in the diagnostic phase (or subroutine) at which the termination occurred.
- e The last test executed before the termination occurred.
- f (FORCED). This optional field will be printed only if the termination occurred and unconditional (UCL) was specified on the DGN:SCLK-NCSU input message. The use of terminating in this way is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

Repair the faulty frame. If further diagnostic execution is desired, specify UCL on the DGN:SCLK-NCSU input message. This will inhibit all early termination except those that are forced.

5. REFERENCES

PIDENTs
PUDGSC--
PUDGSC99 if IPUB is specified

Practice 234-180-020, *Diagnostic Language - DIAL*
Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Message
DGN:SCLK-NCSU

SEE PROPRIETARY NOTICE ON COVER PAGE

Output Message
DGN:SCLK

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:SCLK-TEST
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

```
DGN:SCLK 0, a b PH c d [e]
[TEST    MISMATCH    SUPPLEMENTARY DATA
 f      gggggggg    hhhhhh iiiiii jjjjjjj kkkkkkk lllllll
                        mmmmmm nnnnnnn ooooooo]
```

2. REASON FOR OUTPUT

To print whenever the diagnostic results are printed on a phase basis. This occurs in the case of a partial diagnosis, a test failure, or whenever RAW was requested on the input message.

3. VARIABLE FIELD DEFINITIONS

- a The subunit type being diagnosed.
- b The submember number of the subunit being diagnosed.
- c The diagnostic phase number for which the results are reported.
- d The results of the diagnostic:
 - ATP — All tests passed.
 - CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.
 - NTR — No tests were executed.
 - STF — Some tests failed.
 - STF-BOF — Some tests failed and the raw data buffer overflowed. The phase has not been completed.
- e An optional field that will appear only if the results were not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if e is (40000000 00001000), then tests were skipped for reasons 9 and 47.

SEE PROPRIETARY NOTICE ON COVER PAGE

The reasons are as follows:

BIT	REASONS FOR TESTS SKIPPED
0	Peripheral unit bus (PUB) 0 out-of-service
1	PUB 1 out-of-service
2	Primary signaling processor (SP) pulse points out-of-service
3	Secondary SP pulse points out-of-service
4	Mate unit out-of-service
5	Power control switch in request out-of-service (ROS) position or diagnostic requested from power control switch
11	PUB not duplex
12	Network clock synchronization unit (NCSU) out-of-service
19	Network clock (NCLK) MATE/CHAIN 2-3 out-of-service
20	DS1A T1 line unequipped
21	DS1B T1 line unequipped
22	BSRF unequipped
24	SP scan/distribute points out-of-service
25	SP bus out-of-service
26	Interface peripheral unit bus (IPUB) out-of-service
28	Controller firmware in update mode

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, c is (7,40000000 00001000), seven tests failed, plus tests were skipped for reasons 9 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

If subunit type is BUS:

BIT	REASONS FOR TESTS SKIPPED
6	Central controller (CC) 0 out-of-service
7	CC 1 out-of-service
12	Helper controller 0 out-of-service
13	Helper controller 1 out-of-service

The following appears only if the diagnostic was STF :

f	The test number of the failing test.
g	The bits which were in error; that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.

SEE PROPRIETARY NOTICE ON COVER PAGE

h	RAW response from the unit.
i, j	Information concerning the test being executed. Details of j and k are specified in the diagnostic listing.
k	The address in the phase (or subroutine) of the test that failed.
l	Bits 14-0 contain information for the TLP programs. Bits 23-21 contain the count of the number of words of supplementary data that follows. Bits 20-18 contain the count of the number of words of DOLOOP data that follows. Bits 17-15 contain the count of the number of words of subroutine data that follows.
m	Supplementary data words. The m is repeated x times, where x is bits 23-21 of l. This data supplies information about the test being executed. The last supplementary data word specified is printed first.
n	DOLOOP data words. The n is repeated y times, where y is bits 20-18 of l. This data is the value of the DOLOOP variables at the time of the test failure. The value of the innermost DOLOOP is printed first.
o	Subroutine data words. The o is repeated z times, where z is bits 17-15 of l. This data is the address of the callsubs which led up to this point in the diagnostic. The address of the last callsub is printed first.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

5. REFERENCES

PIDENTs

PUDGSC-- if subunit type is CONTR (MT=1)

PUDGSC99 if subunit type is IPUB

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Message

DGN:SCLK-NCSU

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:SCS-ILL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:SCS a,b c:d e ILLEGAL PHASE

2. REASON FOR OUTPUT

To identify that one or more illegal diagnostic phases have been requested on a partial diagnostic request for a Service Circuit System (SCS). The illegal phase will not be executed; however, all valid phases will be run.

3. VARIABLE FIELD DEFINITIONS

a	Member of the SCS being diagnosed.
b	Subunit number of the subunit being diagnosed.
c	Submember number of the subunit being diagnosed.
d	Helper unit type.
e	Helper member number.

4. ACTION TO BE TAKEN

Check the DGN:SCS input message for the list of valid phase numbers.

5. REFERENCES

PIDENT
DCONTOLL

Input Message
DGN:SCS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:SCS-MIS
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] DGN:SCS a,b c:d e PH f g [h]
[TEST MISMATCH SUPPLEMENTARY DATA
i j j j j j j j k k k k k k k k l l l l l l l l m m m m m m m m n n n n n n n n o o o o o o o o
p p p p p p p p q q q q q q q q r r r r r r r r]
- [2] DGN:SCS a, CONTR s PH f g [h] MSG STARTED
[TEST MISMATCH SUPPLEMENTARY DATA
i j j j j j j j 00t t t t t t u u u u v v v v v v v v v v v v v v w w w w w w w w x y z A A A A A A
00B C C C C C 00D D D D D D 00E E E E E E 00F F F F F F 00G G G G G G
00H H H H H H 00I I I I I I]
- [3] DGN:SCS a, SCU J PH f g [h] MSG STARTED
[TEST MISMATCH SUPPLEMENTARY DATA
i 00000001 00K K K K K K L L L L M M M M N N N N 0000 P P P P P P P P Q Q Q Q Q Q Q Q
00R R R R R R 00S S S S S S 00T T T T T T 00U U U U U U 00V V V V V V
00W W W W W W 00X X X X X X]
- [4] DGN:SCS a, SCU J PH f g [h] MSG STARTED
[TEST MISMATCH SUPPLEMENTARY DATA
i 00000002 00Y Y Y Y Y Y L L L L M M M M N N N N 0000 P P P P P P P P Q Q Q Q Q Q Q Q
00Z Z Z Z Z Z 00a¹..a¹ 00b¹..b¹ 00c¹..c¹ 00d¹..d¹
00e¹..e¹ 00f¹..f¹

2. REASON FOR OUTPUT

To print out diagnostic results on a phase basis for a Service Circuit System (SCS). This occurs in the case of a partial diagnosis, a test failure, or whenever RAW was requested on the input message.

3. VARIABLE FIELD DEFINITIONS

- a Member number of the SCS being diagnosed.
- b Subunit type being diagnosed.
- c Submember number of the subunit being diagnosed.
- d Helper unit type, if specified.
- e Helper member number, if specified.
- f Diagnostic phase number for which the results are reported.

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- g Results of the diagnostic:
- ATP — All tests passed.
 - CATP — All tests passed; however, some tests were skipped because of the unavailability of a system resource which was needed to perform the test.
 - NTR — No tests were executed.
 - STF — Some tests failed.
 - STF-BOF — Some tests failed and the raw data buffer overflowed. Phase has not been completed.
- h An optional field that will appear only if the results were not ATP.
- If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if h is (00000001 00001000) then tests were skipped for reasons 9 and 24. The reasons are listed in Table 1.
- If subunit type is BUS, see DGN:PUB output message for CATP reasons.
- If STF, this field gives the number of test failures, in addition to the reasons that tests were skipped. For example, if h is (7,00000001 00001000), seven tests failed, plus tests were skipped for reasons 9 and 24.
- If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.
- The following appear only if the diagnostic was STF:
- i Test number of the failing test.
 - j Bits which were in error, that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.
 - k RAW response from the unit or firmware diagnostic RAW response.
 - l, m Information concerning the test being executed. Details of l and m are specified in the diagnostic listing.
 - n Address in the phase (or subroutine) of the test that failed.
 - o Bits 14-0 contain information for the TLP programs. Bits 23-21 contain the count of the number of words of supplementary data that follows. Bits 20-18 contain the count of the number of words of DOLOOP data that follows. Bits 17-15 contain the count of the number of words of subroutine data that follows.
 - p Supplementary data words. p is repeated x times, where x is bits 23-21 of o. This data supplies information about the test being executed. The last supplementary data word specified is printed first.

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- q DOLOOP data words. q is repeated y times, where y is bits 20-18 of o. This data is the value of the DOLOOP variables at the time of the test failure. The value of the innermost DOLOOP is printed first.
- r Subroutine data words. r is repeated z times, where z is bits 17-15 of o. This data is the address of the callsubs which led up to this point in the diagnostic. The address of the last callsub is printed first.
- s Controller number (0 or 1).
- t The least significant 16 bits represent the actual octal data from the half word of LR57, where a mismatch with expected data occurred. The expected data must be derived from the actual and mismatched data fields.
- u PU address bus bits of the bus order sent to the SCC (12 bits).
- v PU write bus bits of the order sent to the SCC (36 bits). The upper 7 bits are the opcode and the remaining 29 bits are the data for the order. For SCC PUMACRO orders this includes the PUMACRO macro ID, a data expected flag (write only vs. a write/read order), a sub-opcode, and the test group number.
- w DIAL address of the instruction that failed.
- x Number of words of supplementary data.
- y Number of words of do-loop data. Not defined by SCC code (used only by 1A).
- z Number of words of subroutine data. Not defined by SCC code (used only by 1A).
- A Trouble Location Procedure (TLP) data. Not defined by SCC code (used only by 1A).
- B Indicates in which half word of the SCC 32 bit word the mismatched data occurred. (0 least significant, 1 most significant)
- C SCC microprogram address of the previous function called, i.e., the first function on the stack or the function that called DGFAIL.
- D SCC microprogram address of the second function on the stack, i.e., the address of a subroutine call which then called DGFAIL.
- E The 16 bit field of supplementary data written to the least significant half word of LR58.
- NOTE:** The upper 8 bits of this and the following octal words will always be zero, i.e., only the lower 16 bits are used.
- F The 16 bit field of supplementary data written to the most significant half word of LR59.
- NOTE:** A 32 data word in LR59 is split between the lower 16 bits of two 24 bit supplementary data words.

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G	The 16 bit field of supplementary data written to the least significant half word of LR59.
H	The 16 bit field of supplementary data written to the most significant half word of LR60.
I	The 16 bit field of supplementary data written to the least significant half word of LR60.
J	Service Circuit Unit (SCU) number.
K	Register 0.
L	KCODE (SCU number, etc.).
M	Opcode.
N	Sub-opcode.
O	Test group number.
P	The 1A table ram location.
Q	Miscellaneous 1A control bits.
R	First popped value from the stack (address).
S	Second popped value from the stack (address).
T	Register 1.
U	Register 2.
V	Register 3.
W	Register 4.
X	Register 5.
Y	Register 10.
Z	Second popped value from the stack (address).
a ¹	SCU status register.
b ¹	Register 11.
c ¹	Register 12.
d ¹	Register 13.
e ¹	Register 14.
f ¹	Register 15.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs

PUDGSS - if subunit type is CONTR

PUDGSV - if subunit type is SCU

PUDGSS99 - if subunit type is IPUB

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Message

DGN:SCS

Output Message

DGN:PUB

SEE PROPRIETARY NOTICE ON COVER PAGE

TABLE 1. SCS DIAGNOSTIC CATP CODES

Memory Word: DG1CATP

BIT	SYMBOL	FUNCTION
0	DG4CATPPUB0	Peripheral Unit Bus (PUB) 0 out-of-service
1	DG4CATPPUB1	PUB 1 out-of-service
2	DG4CATPSP0	Base Signaling Processor (SP) frame out-of-service
3	DG4CATPSP1	Duplicated SP frame out-of-service
4	DG4CATPMATE	Mate out-of-service
5	DG4CATPROS	Power converter in Request Out-Of-Service (ROS) state
6	SSNCATPNOPMONTST	Power monitor tests skipped on manual ROS test
9	DG4CATPMI	Other frame responding to this frame's member interrogation
10	DG4CATPGI	Other frame responding to this frame's group interrogation
11	DG4CATPPUBD	PUB not duplex
12	SS4CATPAPUF	Other frame responding to Autonomous Peripheral Unit Failure (APUF) clock interrogation
13	SS4CATPAPUT	Other frame responding to Autonomous Peripheral Unit Trouble (APUT) clock interrogation
15	SS4CATPAPUB	Other frame responding to Autonomous Peripheral Unit Bus (APUB) clock interrogation
16	SS4CATPPHP	Some other frame responding to PHP polling
17	SS4CATPPLP	Some other frame responding to PLP polling
18	SS4CATPHDUNEQ	HDU is not equipped
19	SS4CATPEBLNKNTST	Unused EBI link tests skipped
20	SS4CATPPDG	Some other frame responding to PDG polling
21	SS4CATPPSZ	Some other frame responding to PSZ polling
22	SS4CATPC0OS	Controller 0 out-of-service
23	SS4CATPC1OS	Controller 1 out-of-service
26		Interface Peripheral Unit Bus (IPUB) out-of-service

SEE PROPRIETARY NOTICE ON COVER PAGE

Memory Word: DG1CATP2

BIT	SYMBOL	FUNCTION
0	DG4CATPSPS	Signaling processor (SP) scan / distribute points out of service
1	DG4CATPSPB	SP bus out of service
2	SS4CATPSCUNOPWR	SCU powered down

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:SCS-NOT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:SCS a,b c:d e NOT STARTED - f

2. REASON FOR OUTPUT

To report that the diagnostic request cannot be started. This is usually when the Service Circuit System (SCS) for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | Member number of the SCS being diagnosed. |
| b | Subunit type being diagnosed. |
| c | Submember number of the subunit being diagnosed. |
| d | Helper unit type. |
| e | Helper member number. |
| f | Reason the diagnostic was not started. |

4. ACTION TO BE TAKEN

If the specified SCS cannot be removed from service because there is no spare, restore a spare unit to service.

5. REFERENCES

PIDENTs

PUDGSS - if subunit type is CONTR

PUDGSV - if subunit type is SCU

PUDGSS99 - if subunit type is IPUB

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Messages

DGN:SCS

RST:SCS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:SCS-PUB
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:SCS a b c:PUB d e f [g]

2. REASON FOR OUTPUT

To specify both the diagnostic results and the termination mode at the conclusion of the diagnostic execution on a service circuit system (SCS).

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | Member number of the SCS under diagnosis. |
| b | Type of subunit for which the diagnostic was requested. |
| c | Number of the subunit under diagnosis. |
| d | Helper peripheral unit bus (PUB) that was requested. |
| e | Termination mode for the diagnostic:

ABORTED — Diagnostic abnormally stopped because of an interrupt, error in execution, or a STOP:MACLI input request.

COMPLETED — Diagnostic completed normally.

STOPPED — Diagnostic terminated under program control since further testing would not improve diagnostic resolution. |
| f | The results of the diagnostic:

ATP — All tests passed.

CATP — All tests passed; however, some tests were skipped because of the unavailability of a system resource which was needed to perform the test.

NTR — No tests were executed.

STF — Some tests failed.

STF-BOF — The number of failed tests has filled the buffer; before any more tests are run the system prints out the contents of the buffer and then clears it. |
| g | An optional field that will appear only if the results are not ATP. |

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If CATP or NTR, this field identifies the reason that the tests were skipped. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if g is (00000001 00001000), tests were skipped for reasons 9 and 24. A complete list of CATP bits and their description is contained in the DGN:SCS-MIS output message.

If STF, this field gives the number of failing phases, number of failing tests, trouble number. For example, (2,9, 00101545) indicates 2 phases failed, 9 tests failed, and a trouble number of 0010545.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

If a diagnostic is requested from the main frame, no power monitor tests are performed. At the completion of the diagnostic, the system will report the results via a DGN:SCS-PUB output message for the appropriate unit. In addition to reporting any other STF conditions, the DGN:SCS-PUB output message will contain a bit position 6 in the CATP field. This bit indicates that the power monitor tests were skipped.

When such a diagnostic is performed, the user should first clear any other problems indicated by CATP bits. The DGN:SCS input message must then be used to diagnose the power monitor unit.

5. REFERENCES

PIDENTs

PUDGSS - if subunit type is CONTR

PUDGSV - if subunit type is SCU

PUDGSS99 - if subunit type is IPUB

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Messages

DGN:SCS

STOP:MACLI

Output Message

DGN:SCS-MIS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:SCS-TERM
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:SCS a,b c:d e TERMINATED AT PH f ADR g AFTER TEST h [i]

2. REASON FOR OUTPUT

To report that the diagnostic terminates early for the service circuit system (SCS). This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | Member number of the SCS being diagnosed. |
| b | Subunit type being diagnosed. |
| c | Submember number of the subunit being diagnosed. |
| d | Helper unit type if specified. |
| e | Helper member number if specified. |
| f | Diagnostic phase in which the termination occurred. |
| g | Address in the diagnostic phase (or subroutine) at which the termination occurred. |
| h | Last test executed before the termination occurred. |
| i | (FORCED). This optional field will be printed only if the termination occurred and unconditional (UCL) was specified on the DGN:SCS input message. Termination in this way is restricted to cases where further diagnostic execution will cause system problems. |

4. ACTION TO BE TAKEN

Repair faulty frame. If further diagnostic execution is desired, specify UCL on the DGN:SCS input message. This will inhibit all early terminations except those that are forced.

If a diagnostic is requested from the main frame, no power monitor tests are performed. At the completion of the diagnostic, the system will report the results via a DGN:SCS-PUB output message for the appropriate unit. In addition to reporting any other STF conditions, the DGN:SCS-PUB output message will contain a bit position 6 in the CATP field. This bit indicates that the power monitor tests were skipped.

When such a diagnostic is performed, the user should first clear any other problems indicated by CATP bits. The DGN:SCS input message must then be used to diagnose the power monitor unit.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs

PUDGSS - if subunit type is CONTR

PUDGSV - if subunit type is SCU

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Message

DGN:SCS

Output Message

DGN:SCS-PUB

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:SP-ILL
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:SP a,b c:d e ILLEGAL PHASE

2. REASON FOR OUTPUT

To print whenever one or more illegal diagnostic phases have been requested on a partial diagnostic request for a signaling processor (SP). The illegal phase will not be executed; however, all valid phases will be run.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the SP being diagnosed.
b	The subunit type being diagnosed.
c	The submember number of the subunit being diagnosed.
d	The helper unit type.
e	The helper member number.

4. ACTION TO BE TAKEN

Check the DGN:SP input message for the list of valid phase numbers.

5. REFERENCES

PIDENT
DCONTOLL

Input Message
DGN:SP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:SP-NOT
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:SP a,b c:d e NOT STARTED - f

2. REASON FOR OUTPUT

To print whenever the diagnostic request cannot be started for a signaling processor (SP). This is usually when the unit for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | The member number of the SP being diagnosed. |
| b | The subunit type being diagnosed. |
| c | The submember number of the subunit being diagnosed. |
| d | The helper unit type. |
| e | The helper member number. |
| f | The reason the diagnostic was not started. |

4. ACTION TO BE TAKEN

If the specified unit cannot be removed from service because there is no spare, restore a spare unit to service.

5. REFERENCES

PIDENT
MCFWPEMO

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:SP-PUB
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:SP a b c:PUB d e f g

2. REASON FOR OUTPUT

To specify both the diagnostics results and the termination mode for a signaling processor (SP). This message is printed at the conclusion of the diagnostic execution.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the SP under diagnosis.
- b The type of subunit for which the diagnostic was requested.
- c The number of the subunit under diagnosis.
- d The helper peripheral unit bus (PUB) that was requested.
- e The termination mode for the diagnostic:
- ABORTED — The diagnostic was abnormally stopped due to an interrupt, error in execution, or due to a STOP:MACLI input request.
- COMPLETED — The diagnostic completed normally.
- STOPPED — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution.
- f The results of the diagnostic:
- ATP — All tests passed.
- CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.
- NTR — No tests were executed.
- STF — Some tests failed.
- STF-BOF — The number of failed tests has filled the buffer. Before any more tests are run the system prints out the contents of the buffer and then clears it.
- g An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped.

SEE PROPRIETARY NOTICE ON COVER PAGE

The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if g is (40000000 00001000), then tests were skipped for reasons 9 and 45. The reasons are as follows:

BIT	REASONS FOR TESTS SKIPPED
0	Peripheral unit bus (PUB) 0 out-of-service
1	PUB 1 out-of-service
2	Primary signaling processor (SP) pulse points out-of-service
3	Secondary SP pulse points out-of-service
4	Mate unit out-of-service
5	Power control switch in request out-of-service (ROS) position or diagnostic requested from power control switch
6	Central controller (CC) 0 out-of-service
7	CC 1 out-of-service
8	CI has other units responding
9	MI has other units responding
10	GI has other units responding
11	PUB not duplex
12	Low buffer poll has other units responding
13	Digit buffer poll has other units responding
14	High buffer poll has other units responding
15	Seizure buffer poll has other units responding
16	GI,CI,MI has other units responding on bus 0
17	GI,CI,MI has other units responding on bus 1
18	SP bus circuit out-of-service
19	DT out-of-service
20	DT absolute alarms
21	Patch overwrites in system
24	SP scan / distribute points out-of-service
25	SP bus out-of-service
26	Interface peripheral unit bus (IPUB) out-of-service

If subunit type is BUS:

BIT	REASONS FOR TESTS SKIPPED
6	CC 0 out-of-service
7	CC 1 out-of-service
12	Helper controller 0 out-of-service
13	Helper controller 1 out-of-service

If STF, this field gives the number of failing phases, number of failing tests, trouble number. For example, (2,9,00101545) indicates 2 phases failed, 9 tests failed, and a trouble number of 00101545.

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs

- PUDGSP-- if subunit type is CONTR (MT=1)
- PUDGDP-- if subunit type is CONTR and unit is an sp2 (MT=2)
- PUDGSP-- if subunit type is CONTR and unit is a CRMTX (MT=4)
- PUDGSP-- if subunit type is IPUB

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Messages

DGN:SP
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:SP-TERM
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:SP a,b c:d e TERMINATED AT PH f ADR g AFTER TEST h [i]

2. REASON FOR OUTPUT

To print whenever the diagnostic terminates early for a signaling processor (SP). This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | The member number of the SP being diagnosed. |
| b | The subunit type being diagnosed. |
| c | The submember number of the subunit being diagnosed. |
| d | The helper unit type, if specified. |
| e | The helper member number, if specified. |
| f | The diagnostic phase in which the termination occurred. |
| g | The address in the diagnostic phase (or subroutine) at which the termination occurred. |
| h | The last test executed before the termination occurred. |
| i | (FORCED). This optional field will be printed only if the termination occurred and unconditional (UCL) was specified on the DGN:SP input message. The use of terminating in this way is restricted to cases where further diagnostic execution will cause system problems. |

4. ACTION TO BE TAKEN

Repair the faulty frame. If further diagnostic execution is desired, specify UCL on the DGN:SP input message. This will inhibit all early terminations except those that are forced.

5. REFERENCES

PIDENTs
PUDGSP-- if subunit type is CONTR (MT=1)
PUDGDP-- if subunit type is CONTR and unit is an sp2 (MT=2)
PUDGSP-- if subunit type is CONTR and unit is an CRMTX (MT=4)
PUDGSP-- if subunit type is IPUB

SEE PROPRIETARY NOTICE ON COVER PAGE

Practice 234-180-020, *Diagnostic Language - DIAL*
Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Message
DGN:SP

Output Message
DGN:SP-PUB

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:SP-TEST
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

```
DGN:SP a,b c:d e f g [h]
[TEST    MISMATCH    SUPPLEMENTARY DATA
 i      jjjjjjjj      kkkkkkk llllll mmmmmmm nnnnnnn ooooooo
 ppppppp qqqqqqq rrrrrrr]
```

2. REASON FOR OUTPUT

To print whenever the diagnostic results are printed on a phase basis. This occurs in the case of a partial diagnosis, a test failure, or whenever RAW was requested on the input message.

3. VARIABLE FIELD DEFINITIONS

- | | | | | | | | | | | | |
|---------|--|-----|---------------------|------|---|-----|---------------------------|-----|----------------------|---------|---|
| a | The member number of the unit being diagnosed. | | | | | | | | | | |
| b | The subunit type being diagnosed. | | | | | | | | | | |
| c | The submember number of the subunit being diagnosed. | | | | | | | | | | |
| d | The helper unit type, if specified. | | | | | | | | | | |
| e | The helper member number, if specified. | | | | | | | | | | |
| f | The diagnostic phase number for which the results are reported. | | | | | | | | | | |
| g | <p>The results of the diagnostic:</p> <table border="0"> <tr> <td>ATP</td> <td>— All tests passed.</td> </tr> <tr> <td>CATP</td> <td>— All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.</td> </tr> <tr> <td>NTR</td> <td>— No tests were executed.</td> </tr> <tr> <td>STF</td> <td>— Some tests failed.</td> </tr> <tr> <td>STF-BOF</td> <td>— Some tests failed and the raw data buffer overflowed. The phase has not been completed.</td> </tr> </table> | ATP | — All tests passed. | CATP | — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test. | NTR | — No tests were executed. | STF | — Some tests failed. | STF-BOF | — Some tests failed and the raw data buffer overflowed. The phase has not been completed. |
| ATP | — All tests passed. | | | | | | | | | | |
| CATP | — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test. | | | | | | | | | | |
| NTR | — No tests were executed. | | | | | | | | | | |
| STF | — Some tests failed. | | | | | | | | | | |
| STF-BOF | — Some tests failed and the raw data buffer overflowed. The phase has not been completed. | | | | | | | | | | |
| h | <p>An optional field that will appear only if the results were not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if f is (40000000 00001000), then tests were skipped for reasons 9 and 47.</p> | | | | | | | | | | |

SEE PROPRIETARY NOTICE ON COVER PAGE

The reasons are as follows:

BIT	REASONS FOR TESTS SKIPPED
0	Peripheral unit bus (PUB) 0 out-of-service
1	PUB 1 out-of-service
2	Primary signaling processor (SP) pulse points out-of-service
3	Secondary SP pulse points out-of-service
4	Mate unit out-of-service
5	Power control switch in request out-of-service (ROS) position or diagnostic requested from power control switch
6	Central controller (CC) 0 out-of-service
7	CC 1 out-of-service
8	CI has other units responding
9	MI has other units responding
10	GI has other units responding
11	PUB not duplex
12	Low buffer poll has other units responding
13	Digit buffer poll has other units responding
14	High buffer poll has other units responding
16	GI,CI,MI has other units responding
17	GI,CI,MI has other units responding on BUS 1
18	SP bus circuit out-of-service
19	DT out-of-service
20	DT absolute alarms
21	Patch overwrites in system
24	SP scan / distribute points out-of-service
25	SP bus out-of-service
26	Interface peripheral unit bus (IPUB) out-of-service

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, **f** is (7,40000000 00001000), seven tests failed, plus tests were skipped for reasons 9 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

If subunit type is BUS:

BIT	REASONS FOR TESTS SKIPPED
6	CC 0 out-of-service
7	CC 1 out-of-service
12	Helper controller 0 out-of-service
13	Helper controller 1 out-of-service

SEE PROPRIETARY NOTICE ON COVER PAGE

The following appear only if the diagnostic was STF :

i	The test number of the failing test.
j	The bits which were in error; that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.
k	RAW response from the unit.
l, m	Information concerning the test being executed. Details of l and m are specified in the diagnostic listing.
n	The address in the phase (or subroutine) of the test that failed.
o	Bits 14-0 contain information for the TLP programs. Bits 23-21 contain the count of the number of words of supplementary data that follows. Bits 20-18 contain the count of the number of words of DOLOOP data that follows. Bits 17-15 contain the count of the number of words of subroutine data that follows.
p	Supplementary data words. Variable p is repeated x times, where x is bits 23-21 of o. This data supplies information about the test being executed. The last supplementary data word specified is printed first.
q	DOLOOP data words. Variable q is repeated y times, where y is bits 20-18 of o. This data is the value of the DOLOOP variables at the time of the test failure. The value of the innermost DOLOOP is printed first.
r	Subroutine data words. Variable r is repeated z times, where z is bits 17-15 of o. This data is the address of the callsubs which led up to this point in the diagnostic. The address of the last callsub is printed first.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs

- PUDGSP-- if subunit type is CONTR (MT=1)
- PUDGDP-- if subunit type is CONTR and unit is an sp2 (MT=2)
- PUDGSP-- if subunit type is CONTR and unit is a CRMTX (MT=4)
- PUDGSP-- if subunit type is IPUB

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:SSD
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:SSD a b c [d]

2. REASON FOR OUTPUT

To specify both the diagnostic results and the termination mode. This output message is printed at the conclusion of the diagnostic execution for a scan and signal distributor (SSD).

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit under diagnosis (0 or 1).
- b The termination mode for the diagnostic:
- ABORTED — The diagnostic was abnormally stopped due to an interrupt, error in execution, or due to a STOP:MACLI input request.
- COMPLETED — The diagnostic completed normally.
- STOPPED — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution.
- c The results of the diagnostic:
- ATP — All tests passed.
- CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.
- NTR — No tests were executed.
- STF — Some tests failed.
- d An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (40000000 00010000), then tests were skipped for reasons 12 and 47.

SEE PROPRIETARY NOTICE ON COVER PAGE

The reasons are as follows:

Bit	Meaning
12	SSD out of service (OOS).
43	Power monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).
46	Frame request for PWRMON active (try again).
47	Unit not in normal state.

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, if d is (7,40000000 00010000), seven tests failed, plus tests were skipped for reasons 12 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service if possible, so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs

PDDG --, where --= all valid phase members

listed in PIDENT DCONTABL for PREFIX=PDDG, UTYPE=1XLUSSD

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages

STOP:MACLI

DGN:SSD

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:SSD-ILL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:SSD a ILLEGAL PHASE

2. REASON FOR OUTPUT

To print whenever only illegal diagnostic phases have been requested on a partial diagnostic requested for a scan and signal distributor (SSD).

3. VARIABLE FIELD DEFINITIONS

a The member number of the unit being diagnosed (0 or 1).

4. ACTION TO BE TAKEN

Check PIDENT DCONTABL for PREFIX=PDDG,UTYPE=1XLUSSD to obtain the list of valid phase numbers.

5. REFERENCES

PIDENTs
DCONTABL
PDDG--, where -- = all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=PDDG, UTYPE=1XLUSSD

Input Message
DGN:SSD

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:SSD-NOT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:SSD a NOT STARTED - b

2. REASON FOR OUTPUT

To print whenever the diagnostic request cannot be started for a scan and signal distributor (SSD). This is usually whenever the unit for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The reason the diagnostic was not started.

4. ACTION TO BE TAKEN

If the specified unit cannot be removed from service because there is no spare, restore a spare unit to service. If b equals FROZEN, bus status indicates a store is frozen. That store must be conditionally restored to service.

5. REFERENCES

PIDENT
SDFRTEST

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:SSD-TERM
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:SSD a TERMINATED AT PH b ADR c AFTER TEST d [e]

2. REASON FOR OUTPUT

To print whenever the diagnostic terminates early for a scan and signal distributor (SSD). This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The diagnostic phase in which the termination occurred.
- c The address in the diagnostic phase at which the termination occurred.
- d The last test executed before the termination occurred.
- e (FORCED). This optional field will be printed only if the termination occurred and UCL (unconditional) was specified on the DGN input message. The use of terminating in this way is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service if possible, so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs

PDDG --, where --= all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=PDDG, UTYPE=1XLUSSD

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM User's Manual

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Message
DGN:SSD

Output Message
DGN:SSD

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:SSD-TEST
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

```
DGN:SSD a PH b c [d]
[TEST    MISMATCH  SUPPLEMENTARY DATA
 ee      ffffffff  ggggggggg]
```

2. REASON FOR OUTPUT

To print whenever the diagnostic results are printed on a phase basis for a scan and signal distributor (SSD). This occurs in the case of a partial diagnosis, a test failure, or whenever RAW was requested on the input message.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The diagnostic phase number for which the results are reported.
- c The results of the diagnostic:
- ATP — All tests passed.
 - CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.
 - NTR — No tests were executed.
 - STF — Some tests failed.
 - STF-BOF — Some tests failed and the test failure buffer overflowed.
- d An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (40000000 00010000), then tests were skipped for reasons 12 and 47.

The reasons are as follows:

Bit	Meaning
12	SSD out of service (OOS).
43	Power monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).

SEE PROPRIETARY NOTICE ON COVER PAGE

Bit	Meaning
46	Frame request for PWRMON active (try again).
47	Unit not in normal state.

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, if d is (7,40000000 00010000), seven tests failed, plus tests were skipped for reasons 12 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

The following appear only if the diagnostic was STF.

- e Test number of the failing test.
- f The bits that were in error; that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.
- g Supplementary data concerning the failing test.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service if possible, so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs

PDDG --, where --= all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=PDDG, UTYPE=1XLUSSD

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages

STOP:MACLI

DGN:SSD

SEE PROPRIETARY NOTICE ON COVER PAGE

Output Message
DGN:SSD

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:TGR-ILL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:TGR a,b c:d e ILLEGAL PHASE

2. REASON FOR OUTPUT

To print whenever one or more illegal diagnostic phases have been requested on a partial diagnostic request for a terminal grouping (TGR) frame. The illegal phase will not be executed; however, all valid phases will be run.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the TGR frame being diagnosed.
b	The subunit type being diagnosed.
c	The submember number of the subunit being diagnosed.
d	The helper unit type.
e	The helper member number.

4. ACTION TO BE TAKEN

Check the DGN:TGR input message for the list of valid phase numbers.

5. REFERENCES

PIDENT
DCONTOLL

Input Message
DGN:TGR

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:TGR-INPROG
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:TGR a,b c,PH 16 IN PROGRESS BIT ERROR COUNT = d,
WORD ERROR COUNT = e

2. REASON FOR OUTPUT

To print when phase 16 is in progress and bit error counts and word error counts are available for a terminal grouping (TGR) frame.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the TGR frame being diagnosed.
b	The subunit type being diagnosed.
c	The submember number of the subunit being diagnosed.
d	Bit error count.
e	Word error count.

4. ACTION TO BE TAKEN

Check the bit error and word error count.

5. REFERENCES

PIDENT
PUDGTE16

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:TGR-NOT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:TGR a,b c:d e NOT STARTED - f

2. REASON FOR OUTPUT

To print whenever the diagnostic request cannot be started for a terminal grouping (TGR) frame. This is usually when the unit for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the TGR frame being diagnosed.
b	The subunit type being diagnosed.
c	The submember number of the subunit being diagnosed.
d	The helper unit type.
e	The helper member number.
f	The reason the diagnostic was not started.

4. ACTION TO BE TAKEN

If the specified unit cannot be removed from service because there is no spare, restore a spare unit to service.

5. REFERENCES

PIDENT
MCFWPEMO

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:TGR-PH
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

```
DGN:TGR a,b c:d e PH f g [h]
[TEST      MISMATCH      SUPPLEMENTARY DATA
 i      jjjjjjjj      kkkkkkk lllllll mmmmmmm nnnnnnn ooooooo
 ppppppp qqqqqqq rrrrrrr]
```

2. REASON FOR OUTPUT

To print whenever the diagnostic results are printed on a phase basis for a terminal grouping (TGR) frame. This occurs in the case of a partial diagnosis, a test failure, or whenever RAW was requested on the input message.

3. VARIABLE FIELD DEFINITIONS

- | | | | | | | | | | | | |
|---------|--|-----|---------------------|------|---|-----|---------------------------|-----|----------------------|---------|---|
| a | The member number of the TGR frame being diagnosed. | | | | | | | | | | |
| b | The subunit type being diagnosed. | | | | | | | | | | |
| c | The submember number of the subunit being diagnosed. | | | | | | | | | | |
| d | The helper unit type if specified. | | | | | | | | | | |
| e | The helper member number if specified. | | | | | | | | | | |
| f | The diagnostic phase number for which the results are reported. | | | | | | | | | | |
| g | The results of the diagnostic: <table border="0" style="margin-left: 40px;"> <tr> <td>ATP</td> <td>— All tests passed.</td> </tr> <tr> <td>CATP</td> <td>— All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.</td> </tr> <tr> <td>NTR</td> <td>— No tests were executed.</td> </tr> <tr> <td>STF</td> <td>— Some tests failed.</td> </tr> <tr> <td>STF-BOF</td> <td>— Some tests failed and the raw data buffer overflowed. The phase has not been completed.</td> </tr> </table> | ATP | — All tests passed. | CATP | — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test. | NTR | — No tests were executed. | STF | — Some tests failed. | STF-BOF | — Some tests failed and the raw data buffer overflowed. The phase has not been completed. |
| ATP | — All tests passed. | | | | | | | | | | |
| CATP | — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test. | | | | | | | | | | |
| NTR | — No tests were executed. | | | | | | | | | | |
| STF | — Some tests failed. | | | | | | | | | | |
| STF-BOF | — Some tests failed and the raw data buffer overflowed. The phase has not been completed. | | | | | | | | | | |
| h | An optional field that will appear only if the results were not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if h is (40000000 00001000), then tests were skipped for reasons 9 and 47. | | | | | | | | | | |

SEE PROPRIETARY NOTICE ON COVER PAGE

The reasons are as follows:

BIT	REASONS FOR TESTS SKIPPED
0	Peripheral unit bus (PUB) 0 out-of-service
1	PUB 1 out-of-service
2	Primary signaling processor (SP) pulse points out-of-service
3	Secondary SP pulse points out-of-service
4	Mate unit out-of-service
5	Power control switch in request out-of-service (ROS) position or diagnostic requested from power control switch
8	CI has other units responding
9	MI has other units responding
10	GI has other units responding
11	PUB not duplex
12	Terminal grouping (TGR) 0 out-of-service
13	TGR 1 out-of-service
24	SP scan / distribute points out-of-service
25	SP bus out-of-service
26	Interface peripheral unit bus (IPUB) out-of-service
27	Terminal 00 out-of-service
28	Terminal 01 out-of-service
29	Terminal 02 out-of-service
30	Terminal 03 out-of-service
31	Terminal 04 out-of-service
32	Terminal 05 out-of-service
33	Terminal 06 out-of-service
34	Terminal 07 out-of-service
35	Terminal 08 out-of-service
36	Terminal 09 out-of-service
37	Terminal 10 out-of-service
38	Terminal 11 out-of-service
39	Terminal 12 out-of-service
40	Terminal 13 out-of-service
41	Terminal 14 out-of-service
42	Terminal 15 out-of-service
43	TGR group in growth

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, if h is (7,40000000 00001000), seven tests failed, plus tests were skipped for reasons 9 and 47. If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

The following appears only if the diagnostic was STF.

i The test number of the failing test.

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j	The bits which were in error; that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.
k	RAW response from the unit.
l, m	Information concerning the test being executed. Details of l and m are specified in the diagnostic listing.
n	The address in the phase (or subroutine) of the test that failed.
o	Bits 14-0 contain information for the TLP programs. Bits 23-21 contain the count of the number of words of supplementary data that follows. Bits 20-18 contain the count of the number of words of DOLOOP data that follows. Bits 17-15 contain the count of the number of words of subroutine data that follows.
p	Supplementary data words. Variable p is repeated x times, where x is bits 23-21 of o. This data supplies information about the test being executed. The last supplementary data word is printed first.
q	DOLOOP data words. Variable q is repeated x times, where x is bits 23-21 of o. This data supplies information about the test being executed. The last supplementary data word is printed first.
r	Subroutine data words. Variable r is repeated z times, where z is bits 17-15 of o. This data is the address of the callsubs which led up to this point in the diagnostic. The address of the last callsub is printed first.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs

PUDGTA-- if subunit type is CONTR

PUDGTE-- if subunit type is TER

PUDGTA99 if subunit type is IPUB

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:TGR-PUB
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:TGR a b c:PUB d e f g

2. REASON FOR OUTPUT

To specify both the diagnostics results and the termination mode for a terminal grouping (TGR) frame. This message is printed at the conclusion of the diagnostic execution.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the terminal grouping (TGR) under diagnosis.
- b The type of subunit for which the diagnostic was requested.
- c The number of the subunit under diagnosis.
- d The helper peripheral unit bus (PUB) that was requested.
- e The termination mode for the diagnostic:
- ABORTED — The diagnostic was abnormally stopped due to an interrupt, error in execution, or due to a STOP:MACLI input request.
- COMPLETED — The diagnostic completed normally.
- STOPPED — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution.
- f The results of the diagnostic:
- ATP — All tests passed.
- CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.
- NTR — No tests were executed.
- STF — Some tests failed.
- STF-BOF — The number of failed tests has filled the buffer. Before any more tests are run the system prints out the contents of the buffer and then clears it.

SEE PROPRIETARY NOTICE ON COVER PAGE

g An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if g is (40000000 00001000), then tests were skipped for reasons 9 and 47.

The reasons are as follows:

BIT	REASONS FOR TESTS SKIPPED
0	Peripheral unit bus (PUB) 0 out-of-service
1	PUB 1 out-of-service
2	Primary signaling processor (SP) pulse points out-of-service
3	Secondary SP pulse points out-of-service
4	Mate unit out-of-service
5	Power control switch in request out-of-service (ROS) position or diagnostic requested from power control switch
8	CI has other units responding
9	MI has other units responding
10	GI has other units responding
11	PUB not duplex
12	Terminal grouping (TGR) a, controller (CONTR) 0 out-of-service
13	TGR a, CONTR 1 out-of-service
24	SP scan / distribute points out-of-service
25	SP bus out-of-service
27	Terminal 00 out-of-service
28	Terminal 01 out-of-service
29	Terminal 02 out-of-service
30	Terminal 03 out-of-service
31	Terminal 04 out-of-service
32	Terminal 05 out-of-service
33	Terminal 06 out-of-service
34	Terminal 07 out-of-service
35	Terminal 08 out-of-service
36	Terminal 09 out-of-service
37	Terminal 10 out-of-service
38	Terminal 11 out-of-service
39	Terminal 12 out-of-service
40	Terminal 13 out-of-service
41	Terminal 14 out-of-service
42	Terminal 15 out-of-service
43	TGR group in growth

SEE PROPRIETARY NOTICE ON COVER PAGE

If subunit type is IPUB:

BIT	REASONS FOR TESTS SKIPPED
6	Central controller (CC) 0 out-of-service
7	CC 1 out-of-service
12	Helper controller 0 out-of-service
13	Helper controller 1 out-of-service
26	Interface peripheral unit bus (IPUB) out-of-service
27	DTFRIGAL return failed

If STF, this field gives the number of failing phases, number of failing tests, trouble number. For example, (2,9,00101545) indicates 2 phases failed, 9 tests failed, and a trouble number of 00101545.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs

PUDGTA-- if subunit type is CONTR

PUDGTE-- if subunit type is TER

PUDGTA99 if subunit type is IPUB

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Messages

DGN:TGR

STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:TGR-TERM
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:TGR a,b c:d e TERMINATED AT PH f ADR g AFTER TEST h [i]

2. REASON FOR OUTPUT

To print whenever the diagnostic terminates early for a terminal grouping (TGR) frame. This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the TGR frame being diagnosed.
b	The subunit type being diagnosed.
c	The submember number of the subunit being diagnosed.
d	The helper unit type, if specified.
e	The helper member number, if specified.
f	The diagnostic phase in which the termination occurred.
g	The address on the diagnostic phase (or subroutine) at which the termination occurred.
h	The last test executed before the termination occurred.
i	(FORCED). This optional field will be printed only if the termination occurred and unconditional (UCL) was specified on the DGN:TGR input message. The use of terminating in this way is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

Repair the faulty frame. If further diagnostic execution is desired, specify UCL on the DGN:TGR input message. This will inhibit all early terminations except those that are forced.

5. REFERENCES

PIDENTs
PUDGTA-- if subunit type is CONTR
PUDGTA99 if subunit type is IPUB
PUDGTE-- if subunit type is TER

Practice 234-180-020, *Diagnostic Language - DIAL*
Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

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Input Message
DGN:TGR

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:TMSP-CONTR
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:TMSP a, CONTR b:PH 9 IN PROGRESS c d

2. REASON FOR OUTPUT

To print whenever the Time Multiplexed Switch Pair (TMSP) diagnostic has completed testing of a specific combination of Time Slot Interchanges (TSIs) and TMSP.

Check the DGN:TMSP input message for explanations of TMSP Phase 9 unusual or unexpected results.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the TMSP under diagnosis.
- b The number of the subunit under diagnosis.
- c This field identifies the specific combination of TSIs that was tested, plus the total number of test failures since the start of the diagnostic. An example is (00110001 00000004). The format is as follows:

BIT	DESCRIPTION
-----	-------------

0-23	Total number of failures since the start of the phase.
------	--

24-26	Transmit TSI controller just completed testing.
-------	---

27-35	Transmit TSI member number just completed testing.
-------	--

36-38	Receive TSI controller just completed testing.
-------	--

39-47	Receive TSI member number just completed testing.
-------	---

- d The current view of the final diagnostic results

ATP — All tests passed.

CATP — All tests passed; however, some tests were skipped due to the unavailability of TSIs to perform the tests.

STF — Some tests failed.

4. ACTION TO BE TAKEN

If the results are CATP, restore the TSIs to service so that tests may be executed. If STF, repair the unit. Otherwise, no action is needed.

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5. REFERENCES

PIDENT
PUDGTG09

Practice 234-180-020, *Diagnostic Language - DIAL*
Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Message
DGN : TMSP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:TMSP-ILL
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:TMSP a,b c:d e ILLEGAL PHASE

2. REASON FOR OUTPUT

To print whenever one or more illegal diagnostic phases have been requested on a partial diagnostic request for a time multiplexed switch pair (TMSP). The illegal phase will not be executed; however, all valid phases will be run.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the TMSP being diagnosed.
b	The subunit type being diagnosed.
c	The submember number of the subunit being diagnosed.
d	The helper unit type, if specified.
e	The helper member number, if specified.

4. ACTION TO BE TAKEN

Check the DGN:TMSP input message for the list of valid phase numbers.

5. REFERENCES

PIDENT
DCONTOLL

Input Message
DGN:TMSP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:TMSP-NOT
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:TMSP a,b c:d e NOT STARTED - f

2. REASON FOR OUTPUT

To print whenever the diagnostic request cannot be started for a time multiplexed switch pair (TMSP). This is usually when the unit for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | The member number of the TMSP being diagnosed. |
| b | The subunit type being diagnosed. |
| c | The submember number of the subunit being diagnosed. |
| d | The helper unit type, if specified. |
| e | The helper member number, if specified. |
| f | The reason the diagnostic was not started. |

4. ACTION TO BE TAKEN

If the specified unit cannot be removed from service because there is no spare, restore a spare unit to service.

5. REFERENCES

PIDENT
MCFWPEMO

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:TMSP-PH
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

```
DGN:TMSP a,b c:d e PH f g [h]
[TEST      MISMATCH    SUPPLEMENTARY DATA
 i      jjjjjjjj      kkkkkkk lllllll mmmmmm nnnnnn oooooo
 pppppp qqqqqq rrrrrr]
```

2. REASON FOR OUTPUT

To print whenever the diagnostic results are printed on a phase basis for a time multiplexed switch pair (TMSP). This occurs in the case of a partial diagnosis, a test failure, or whenever RAW was requested on the input message.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the TMSP being diagnosed.
- b The subunit type being diagnosed.
- c The submember number of the subunit being diagnosed.
- d The helper unit type, if specified.
- e The helper member number, if specified.
- f The diagnostic phase number for which the results are reported.
- g The results of the diagnostic:
 - ATP — All tests passed.
 - CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.
 - NTR — No tests were executed.
 - STF — Some tests failed.
 - STF-BOF — Some tests failed and the raw data buffer overflowed. The phase has not been completed.
- h An optional field that will appear only if the results were not ATP. In CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if h is (40000000 00001000), then tests were skipped for reasons 9 and 47.

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The reasons are as follows:

BIT	REASONS FOR TESTS SKIPPED
0	Peripheral unit bus (PUB) 0 out-of-service
1	PUB 1 out-of-service
2	Primary signaling processor (SP) pulse points out-of-service
3	Secondary SP pulse points out-of-service
4	Mate unit out-of-service
5	Power control switch in request out-of-service (ROS) position or diagnostic requested from power control switch
8	CI has other units responding
9	MI has other units responding
10	GI has other units responding
11	PUB not duplex
12	Some time slot interchanges (TSIs) or associated voiceband interface frames (VIFs) are out-of-service
13	Duplex failure in TMSP - repair other controller first
14	Mate and unit under diagnosis cannot be placed on same bus
15	Controller equipage must be in special growth or greater
16	Cannot place TSIs on out-of-service bus
17	Bus 0 power control switch in ROS position
18	Bus 1 power control switch in ROS position
24	SP scan / distribute points out-of-service
25	SP bus out-of-service
26	Interface peripheral unit bus (IPUB) out-of-service
36-41	Count of TSIs used given that some TSIs were out-of-service

If subunit type is BUS:

BIT	REASONS FOR TESTS SKIPPED
6	Central controller (CC) 0 out-of-service
7	CC 1 out-of-service
12	Helper controller 0 out-of-service
13	Helper controller 1 out-of-service

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, if h is (7,40000000 00001000), seven tests failed, plus tests were skipped for reasons 9 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

The following appear only if the diagnostic was STF.

i The text number of the failing test.

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j	The bits which were in error; that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.
k	RAW response from the unit.
l, m	Information concerning the test being executed. Details of l and m is specified in the diagnostic listing.
n	The address in the phase (or subroutine) of the test that failed.
o	Bits 14-0 contain information for the TLP programs. Bits 23-21 contain the count of the number of words of supplementary data that follows. Bits 20-18 contain the count of the number of words of DOLOOP data that follows. Bits 17-15 contain the count of the number of words of subroutine data that follows.
p	Supplementary data words. Variable p is repeated x times, where x is bits 23-21 of o. This data supplies information about the test being executed. The last supplementary data word specified is printed first.
q	DOLOOP data words. Variable q is repeated y times, where y is bits 20-18 of o. This data is the value of the DOLOOP variables at the time of the test failure. The value of the innermost DOLOOP is printed first.
r	Subroutine data words. Variable r is repeated z times, where z is bits 17-15 of o. This data is the address of the callsubs which led up this point in the diagnostic. The last address of callsub is printed first.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs

PUDGTG-- where -- is from 01 to 09 if subunit type is CONTR

PUDGPB99 if subunit type is IPUB

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:TMSP-PUB
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:TMSP a b c:PUB d CONTR e f g [h]

2. REASON FOR OUTPUT

To specify both the diagnostics results and the termination mode for a time multiplexed switch pair (TMSP). This message is printed at the conclusion of the diagnostic execution.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | The member number of the time multiplexed switch (TMS) under diagnosis. |
| b | The type of subunit for which the diagnostic was requested. |
| c | The number of the subunit under diagnosis. |
| d | The helper peripheral unit bus (PUB) that was requested. |
| e | The helper time slot interchange frame (TSIF) controller that was requested. |
| f | <p>The termination mode for the diagnostic:</p> <p>ABORTED — The diagnostic was abnormally stopped due to an interrupt, error in execution, or due to a STOP:MACLI input request.</p> <p>COMPLETED — The diagnostic completed normally.</p> <p>STOPPED — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution.</p> |
| g | <p>The results of the diagnostic:</p> <p>ATP — All tests passed.</p> <p>CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.</p> <p>NTR — No tests were executed.</p> <p>STF — Some tests failed.</p> <p>STF-BOF — The number of failed tests has filled the buffer. Before any more tests are run the system prints out the contents of the buffer and then clears it.</p> |

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h

An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if h is (40000000 00001000), then tests were skipped for reasons 9 and 45. The reasons are as follows:

BIT	REASONS FOR TESTS SKIPPED
0	Peripheral unit bus (PUB) 0 out-of-service
1	PUB 1 out-of-service
2	Primary signaling processor (SP) pulse points out-of-service
3	Secondary SP pulse points out-of-service
4	Mate unit out-of-service
5	Power control switch in request out-of-service (ROS) position or diagnostic requested from power control switch
8	CI has other units responding
9	MI has other units responding
10	GI has other units responding
11	PUB not duplex
12	Some time slot interchanges (TSIs) or associated voiceband interface frames (VIFs) are out-of-service
13	Duplex failure in TMSP - repair other controller first
14	Mate and unit under diagnosis cannot be placed on same bus
15	Controller equipage must be in special growth or greater
16	Cannot place TSIs on out-of-service bus
17	Bus 0 power control switch in ROS position
18	Bus 1 power control switch in ROS position
24	SP scan / distribute points out-of-service
25	SP bus out-of-service
36-41	Count of TSIs used given that some TSIs were out-of-service

If subunit type is IPUB:

BIT	REASONS FOR TESTS SKIPPED
6	Central controller (CC) 0 out-of-service
7	CC 1 out-of-service
12	Helper controller 0 out-of-service
13	Helper controller 1 out-of-service
26	Interface peripheral unit bus (IPUB) out-of-service
27	DTFRIGAL return failed

If STF, this field gives the number of failing phases, number of failing tests, trouble number. For example, (2,9,1101545) indicates 2 phases failed, 9 tests failed, and a trouble number of 00101545.

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4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, the unit should be repaired as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY). Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs

PUDGTG-- where -- is from 01 to 09 if subunit type is CONTR

PUDGPB99 if subunit type is IPUB

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Messages

DGN:TMSP

STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:TMSP-TERM
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:TMSP a,b c:d e TERMINATED AT PH f ADR g AFTER TEST h [i]

2. REASON FOR OUTPUT

To print whenever the diagnostic terminates early for a time multiplexed switch pair (TMSP). This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause the system problems.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the TMSP being diagnosed.
b	The subunit type being diagnosed.
c	The submember number of the subunit being diagnosed.
d	The helper unit type, if specified.
e	The helper member number, if specified.
f	The diagnostic phase in which the termination occurred.
g	The address in the diagnostic phase (or subroutine) at which the termination occurred.
h	The last test executed before the termination occurred.
i	(FORCED). This optional field will be printed only if the termination occurred and unconditional (UCL) was specified on the DGN:TMSP input message. The use of terminating in this way is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

Repair the faulty frame. If further diagnostic execution is desired, specify UCL should be specified on the DGN:TMSP input message. This will inhibit all early terminations except those that are forced.

5. REFERENCES

PIDENTs

PUDGTG-- where -- is from 01 to 09 if subunit type is CONTR

PUDGPB99 if subunit type is IPUB

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

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Input Message
DGN : TMSP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:TSI-ILL
WORK CENTER.. MOC, TEC
GENERIC 4E21 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:TSI a,b c:d e ILLEGAL PHASE

2. REASON FOR OUTPUT

To print whenever one or more illegal diagnostic phases have been requested on a partial diagnostic request for a Time Slot Interchange (TSI). The illegal phase will not be executed; however, all valid phases will be run.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the TSI being diagnosed.
b	The subunit type being diagnosed.
c	The submember number of the subunit being diagnosed.
d	The helper unit type, if specified.
e	The helper member number, if specified.

4. ACTION TO BE TAKEN

Check the DGN:TSI input message for the list of valid phase numbers.

5. REFERENCES

PIDENT
DCONTOLL

Input Message
DGN:TSI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:TSI-NOT
WORK CENTER.. MOC, TEC
GENERIC 4E21 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:TSI a,b c:d e NOT STARTED - f

2. REASON FOR OUTPUT

To print whenever the diagnostic request cannot be started for a Time Slot Interchange (TSI). This is usually when the unit for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | The member number of the TSI being diagnosed. |
| b | The subunit type being diagnosed. |
| c | The submember number of the subunit being diagnosed. |
| d | The helper unit type. |
| e | The helper member number. |
| f | The reason the diagnostic was not started. |

4. ACTION TO BE TAKEN

If the specified unit cannot be removed from service because there is no spare, restore a spare unit to service.

5. REFERENCES

PIDENT
MCFWPEMO

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:TSI-PUB
WORK CENTER.. MOC, TEC
GENERIC 4E21 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:TSI a b c:PUB d e f [g]

2. REASON FOR OUTPUT

To specify both the diagnostic results and the termination mode for a Time Slot Interchange (TSI). This message is printed at the conclusion of the diagnostic execution.

3. VARIABLE FIELD DEFINITIONS

- | | | | | | | | | | | | |
|-----------|---|---------|--|-----------|---|---------|--|-----|----------------------|---------|---|
| a | The member number of the Time Slot Interchange Frame (TSIF) under diagnosis. | | | | | | | | | | |
| b | The type of subunit for which the diagnostic was requested. | | | | | | | | | | |
| c | The number of the subunit under diagnosis. | | | | | | | | | | |
| d | The helper Peripheral Unit Bus (PUB) that was requested. | | | | | | | | | | |
| e | The termination mode for the diagnostic: <table border="0" style="margin-left: 20px;"><tr><td>ABORTED</td><td>— The diagnostic was abnormally stopped due to an interrupt, error in execution, or due to a STOP:MACLI input request.</td></tr><tr><td>COMPLETED</td><td>— The diagnostic completed normally.</td></tr><tr><td>STOPPED</td><td>— The diagnostic was terminated under program control since further testing would not improve diagnostic resolution.</td></tr></table> | ABORTED | — The diagnostic was abnormally stopped due to an interrupt, error in execution, or due to a STOP:MACLI input request. | COMPLETED | — The diagnostic completed normally. | STOPPED | — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution. | | | | |
| ABORTED | — The diagnostic was abnormally stopped due to an interrupt, error in execution, or due to a STOP:MACLI input request. | | | | | | | | | | |
| COMPLETED | — The diagnostic completed normally. | | | | | | | | | | |
| STOPPED | — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution. | | | | | | | | | | |
| f | The results of the diagnostic: <table border="0" style="margin-left: 20px;"><tr><td>ATP</td><td>— All tests passed.</td></tr><tr><td>CATP</td><td>— All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.</td></tr><tr><td>NTR</td><td>— No tests were executed.</td></tr><tr><td>STF</td><td>— Some tests failed.</td></tr><tr><td>STF-B0F</td><td>— The number of failed tests has filled the buffer. Before any more tests are run, the system prints out the contents of the buffer and then clears it.</td></tr></table> | ATP | — All tests passed. | CATP | — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test. | NTR | — No tests were executed. | STF | — Some tests failed. | STF-B0F | — The number of failed tests has filled the buffer. Before any more tests are run, the system prints out the contents of the buffer and then clears it. |
| ATP | — All tests passed. | | | | | | | | | | |
| CATP | — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test. | | | | | | | | | | |
| NTR | — No tests were executed. | | | | | | | | | | |
| STF | — Some tests failed. | | | | | | | | | | |
| STF-B0F | — The number of failed tests has filled the buffer. Before any more tests are run, the system prints out the contents of the buffer and then clears it. | | | | | | | | | | |

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- g An optional field that will appear only if the results are not All Tests Passed (ATP). If CATP or NTR, this field identifies the reason that the tests were skipped. The reasons are identified by their bit positions in the 16-digit octal number that is printed. For example, if g is (40000000 00001000), then tests were skipped for reasons 9 and 47.

The reasons for TSI controllers are as follows:

BIT	REASONS FOR TESTS SKIPPED
0	Peripheral Unit Bus (PUB) 0 out-of-service
1	PUB 1 out-of-service
2	Primary Signaling Processor (SP) pulse points out-of-service
3	Secondary SP pulse points out-of-service
4	Mate unit out-of-service
5	Power control switch in Request Out-Of-Service (ROS) position or diagnostic requested from power control switch
8	Clock Interrogate (CI) has other units responding
9	Member Interrogate (MI) has other units responding
10	Group Interrogate (GI) has other units responding
11	PUB not duplex
12	Time Multiplexed Switch Pair (TMSP) out-of-service
13	Voiceband Interface Unit (VIU) / DTU out-of-service
14	Network blockage encountered
15	Time Slot Interchange Frame (TSIF) in growth
16	Echo Suppressor Unit (ESU) out-of-service
24	SP scan / distribute points out-of-service
25	SP bus out-of-service

If subunit type is IPUB:

BIT	REASONS FOR TESTS SKIPPED
6	Central Controller (CC) 0 out-of-service
7	CC 1 out-of-service
12	Helper controller 0 out-of-service
13	Helper controller 1 out-of-service
26	Interface Peripheral Unit Bus (IPUB) out-of-service
27	DTFRIGAL return failed

If STF, this field gives the number of failing phases, number of failing tests, trouble number. For example, (2,9,00101545) indicates 2 phases failed, 9 tests failed, and a trouble number of 00101545.

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the Teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs

PUDGTI--, if subunit type is CONTR

PUDGTI99, if subunit type is IPUB

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Messages

DGN:TSI

STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:TSI-TERM
WORK CENTER.. MOC, TEC
GENERIC 4E21 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:TSI a,b c:d e TERMINATED AT PH f ADR g AFTER TEST h [FORCED]

2. REASON FOR OUTPUT

To print whenever the diagnostic terminates early for a Time Slot Interchange (TSI). This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the TSI being diagnosed.
b	The subunit type being diagnosed.
c	The submember number of the subunit being diagnosed.
d	The helper unit type, if specified.
e	The helper member number, if specified.
f	The diagnostic phase in which the termination occurred.
g	The address in the diagnostic phase (or subroutine) at which the termination occurred.
h	The last test executed before the termination occurred.
FORCED	This optional field will be printed only if the termination occurred and Unconditional (UCL) was specified on the DGN:TSI input message. The use of terminating in this way is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

Repair the faulty frame. If further diagnostic execution is desired, specify UCL on the DGN:TSI input message. This will inhibit all early termination except those that are forced.

5. REFERENCES

PIDENTs
PUDGTS--, if subunit type is CONTR
PUDGTI--, if subunit type is CONTR
PUDGTI99, if subunit type is IPUB

Practice 234-180-020, *Diagnostic Language - DIAL*
Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Message
DGN:TSI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:TSI-TEST
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

```
DGN:TSI a,b c:d e PH f g [h]
[TEST   MISMATCH   SUPPLEMENTARY DATA
 i      jjjjjjjj   kkkkkkk lllllll mmmmmmm nnnnnnn ooooooo
                          ppppppp qqqqqqq rrrrrrr]
```

2. REASON FOR OUTPUT

To print whenever the diagnostic results are printed on a phase basis for a Time Slot Interchange (TSI). This occurs in the case of a partial diagnosis, a test failure, or whenever RAW was requested on the input message.

3. VARIABLE FIELD DEFINITIONS

- | | | | | | | | | | | | |
|---------|--|-----|---------------------|------|---|-----|---------------------------|-----|----------------------|---------|---|
| a | The member number of the unit being diagnosed. | | | | | | | | | | |
| b | The subunit type being diagnosed. | | | | | | | | | | |
| c | The submember number of the subunit being diagnosed. | | | | | | | | | | |
| d | The helper unit type, if specified. | | | | | | | | | | |
| e | The helper member number, if specified. | | | | | | | | | | |
| f | The diagnostic phase number for which the results are reported. | | | | | | | | | | |
| g | The results of the diagnostic: <table border="0"><tr><td>ATP</td><td>— All tests passed.</td></tr><tr><td>CATP</td><td>— All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.</td></tr><tr><td>NTR</td><td>— No tests were executed.</td></tr><tr><td>STF</td><td>— Some tests failed.</td></tr><tr><td>STF-BOF</td><td>— Some tests failed and the raw data buffer overflowed. The phase has not been completed.</td></tr></table> | ATP | — All tests passed. | CATP | — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test. | NTR | — No tests were executed. | STF | — Some tests failed. | STF-BOF | — Some tests failed and the raw data buffer overflowed. The phase has not been completed. |
| ATP | — All tests passed. | | | | | | | | | | |
| CATP | — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test. | | | | | | | | | | |
| NTR | — No tests were executed. | | | | | | | | | | |
| STF | — Some tests failed. | | | | | | | | | | |
| STF-BOF | — Some tests failed and the raw data buffer overflowed. The phase has not been completed. | | | | | | | | | | |
| h | An optional field that will appear only if the results were not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit positions in the 16-digit octal number that is printed. For example, if h is (40000000 00001000), then tests were skipped for reasons 9 and 47. | | | | | | | | | | |

SEE PROPRIETARY NOTICE ON COVER PAGE

The reasons are as follows:

BIT	REASONS FOR TESTS SKIPPED
0	Peripheral Unit Bus (PUB) 0 out-of-service
1	PUB 1 out-of-service
2	Primary Signaling Processor (SP) pulse points out-of-service
3	Secondary SP pulse points out-of-service
4	Mate unit out-of-service
5	Power control switch in Request Out-Of-Service (ROS) position or diagnostic requested from power control switch
8	Clock Interrogate (CI) has other units responding
9	Member Interrogate (MI) has other units responding
10	Group Interrogate (GI) has other units responding
11	PUB not duplex
12	Time Multiplexed Switch Pair (TMSP) out-of-service
13	Voiceband Interface Unit (VIU) / DTU out-of-service
14	Network blockage encountered
15	Time Slot Interchange Frame (TSIF) in growth
16	Echo Suppressor Unit (ESU) out-of-service
24	SP scan / distribute points out-of-service
25	SP bus out-of-service

If subunit type is IPUB:

BIT	REASONS FOR TESTS SKIPPED
6	Central Controller (CC) 0 out-of-service
7	CC 1 out-of-service
12	Helper controller 0 out-of-service
13	Helper controller 1 out-of-service
26	Interface Peripheral Unit Bus (IPUB) out-of-service
27	DTFRIGAL return failed

If STF, this field gives the number of test failures, in addition to the reasons that tests were skipped. For example, if h is (7,40000000 00001000), seven tests failed, plus tests were skipped for reason 9 and 47. If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

The following appear only if the diagnostic was STF.

- i The test number of the failing test.
- j The bits that were in error; that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.

SEE PROPRIETARY NOTICE ON COVER PAGE

k	RAW response from the unit.
l, m	Information concerning the test being executed. Details of l and m are specified in the diagnostic listing.
n	The address in the phase (or subroutine) of the test that failed.
o	Bits 14-0 contain information for the TLP programs. Bits 23-21 contain the count of the number of words of supplementary data that follows. Bits 20-18 contain the count of the number of words of DOLOOP data that follows. Bits 17-15 contain the count of the number of words of subroutine data that follows.
p	Supplementary data words. Variable p is repeated x times, where x is bits 23-21 of o. This data supplies information about the test being executed. The last supplementary data word specified is printed first.
q	DOLOOP data words. Variable q is repeated y times, where y is bits 20-18 of o. This data is the value of the DOLOOP variables at the time of the test failure. The value of the innermost DOLOOP is printed first.
r	Subroutine data words. Variable r is repeated z times, where z is bits 17-15 of o. This data is the address of the callsubs which led up to this point in the diagnostic. The address of the last callsub is printed first.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the Teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs

PUDGTS--, if subunit type is CONTR

PUDGTI--, if subunit type is CONTR

PUDGTI99, if subunit type is IPUB

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:VIF-FAULT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:VIF a,b c:d e SUSPECTED FAULTY EQUIPMENT
EQPT LOC CODE SUPPLEMENTARY DATA
f-g h i

2. REASON FOR OUTPUT

To print whenever the voiceband interface frame (VIF) diagnostic has detected faulty equipment. The diagnostic had failing tests which were resolved to the listed equipment.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | The member number of the VIF being diagnosed. |
| b | The subunit type being diagnosed. |
| c | The number of the subunit type being diagnosed. |
| d | The helper unit type, if specified. |
| e | The helper member number, if specified. |
| f | The bay and shelf of the failing equipment. The f is a 3-digit number. The first digit is the bay number, and the last two digits are the shelf number expressed in inches from the floor. |
| g | The number of the slot containing the faulty equipment. |
| h | The code of the suspect faulty equipment. |
| i | Supplementary data concerning the failing equipment. |

4. ACTION TO BE TAKEN

Repair the indicated faulty equipment as quickly as possible. The replacement of faulty equipment should proceed in the order that the equipment is printed. If the fault is not repaired by replacing an indicated piece of equipment, then that piece of equipment should be replaced and the diagnosis requested.

5. REFERENCES

PIDENTs
PUDGVC-- if subunit type is CONTR
PUDGVU-- if subunit type is VIU
PUDGVC01 if subunit type is IPUB

SEE PROPRIETARY NOTICE ON COVER PAGE

Practice 254-180-020, *Diagnostic Language - DIAL*
Practice 254-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:VIF-ILL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:VIF a,b c:d e ILLEGAL PHASE

2. REASON FOR OUTPUT

To print whenever one or more illegal diagnostic phases have been requested on a partial diagnostic request for a voiceband interface frame (VIF). The illegal phase will not be executed; however, all valid phases will be run.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the VIF being diagnosed.
b	The subunit type being diagnosed.
c	The submember number of the subunit being diagnosed.
d	The helper unit type.
e	The helper member number.

4. ACTION TO BE TAKEN

Check the DGN:VIF input message for the list of valid phase numbers.

5. REFERENCES

PIDENT
DCONTOLL

Input Message
DGN:VIF

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:VIF-NOT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:VIF a,b c:d e NOT STARTED - f

2. REASON FOR OUTPUT

To print whenever the diagnostic request cannot be started for a voiceband interface frame (VIF). This is usually when the unit for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the VIF being diagnosed.
b	The subunit type being diagnosed.
c	The submember number of the subunit being diagnosed.
d	The helper unit type.
e	The helper member number.
f	The reason the diagnostic was not started.

4. ACTION TO BE TAKEN

If the specified unit cannot be removed from service because there is no spare, restore a spare unit to service.

5. REFERENCES

PIDENT
MCFWPEMD

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:VIF-PUB
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:VIF a b c:PUB d e f g

2. REASON FOR OUTPUT

To print at the conclusion of the diagnostic execution for a voiceband interface frame (VIF).
This message specifies both the diagnostics results and the termination mode.

3. VARIABLE FIELD DEFINITIONS

- | | | | | | | | | | | | |
|-----------|---|---------|--|-----------|--|---------|--|-----|---------------------|---------|--|
| a | The member number of the VIF under diagnosis. | | | | | | | | | | |
| b | The type of subunit for which the diagnostic was requested. | | | | | | | | | | |
| c | The number of the subunit under diagnosis. | | | | | | | | | | |
| d | The helper peripheral unit bus (PUB) that was requested. | | | | | | | | | | |
| e | The termination mode for the diagnostic: <table border="0"><tr><td>ABORTED</td><td>— The diagnostic was abnormally stopped due to an interrupt, error in execution, or due to a STOP:MACLI input request.</td></tr><tr><td>COMPLETED</td><td>— The diagnostic completed normally.</td></tr><tr><td>STOPPED</td><td>— The diagnostic was terminated under program control since further testing would not improve diagnostic resolution.</td></tr></table> | ABORTED | — The diagnostic was abnormally stopped due to an interrupt, error in execution, or due to a STOP:MACLI input request. | COMPLETED | — The diagnostic completed normally. | STOPPED | — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution. | | | | |
| ABORTED | — The diagnostic was abnormally stopped due to an interrupt, error in execution, or due to a STOP:MACLI input request. | | | | | | | | | | |
| COMPLETED | — The diagnostic completed normally. | | | | | | | | | | |
| STOPPED | — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution. | | | | | | | | | | |
| f | The results of the diagnostic: <table border="0"><tr><td>ATP</td><td>— All tests passed</td></tr><tr><td>CATP</td><td>— All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test</td></tr><tr><td>NTR</td><td>— No tests were executed</td></tr><tr><td>STF</td><td>— Some tests failed</td></tr><tr><td>STF-BOF</td><td>— The number of failed tests has filled the buffer. Before any more tests are run, the system prints out the contents of the buffer and then clears it</td></tr></table> | ATP | — All tests passed | CATP | — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test | NTR | — No tests were executed | STF | — Some tests failed | STF-BOF | — The number of failed tests has filled the buffer. Before any more tests are run, the system prints out the contents of the buffer and then clears it |
| ATP | — All tests passed | | | | | | | | | | |
| CATP | — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test | | | | | | | | | | |
| NTR | — No tests were executed | | | | | | | | | | |
| STF | — Some tests failed | | | | | | | | | | |
| STF-BOF | — The number of failed tests has filled the buffer. Before any more tests are run, the system prints out the contents of the buffer and then clears it | | | | | | | | | | |

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- g An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped. The reasons are identified by their bit positions in the 16-digit octal number that is printed. For example, if g is (10000000 00001000), then tests were skipped for reasons 9 and 45.

The reasons are as follows:

BIT	REASONS FOR TESTS SKIPPED
0	Peripheral unit bus (PUB) 0 out-of-service
1	PUB 1 out of service
2	Primary signaling processor (SP) pulse points out-of-service
3	Secondary SP pulse points out of service
4	Mate unit out of service
5	Power control switch in request out-of-service (ROS) position or diagnostic requested from power control switch
8	CI has other units responding
9	NI has other units responding
10	GI has other units responding
11	PUB not duplex
12	No SM flywheel tests - all voiceband interface units (VIUs) alarming
13	Protection switch (PSW) tests skipped - VIU protection switched
14	Simplex mode - controller powered off
15	VIU unavailable - all VIUs have signal distributor (SD) alarms
16	VIU 7 unavailable
17	Autonomous peripheral unit failure (APUF)-CI has other units responding
18	Autonomous peripheral unit trouble (APUT)-CI has other units responding
24	SP scan / distribute points out of service

If STF, this field gives the number of failing phases, number of failing tests, trouble number. For example (2,9, 00101545) indicates 2 phases failed, 9 tests failed, and a trouble number of 00101545.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs

PUDGVC-- if subunit type is CONTR

PUDGVU-- if subunit type is VIU

PUDGVC01 if subunit type is IPUB

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Messages

DGN:VIF

STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:VIF-TERM
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:VIF a,b c:d e TERMINATED AT PH f ADR g AFTER TEST h [i]

2. REASON FOR OUTPUT

To print whenever the diagnostic terminates early for a voiceband interface frame (VIF). This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the VIF being diagnosed.
b	The subunit type being diagnosed.
c	The submember number of the subunit being diagnosed.
d	The helper unit type, if specified.
e	The helper member number, if specified.
f	The diagnostic phase in which the termination occurred.
g	The address in the diagnostic phase (or subroutine) at which the termination occurred.
h	The last test executed before the termination occurred.
i	(FORCED). This optional field will be printed only if the termination occurred and unconditional (UCL) was specified on the DGN:VIF input message. The use of terminating in this way is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

Repair the faulty frame. If further diagnostic execution is desired, then UCL should be specified on the DGN:VIF input message. This will inhibit all early termination except those that are forced.

5. REFERENCES

PIDENTs

PUDGVC-- if subunit type is CONTR

PUDGVU-- if subunit type is VIU

Practice 254-180-020, *Diagnostic Language - DIAL*

Practice 254-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Message
DGN:VIF

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:VIF-TEST
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

```
DGN:VIF a,b c:d e PH f g [h]
[TEST      MISMATCH      SUPPLEMENTARY DATA
 i      jjjjjjjj      kkkkkkk lllllll mmmmmmm nnnnnnn ooooooo
 ppppppp qqqqqqq rrrrrrr]
```

2. REASON FOR OUTPUT

To print whenever the diagnostic results are printed on a phase basis for a voiceband interface frame (VIF). This occurs in the case of a partial diagnosis, a test failure, or whenever RAW was requested on the input message.

3. VARIABLE FIELD DEFINITIONS

- | | | | | | | | | | | | |
|---------|--|-----|---------------------|------|---|-----|---------------------------|-----|----------------------|---------|---|
| a | The member number of the VIF being diagnosed. | | | | | | | | | | |
| b | The subunit type being diagnosed. | | | | | | | | | | |
| c | The submember number of the subunit being diagnosed. | | | | | | | | | | |
| d | The helper unit type, if specified. | | | | | | | | | | |
| e | The helper member number, if specified. | | | | | | | | | | |
| f | The diagnostic phase number for which the results are reported. | | | | | | | | | | |
| g | <p>The results of the diagnostic:</p> <table border="0"> <tr> <td>ATP</td> <td>— All tests passed.</td> </tr> <tr> <td>CATP</td> <td>— All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.</td> </tr> <tr> <td>NTR</td> <td>— No tests were executed.</td> </tr> <tr> <td>STF</td> <td>— Some tests failed.</td> </tr> <tr> <td>STF-BOF</td> <td>— Some tests failed and the raw data buffer overflowed. The phase has not been completed.</td> </tr> </table> | ATP | — All tests passed. | CATP | — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test. | NTR | — No tests were executed. | STF | — Some tests failed. | STF-BOF | — Some tests failed and the raw data buffer overflowed. The phase has not been completed. |
| ATP | — All tests passed. | | | | | | | | | | |
| CATP | — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test. | | | | | | | | | | |
| NTR | — No tests were executed. | | | | | | | | | | |
| STF | — Some tests failed. | | | | | | | | | | |
| STF-BOF | — Some tests failed and the raw data buffer overflowed. The phase has not been completed. | | | | | | | | | | |
| h | <p>An optional field that will appear only if the results were not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit positions in the 16-digit octal number that is printed. For example, if h is (40000000 0001000), then tests were skipped for reasons 9 and 47.</p> | | | | | | | | | | |

SEE PROPRIETARY NOTICE ON COVER PAGE

The reasons are as follows:

BIT	REASONS FOR TESTS SKIPPED
0	Peripheral unit bus (PUB) 0 out-of-service
1	PUB 1 out of service
2	Primary signaling processor (SP) pulse points out-of-service
3	Secondary SP pulse points out of service
4	Mate unit out of service
5	Power control switch in request out-of-service (ROS) position or diagnostic requested from power control switch
8	CI has other units responding
9	NI has other units responding
10	GI has other units responding
11	PUB not duplex
12	No SM flywheel tests - all voiceband interface units (VIUs) alarming
13	Protection switch (PSW) tests skipped - VIU protection switched
14	Simplex mode - controller powered off
15	VIU unavailable - all VIUs have signal distributor (SD) alarms
16	VIU 7 unavailable
17	Autonomous peripheral unit failure (APUF)-CI has other units responding
18	Autonomous peripheral unit trouble (APUT)-CI has other units responding
24	SP scan / distribute points out of service

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, h is (7,40000000 00001000), seven tests failed plus tests were skipped for reasons 9 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

The following appear only if the diagnostic was STF.

- | | |
|---|---|
| i | The test number of the failing test. |
| j | The bits which were in error; that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit. |
| k | The actual result of the test. |
| l | The last order to the voiceband interface controller (VIC). |

SEE PROPRIETARY NOTICE ON COVER PAGE

m	The expected result of the test.
n	The address in the phase (or subroutine) of the test that failed.
o	Bits 14-1 contain the VIC involved in the test. Bits 23-21 contain the count of the number of words of supplementary data that follows. Bits 20-18 contain the count of the number of words of DOLOOP data that follows. Bits 17-15 contain the count of the number of words of subroutine data that follows.
p	Supplementary data words. The p is repeated x times, where x is bits 23-21 of o. This data supplies information about the test being executed. The last supplementary data word specified is printed first.
q	DOLOOP data words. The q is repeated y times, where y is bits 20-18 of o. The data is the value of the DOLOOP variables at the time of the test failure. The value of the innermost DOLOOP is printed first.
r	Subroutine data words. The r is repeated z times, where z is bits 17-15 of o. This data is the address of the callsubs which led up to this point in the diagnostic. The address of the last callsub is printed first.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs

PUDGVC-- if subunit type is CONTR

PUDGVU-- if subunit type is VIU

PUDGVC01 if subunit type is IPUB

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:XPWR
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:XPWR a b c [d]

2. REASON FOR OUTPUT

To specify both the diagnostic results and the termination mode. This output message is printed at the conclusion of the diagnostic execution for a miscellaneous power (XPWR) unit.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit under diagnosis (0 or 1).
- b The termination mode for the diagnostic:
- ABORTED — The diagnostic was abnormally stopped due to an interrupt, error in execution, or due to a STOP:MACLI input request.
- COMPLETED — The diagnostic completed normally.
- STOPPED — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution.
- c The results of the diagnostic:
- ATP — All tests passed.
- CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.
- NTR — No tests were executed.
- STF — Some tests failed.
- d An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (40000000 00010000), then tests were skipped for reasons 12 and 47.

SEE PROPRIETARY NOTICE ON COVER PAGE

The reasons are as follows:

Bit	Meaning
12	Scan and signal distributor (SSD) out of service (OOS).
43	Power monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).
46	Frame request for PWRMON active (try again).
47	Unit not in normal state.

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, if d is (7,40000000 00010000), seven tests failed, plus tests were skipped for reasons 12 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service if possible, so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs

XPDG --, where --= all valid phase members
listed in PIDENT DCONTABL for PREFIX=XPDG, UTYPE=1XLUXPWR

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages

DGN:XPWR

STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:XPWR-ILL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:XPWR a ILLEGAL PHASE

2. REASON FOR OUTPUT

To print whenever only illegal diagnostic phases have been requested on a partial diagnostic requested for a miscellaneous power (XPWR) unit.

3. VARIABLE FIELD DEFINITIONS

a The member number of the unit being diagnosed (0 or 1).

4. ACTION TO BE TAKEN

Check PIDENT DCONTABL for PREFIX=XPDG, UTYPE=1XLUXPWR to obtain the list of valid phase numbers.

5. REFERENCES

PIDENTs
DCONTABL
XPDG--, where -- = all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=XPDG, UTYPE=1XLUXPWR

Input Message
DGN:XPWR

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:XPWR-NOT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:XPWR a NOT STARTED - b

2. REASON FOR OUTPUT

To print whenever the diagnostic request cannot be started for a miscellaneous power (XPWR) unit. This is usually whenever the unit for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
b The reason the diagnostic was not started.

4. ACTION TO BE TAKEN

If the specified unit cannot be removed from service because there is no spare, restore a spare unit to service. If b equals FROZEN, bus status indicates a store is frozen. That store must be conditionally restored to service.

5. REFERENCES

PIDENTs

XPDG --, where --= all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=XPDG, UTYPE=1XLUXPWR

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Message

DGN:XPWR

Output Message

DGN:XPWR

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:XPWR-TERM
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DGN:XPWR a TERMINATED AT PH b ADR c AFTER TEST d [e]

2. REASON FOR OUTPUT

To print whenever the diagnostic terminates early for a miscellaneous power (XPWR) unit. This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The diagnostic phase in which the termination occurred.
- c The address in the diagnostic phase at which the termination occurred.
- d The last test executed before the termination occurred.
- e (FORCED). This optional field will be printed only if the termination occurred and UCL (unconditional) was specified on the DGN input message. The use of terminating in this way is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service if possible, so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs

XPDG --, where --= all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=XPDG, UTYPE=1XLUXPWR

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

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Input Message
DGN : XPWR

Output Message
DGN : XPWR

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:XPWR-TEST
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

```
DGN:XPWR a PH b c [d]
[TEST    MISMATCH  SUPPLEMENTARY DATA
 ee      ffffffff  gggggggg]
```

2. REASON FOR OUTPUT

To print whenever the diagnostic results are printed on a phase basis for a miscellaneous power (XPWR) unit. This occurs in the case of a partial diagnosis, a test failure, or whenever RAW was requested on the input message.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The diagnostic phase number for which the results are reported.
- c The results of the diagnostic:
 - ATP — All tests passed.
 - CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.
 - NTR — No tests were executed.
 - STF — Some tests failed.
 - STF-BOF — Some tests failed and the test failure buffer overflowed.
- d An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (40000000 00010000), then tests were skipped for reasons 12 and 47.

The reasons are as follows:

Bit	Meaning
12	Scan and signal distributor (SSD) out of service (OOS).
43	Power monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).

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Bit	Meaning
46	Frame request for PWRMON active (try again).
47	Unit not in normal state.

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, if d is (7,40000000 00010000), seven tests failed, plus tests were skipped for reasons 12 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

The following appear only if the diagnostic was STF.

- e Test number of the failing test.
- f The bits that were in error; that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.
- g Supplementary data concerning the failing test.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service if possible, so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs

XPDG --, where == all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=XPDG, UTYPE=1XLUXPWR

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages

STOP:MACLI

DGN:XPWR

SEE PROPRIETARY NOTICE ON COVER PAGE

Output Message
DGN:XPWR

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:XTSI-ILL
WORK CENTER.. MOC, TEC
GENERIC 4E24 Rel. 2 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:XTSI a,b c:d e ILLEGAL PHASE

2. REASON FOR OUTPUT

To print whenever one or more illegal diagnostic phases have been requested on a partial diagnostic request for an Expanded Time Slot Interchange (XTSI). The illegal phase will not be executed; however, all valid phases will be run.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the XTSI being diagnosed.
b	The subunit type being diagnosed.
c	The submember number of the subunit being diagnosed.
d	The helper unit type, if specified.
e	The helper member number, if specified.

4. ACTION TO BE TAKEN

Check the DGN:XTSI input message for the list of valid phase numbers.

5. REFERENCES

PIDENT
DCONTOLL
PUDGXT__, for CONTR subunit.
PUDGDS__, for D3U subunit.
PUDGXS__, for SPU subunit.
PUDGIB__, for IBU subunit.

Input Message
DGN:XTSI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:XTSI-NOT
WORK CENTER.. MOC, TEC
GENERIC 4E24 Rel. 2 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:XTSI a,b c:d e NOT STARTED - f

2. REASON FOR OUTPUT

To print whenever the diagnostic request cannot be started for an Expanded Time Slot Interchange (XTSI). This is usually when the unit for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the XTSI being diagnosed.
b	The subunit type being diagnosed.
c	The submember number of the subunit being diagnosed.
d	The helper unit type.
e	The helper member number.
f	The reason the diagnostic was not started.

4. ACTION TO BE TAKEN

If the specified unit cannot be removed from service because there is no spare, restore a spare unit to service.

5. REFERENCES

PIDENT
MCFWPEMO
PUDGXT__, for CONTR subunit.
PUDGDS__, for D3U subunit.
PUDGXS__, for SPU subunit.
PUDGIB__, for IBU subunit.

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:XTSI-PUB
WORK CENTER.. MOC, TEC
GENERIC 4E24 Rel. 2 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:XTSI a b c:PUB d e f [g]

2. REASON FOR OUTPUT

To specify both the diagnostic results and the termination mode for an Expanded Time Slot Interchange (XTSI). This message is printed at the conclusion of the diagnostic execution.

3. VARIABLE FIELD DEFINITIONS

- | | | | | | | | | | | | |
|-----------|--|---------|--|-----------|---|---------|--|-----|----------------------|---------|---|
| a | The member number of the XTSI frame under diagnosis. | | | | | | | | | | |
| b | The type of subunit for which the diagnostic was requested. | | | | | | | | | | |
| c | The number of the subunit under diagnosis. | | | | | | | | | | |
| d | The helper Peripheral Unit Bus (PUB) that was requested. | | | | | | | | | | |
| e | The termination mode for the diagnostic: <table border="0"><tr><td>ABORTED</td><td>— The diagnostic was abnormally stopped due to an interrupt, error in execution, or due to a STOP:MACLI input request.</td></tr><tr><td>COMPLETED</td><td>— The diagnostic completed normally.</td></tr><tr><td>STOPPED</td><td>— The diagnostic was terminated under program control since further testing would not improve diagnostic resolution.</td></tr></table> | ABORTED | — The diagnostic was abnormally stopped due to an interrupt, error in execution, or due to a STOP:MACLI input request. | COMPLETED | — The diagnostic completed normally. | STOPPED | — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution. | | | | |
| ABORTED | — The diagnostic was abnormally stopped due to an interrupt, error in execution, or due to a STOP:MACLI input request. | | | | | | | | | | |
| COMPLETED | — The diagnostic completed normally. | | | | | | | | | | |
| STOPPED | — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution. | | | | | | | | | | |
| f | The results of the diagnostic: <table border="0"><tr><td>ATP</td><td>— All tests passed.</td></tr><tr><td>CATP</td><td>— All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.</td></tr><tr><td>NTR</td><td>— No tests were executed.</td></tr><tr><td>STF</td><td>— Some tests failed.</td></tr><tr><td>STF-BOF</td><td>— The number of failed tests has filled the buffer. Before any more tests are run, the system prints out the contents of the buffer and then clears it.</td></tr></table> | ATP | — All tests passed. | CATP | — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test. | NTR | — No tests were executed. | STF | — Some tests failed. | STF-BOF | — The number of failed tests has filled the buffer. Before any more tests are run, the system prints out the contents of the buffer and then clears it. |
| ATP | — All tests passed. | | | | | | | | | | |
| CATP | — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test. | | | | | | | | | | |
| NTR | — No tests were executed. | | | | | | | | | | |
| STF | — Some tests failed. | | | | | | | | | | |
| STF-BOF | — The number of failed tests has filled the buffer. Before any more tests are run, the system prints out the contents of the buffer and then clears it. | | | | | | | | | | |

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g

An optional field that will appear only if the results are not All Tests Passed (ATP). If CATP or NTR, this field identifies the reason that the tests were skipped. The reasons are identified by their bit positions in the 16-digit octal number that is printed. For example, if g is (40000000 00001000), then tests were skipped for reasons 9 and 47.

The reasons for XTSI controllers and Digital Signal Level 3 Units (D3Us), Signal Processing Units (SPUs) or an In-Band Unit (IBU) are as follows:

BIT	REASONS FOR TESTS SKIPPED
0	Peripheral Unit Bus (PUB) 0 out-of-service
1	PUB 1 out-of-service
2	Primary Signaling Processor (SP) pulse points out-of-service
3	Secondary SP pulse points out-of-service
4	Mate unit out-of-service
5	Power control switch in Request Out-Of-Service (ROS) position
6	Central Controller (CC) 0 Out Of Service
7	CC 1 Out Of Service
8	Power monitor tests skipped on manual ROS test (diagnostic requested from power control switch)
9	Member Interrogate (MI) has other units responding
10	Group Interrogate (GI) has other units responding
11	PUB not duplex
12	Autonomous Peripheral Unit Failure (APUF) CATP flag
13	Autonomous Peripheral Unit Trouble (APUT) CATP flag
14	Network blockage encountered
15	Time Slot Interchange Frame (TSIF) in growth
17	Some other frame responding to Poll High Priority (PHP) polling
18	Some other frame responding to Poll Low Priority (PLP) polling
19	Some other frame responding to Poll Digit (PDG) polling
20	Some other frame responding to Poll Seizure (PSZ) polling
22	Controller 0 Out Of Service
23	Controller 1 Out Of Service
24	SP scan / distribute points out-of-service
25	SP bus out-of-service
26	Some Protection Switch Client (PSC) is protection switched
27	Controller not duplex
28	One or both controller power feeds are not available
30	Some PSC port is pested

SEE PROPRIETARY NOTICE ON COVER PAGE

BIT	REASONS FOR TESTS SKIPPED (continued)
31	Network clock 0 Out Of Service
32	Network clock 1 Out Of Service
33	Time Multiplexed Switch (TMS) is Out Of Service
34	A-Link Controller (ALC) is powered down
35	Controller 0 is powered down
36	Controller 1 is powered down
37	Some PSC Power Control Switch is in ROS Position
38	Some PSC Port is not running operational load
39	Digital Signal Level 3 Unit (D3U), Signal Processing Unit (SPU) or In-Band Unit (IBU) not in growth or special growth
40	D3U or SPU not protection switched
41	IBU Out-Of-Service
42	IBU Power control switch in Request Out-Of-Service (ROS) position
43	IBU is not running operational load
44	IBU port is pested

If subunit type is IPUB:

BIT	REASONS FOR TESTS SKIPPED
6	Central Controller (CC) 0 out-of-service
7	CC 1 out-of-service
12	Helper controller 0 out-of-service
13	Helper controller 1 out-of-service
26	Interface Peripheral Unit Bus (IPUB) out-of-service
27	DTFRIGAL return failed

If STF, this field gives the number of failing phases, number of failing tests, trouble number. For example, (2,9,00101545) indicates 2 phases failed, 9 tests failed, and a trouble number of 00101545.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 8 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the Teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs

PUDGXT__, for CONTR subunit.

PUDGXT99, for IPUB subunit.

PUDGDS__, for D3U subunit.

PUDGXS__, for SPU subunit.

PUDGIB__, for IBU subunit.

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Messages

DGN:XTSI

STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:XTSI-TERM
WORK CENTER.. MOC, TEC
GENERIC 4E24 Rel. 2 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DGN:XTSI a,b c:d e TERMINATED AT PH f ADR g AFTER TEST h [FORCED]

2. REASON FOR OUTPUT

To print whenever the diagnostic terminates early for an Expanded Time Slot Interchange (XTSI). This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the XTSI being diagnosed.
b	The subunit type being diagnosed.
c	The submember number of the subunit being diagnosed.
d	The helper unit type, if specified.
e	The helper member number, if specified.
f	The diagnostic phase in which the termination occurred.
g	The address in the diagnostic phase (or subroutine) at which the termination occurred.
h	The last test executed before the termination occurred.
FORCED	This optional field will be printed only if the termination occurred and Unconditional (UCL) was specified on the DGN:XTSI input message. The use of terminating in this way is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

Repair the faulty frame. If further diagnostic execution is desired, specify UCL on the DGN:XTSI input message. This will inhibit all early termination except those that are forced.

5. REFERENCES

PIDENTs
PUDGXT__, for CONTR subunit.
PUDGXT99, for IPUB subunit.
PUDGDS__, for D3U subunit.
PUDGXS__, for SPU subunit.
PUDGIB__, for IBU subunit.

SEE PROPRIETARY NOTICE ON COVER PAGE

Practice 234-180-020, *Diagnostic Language - DIAL*
Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Message
DGN:XTSI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DGN:XTSI-TEST
WORK CENTER.. MOC
GENERIC 4E24 Rel. 2 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] DGN:XTSI a,b c:d e PH f g [h]
[TEST MISMATCH SUPPLEMENTARY DATA
i j j j j j j j k k k k k k k l l l l l l l m m m m m m m n n n n n n n o o o o o o o
p p p p p p p q q q q q q q r r r r r r r]
- [2] DGN:XTSI a, CONTR s PH f g [h] MSG STARTED
[TEST MISMATCH SUPPLEMENTARY DATA
i j j j j j j j 00t t t t t u u u u v v v v v v v v v v v w w w w w w w x y z a 1 . a 1
0 b 1 c 1 . c 1 0 0 d 1 . . d 1 0 0 e 1 . . e 1 0 0 f 1 . . f 1 0 0 g 1 . . g 1
0 0 h 1 . . h 1 0 0 i 1 . . i 1]
- [3] DGN:XTSI a, D3U j1 PH f g [h] MSG STARTED
[TEST MISMATCH SUPPLEMENTARY DATA
i j j j j j j j 00t t t t t u u u u v v v v v v v v v v v w w w w w w w x y z a 1 . a 1
0 b 1 c 1 . c 1 0 0 d 1 . . d 1 0 0 e 1 . . e 1 0 0 f 1 . . f 1 0 0 g 1 . . g 1
0 0 h 1 . . h 1 0 0 i 1 . . i 1]
- [4] DGN:XTSI a, SPU k1 PH f g [h] MSG STARTED
[TEST MISMATCH SUPPLEMENTARY DATA
i j j j j j j j 00t t t t t u u u u v v v v v v v v v v v w w w w w w w x y z a 1 . a 1
0 b 1 c 1 . c 1 0 0 d 1 . . d 1 0 0 e 1 . . e 1 0 0 f 1 . . f 1 0 0 g 1 . . g 1
0 0 h 1 . . h 1 0 0 i 1 . . i 1]
- [5] DGN:XTSI a, IBU 0 PH f g [h] MSG STARTED
[TEST MISMATCH SUPPLEMENTARY DATA
i j j j j j j j 00t t t t t u u u u v v v v v v v v v v v w w w w w w w x y z a 1 . a 1
0 b 1 c 1 . c 1 0 0 d 1 . . d 1 0 0 e 1 . . e 1 0 0 f 1 . . f 1 0 0 g 1 . . g 1
0 0 h 1 . . h 1 0 0 i 1 . . i 1]

2. REASON FOR OUTPUT

To print out diagnostic results on a phase basis for an Expanded Time Slot Interchange (XTSI). This occurs in the case of a partial diagnosis, a test failure, or whenever RAW was requested on the input message.

Format [1] is the general format.

Format [2] is the Controller (CONTR) resident format.

Format [3] is the Digital Signal Level 3 Unit (D3U) resident format.

Format [4] is the Signal Processing Unit (SPU) resident format.

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Format [5] is the In-Band Unit (IBU) resident format.

3. VARIABLE FIELD DEFINITIONS

- a Member number of the XTSI being diagnosed.
- b Subunit type being diagnosed.
- c Submember number of the subunit being diagnosed.
- d Helper unit type, if specified.
- e Helper member number, if specified.
- f Diagnostic phase number for which the results are reported.
- g Results of the diagnostic:
 - ATP — All tests passed.
 - CATP — All tests passed; however, some tests were skipped because of the unavailability of a system resource which was needed to perform the test.
 - NTR — No tests were executed.
 - STF — Some tests failed.
 - STF-BOF — Some tests failed and the raw data buffer overflowed. Phase has not been completed.
- h An optional field that will appear only if the results were not All Tests Passed (ATP).

If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if h is (00000001 00001000) then tests were skipped for reasons 9 and 24. The reasons are listed in Table 1.

If subunit type is BUS, see DGN:PUB output message for CATP reasons.

If STF, this field gives the number of test failures, in addition to the reasons that tests were skipped. For example, if h is (7,00000001 00001000), seven tests failed, plus tests were skipped for reasons 9 and 24.

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The reasons for XTSI controllers and Digital Signal Level 3 Units (D3Us), Signal Processing Units (SPUs) or In-Band Unit (IBU) are as follows:

BIT	REASONS FOR TESTS SKIPPED
0	Peripheral Unit Bus (PUB) 0 out-of-service
1	PUB 1 out-of-service
2	Primary Signaling Processor (SP) pulse points out-of-service
3	Secondary SP pulse points out-of-service
4	Mate unit out-of-service
5	Power control switch in Request Out-Of-Service (ROS) position
6	Central Controller (CC) 0 Out Of Service
7	CC 1 Out Of Service
8	Power monitor tests skipped on manual ROS test (diagnostic requested from power control switch)
9	Member Interrogate (MI) has other units responding
10	Group Interrogate (GI) has other units responding
11	PUB not duplex
12	Autonomous Peripheral Unit Failure (APUF) CATP flag
13	Autonomous Peripheral Unit Trouble (APUT) CATP flag
14	Network blockage encountered
15	Time Slot Interchange Frame (TSIF) in growth
17	Some other frame responding to Poll High Priority (PHP) polling
18	Some other frame responding to Poll Low Priority (PLP) polling
19	Some other frame responding to Poll Digit (PDG) polling
20	Some other frame responding to Poll Seizure (PSZ) polling
22	Controller 0 Out Of Service
23	Controller 1 Out Of Service
24	SP scan / distribute points out-of-service
25	SP bus out-of-service
26	Some Protection Switch Client (PSC) is protection switched
27	Controller not duplex
28	One or both controller power feeds are not available
30	Some PSC port is pested
31	Network clock 0 Out Of Service
32	Network clock 1 Out Of Service
33	Time Multiplexed Switch (TMS) is Out Of Service
34	A-Link Controller (ALC) is powered down
35	Controller 0 is powered down
36	Controller 1 is powered down
37	Some PSC Power Control Switch is in ROS Position
38	Some PSC Port is not running operational load
39	Digital Signal Level 3 Unit (D3U), Signal Processing Unit (SPU) or In-Band Unit (IBU) not in growth or special growth

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BIT	REASONS FOR TESTS SKIPPED (continued)
40	D3U or SPU not protection switched
41	IBU Out-Of-Service
42	IBU Power control switch in Request Out-Of-Service (ROS) position
43	IBU is not running operational load
44	IBU port is pested

If subunit type is IPUB:

BIT	REASONS FOR TESTS SKIPPED
6	Central Controller (CC) 0 out-of-service
7	CC 1 out-of-service
12	Helper controller 0 out-of-service
13	Helper controller 1 out-of-service
26	Interface Peripheral Unit Bus (IPUB) out-of-service
27	DTFRIGAL return failed

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

The following appear only if the diagnostic was STF :

i	Test number of the failing test.
j	Bits which were in error, that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.
k	RAW response from the unit or firmware diagnostic RAW response.
l, m	Information concerning the test being executed. Details are specified in the diagnostic listing.
n	Address in the phase (or subroutine) of the test that failed.
o	Bits 14-0 contain information for the TLP programs. Bits 23-21 contain the count of the number of words of supplementary data that follows. Bits 20-18 contain the count of the number of words of DOLOOP data that follows. Bits 17-15 contain the count of the number of words of subroutine data that follows.
p	Supplementary data words. Repeated x times, where x is bits 23-21 of variable o. This data supplies information about the test being executed. The last supplementary data word specified is printed first.
q	DOLOOP data words. Repeated y times, where y is bits 20-18 of variable o. This data is the value of the DOLOOP variables at the time of the test failure. The value of the innermost DOLOOP is printed first.

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r	Subroutine data words. Repeated z times, where z is bits 17-15 of variable o. This data is the address of the callsubs which led up to this point in the diagnostic. The address of the last callsub is printed first.
s	Controller number (0 or 1).
t	The least significant 16 bits represent the actual octal data from the half word of LR57, where a mismatch with expected data occurred. The expected data must be derived from the actual and mismatched data fields.
u	Peripheral Unit (PU) address bus bits of the bus order sent to the subunit (12 bits).
v	PU write bus bits of the order sent to the subunit (36 bits). The upper 7 bits are the opcode and the remaining 29 bits are the data for the order. For subunit PUMACRO orders this includes the PUMACRO macro ID, a data expected flag (write only vs. a write/read order), a sub-opcode, and the test group number.
w	DIAL address of the instruction that failed.
x	Number of words of supplementary data.
y	Number of words of do-loop data. Not defined by subunit code.
z	Number of words of subroutine data. Not defined by subunit code.
a1	Trouble Location Procedure (TLP) data. Not defined by subunit code.
b1	Indicates in which half word of the subunit 32 bit word the mismatched data occurred. (0 least significant, 1 most significant)
c1	Subunit microprogram address of the previous function called, i.e., the first function on the stack or the function that called DGFAIL.
d1	Subunit microprogram address of the second function on the stack, i.e., the address of a subroutine call which then called DGFAIL.
e1	The 16 bit field of supplementary data written to the least significant half word of LR58. NOTE: The upper 8 bits of this and the following octal words will always be zero, i.e., only the lower 16 bits are used.
f1	The 16 bit field of supplementary data written to the most significant half word of LR59. NOTE: A 32 data word in LR59 is split between the lower 16 bits of two 24 bit supplementary data words.
g1	The 16 bit field of supplementary data written to the least significant half word of LR59.

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h1	The 16 bit field of supplementary data written to the most significant half word of LR60.
i1	The 16 bit field of supplementary data written to the least significant half word of LR60.
j1	Digital Signal Level 3 Unit (D3U) number.
k1	Signal Processing Unit (SPU) number.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

5. REFERENCES

PIDENTs

PUDGXT__, for CONTR subunit.

PUDGXT99, for IPUB subunit.

PUDGDS__, for D3U subunit.

PUDGXS__, for SPU subunit.

PUDGIB__, for IBU subunit.

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Message

DGN:XTSI

Output Message

DGN:PUB

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Quarterly Release (If applicable) : _____

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	Excellent	Good	Fair	Poor
Ease of Use				
Accuracy				
Completeness				
Organization				
Appearance				
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Clarity				
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4ESS[™] Switch
1B Processor
Output Messages
Volume 2
DUMP - EX(A-Q)

OM-4B000-01
Issue 1.8.1
July 2002

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EX:AUI	EX:AUI-NOT	4E19	1
EX:AUI	EX:AUI-SUSP	4E19	1
EX:AUI	EX:AUI-TERM	4E19	1
EX:AUI	EX:AUI-TEST	4E19	1
EX:CC	EX:CC	4E19	1
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EX:CS	EX:CS	4E19	1
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EX:MUP	EX:MUP-TEST	4E19	1
EX:NCLK	EX:NCLK	4E19	1
EX:NCLK	EX:NCLK-ADDR	4E19	1
EX:NCLK	EX:NCLK-ILL	4E19	1
EX:NCLK	EX:NCLK-LOOP	4E19	1
EX:NCLK	EX:NCLK-NOT	4E19	1
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EX:PSB	EX:PSB-TEST	4E19	1.2
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EX:PUB	EX:PUB-SUSP	4E19	1
EX:PUB	EX:PUB-TERM	4E19	1.1
EX:PUB	EX:PUB-TEST	4E19	1.1

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:A1B
WORK CENTER.. MAC, MOC, NMOC, TEC,
 TOC
GENERIC 4E21 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

- [1] DUMP:A1B, [XS]INDIR a, [ID b,][X]ADR c, INC d[, SIZE e, DISP f] g [h]
iiiiiiiiiii jooooooooooooooooooooooooooooo joooooooooooooooooooooooooooooooooooo
 jooooooooooooooooooooooooooooo joooooooooooooooooooooooooooooooooooo
 jooooooooooooooooooooooooooooo joooooooooooooooooooooooooooooooooooo
 jooooooooooooooooooooooooooooo joooooooooooooooooooooooooooooooooooo
 .
 .
 .
iiiiiiiiiii jooooooooooooooooooooooooooooo joooooooooooooooooooooooooooooooooooo
 jooooooooooooooooooooooooooooo joooooooooooooooooooooooooooooooooooo
 jooooooooooooooooooooooooooooo joooooooooooooooooooooooooooooooooooo
 jooooooooooooooooooooooooooooo joooooooooooooooooooooooooooooooooooo
- [2] DUMP:A1B, INDIR a, UMEM k, INC d[, SIZE e, DISP f] g [h]
iiiiiiiiiii jooooooooooooooooooooooooooooo joooooooooooooooooooooooooooooooooooo
 jooooooooooooooooooooooooooooo joooooooooooooooooooooooooooooooooooo
 jooooooooooooooooooooooooooooo joooooooooooooooooooooooooooooooooooo
 jooooooooooooooooooooooooooooo joooooooooooooooooooooooooooooooooooo
 .
 .
 .
iiiiiiiiiii jooooooooooooooooooooooooooooo joooooooooooooooooooooooooooooooooooo
 jooooooooooooooooooooooooooooo joooooooooooooooooooooooooooooooooooo
 jooooooooooooooooooooooooooooo joooooooooooooooooooooooooooooooooooo
 jooooooooooooooooooooooooooooo joooooooooooooooooooooooooooooooooooo
- [3] DUMP:A1B, [XS]INDIR a, l, INC d[, SIZE e, DISP f] g [h]
iiiiiiiiiii jooooooooooooooooooooooooooooo joooooooooooooooooooooooooooooooooooo
 jooooooooooooooooooooooooooooo joooooooooooooooooooooooooooooooooooo
 jooooooooooooooooooooooooooooo joooooooooooooooooooooooooooooooooooo
 jooooooooooooooooooooooooooooo joooooooooooooooooooooooooooooooooooo
 .
 .
 .
iiiiiiiiiii jooooooooooooooooooooooooooooo joooooooooooooooooooooooooooooooooooo
 jooooooooooooooooooooooooooooo joooooooooooooooooooooooooooooooooooo
 jooooooooooooooooooooooooooooo joooooooooooooooooooooooooooooooooooo
 jooooooooooooooooooooooooooooo joooooooooooooooooooooooooooooooooooo

SEE PROPRIETARY NOTICE ON COVER PAGE

```
[4]  DUMP:A1B, [XS]INDIR a, [ID b, ][X]ADR c, INC d[, SIZE e, DISP f] g [h]
      iiiiiiiiiii jooooooooo jooooooooo jooooooooo jooooooooo
      jooooooooo jooooooooo jooooooooo jooooooooo
      .
      .
      .
      iiiiiiiiiii jooooooooo jooooooooo jooooooooo jooooooooo
      jooooooooo jooooooooo jooooooooo jooooooooo

[5]  DUMP:A1B, INDIR a, UMEM k, INC d[, SIZE e, DISP f] g [h]
      iiiiiiiiiii jooooooooo jooooooooo jooooooooo jooooooooo
      jooooooooo jooooooooo jooooooooo jooooooooo
      .
      .
      .
      iiiiiiiiiii jooooooooo jooooooooo jooooooooo jooooooooo
      jooooooooo jooooooooo jooooooooo jooooooooo

[6]  DUMP:A1B, [XS]INDIR a, l, INC d[, SIZE e, DISP f] g [h]
      iiiiiiiiiii jooooooooo jooooooooo jooooooooo jooooooooo
      jooooooooo jooooooooo jooooooooo jooooooooo
      .
      .
      .
      iiiiiiiiiii jooooooooo jooooooooo jooooooooo jooooooooo
      jooooooooo jooooooooo jooooooooo jooooooooo
```

2. REASON FOR OUTPUT

To dump data that was requested via the DUMP:A1B input message.
Formats 1-3 displays the contents of the specified areas in binary.
Formats 4-6 displays the contents of the specified areas in octal or decimal.

3. VARIABLE FIELD DEFINITIONS

a	Level of indirectness.
b	File system ID tag. (Must be in file segments 1 through 3 since this is used for extended memory access.)
c	Base address.
d	Address increment.
e	Indicates a mask definition used in reading the displayed location. Decimal size of the mask.
f	Decimal displacement of the mask.

SEE PROPRIETARY NOTICE ON COVER PAGE

g	Disposition of the request:
	ABORTED — Function failed.
	COMPLETED — Function finished successfully.
	MSG COMPLETED — Partitioned message finished successfully.
	MSG IN PROGRESS — Partitioned output message is proceeding.
	MSG STARTED — First segment or partitioned message printed successfully.
	STOPPED — Function failed.
h	Additional failure information.
i	Address of the first location on the displayed line.
j	Contents of the specified locations.
k	Utility memory indicator.
l	Central control (CC) register indicator. (B, F, G, J, K, L, X, Y, or Z.)

4. ACTION TO BE TAKEN

If message is ABORTED or STOPPED retry after verifying input ranges and parameters.

5. REFERENCES

PIDENTs
GULPUTPP
GULPUTXP
GULRUTCR

Input Message
DUMP:A1B

SEE PROPRIETARY NOTICE ON COVER PAGE

1. FORMAT

SEE PROPRIETARY NOTICE ON COVER PAGE

```
[4]  DUMP:AU,INDIR a,ADR b,INC c[,SIZE D'd,DISP D'e] f [g]
      hhhhhhhh  iiii iiii iiii iiii
              iiii iiii iiii iiii
      .
      .
      .
      hhhhhhhh  iiii iiii iiii iiii
              iiii iiii iiii iiii

[5]  DUMP:AU,INDIR a,UMEM j,INC c[,SIZE D'd,DISP D'e] f [g]
      hhhhhhhh  iiii iiii iiii iiii
              iiii iiii iiii iiii
      .
      .
      .
      hhhhhhhh  iiii iiii iiii iiii
              iiii iiii iiii iiii

[6]  DUMP:AU,INDIR a,k,INC c[,SIZE D'd,DISP D'e] f [g]
      hhhhhhhh  iiii iiii iiii iiii
              iiii iiii iiii iiii
      .
      .
      .
      hhhhhhhh  iiii iiii iiii iiii
              iiii iiii iiii iiii
```

2. REASON FOR OUTPUT

To dump data that was requested via the DUMP:0 input message. Formats [1-3] displays the contents of the specified areas in binary. Formats [4-6] displays the contents of the specified areas in octal or decimal.

3. VARIABLE FIELD DEFINITIONS

AU	Auxiliary unit.				
a	Level of indirectness.				
b	Base address.				
c	Address increment.				
d	Indicates a mask definition used in reading the displayed location. Decimal size of the mask.				
e	Decimal displacement of the mask.				
f	Disposition of the request: <table> <tr> <td>ABORTED</td><td>— Function failed.</td></tr> <tr> <td>COMPLETED</td><td>— Function finished successfully.</td></tr> </table>	ABORTED	— Function failed.	COMPLETED	— Function finished successfully.
ABORTED	— Function failed.				
COMPLETED	— Function finished successfully.				

SEE PROPRIETARY NOTICE ON COVER PAGE

	MSG COMPLETED	— Partitioned message finished successfully.
	MSG IN PROGRESS	— Partitioned output message is proceeding.
	MSG STARTED	— First segment or partitioned message printed successfully.
	STOPPED	— Function failed.
g	If present, additional failure information.	
h	Address of the first location on the displayed line.	
i	Utility memory indicator.	
j	Contents of the specified locations.	
k	CC register indicator.	

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
GULPIMDT
GULPUTPP
GULPUTXP
GULRUTCR

Practice 234-301-003, *1B Processor Generic Utility Program (GULP) Application - Description*

PA-4A002-01, *4ESSTM User's Manual*

SEE PROPRIETARY NOTICE ON COVER PAGE

1. FORMAT

SEE PROPRIETARY NOTICE ON COVER PAGE

SEE PROPRIETARY NOTICE ON COVER PAGE

2. REASON FOR OUTPUT

To dump data that was requested via the DUMP:CC input message.
Formats [1-4] displays the contents of the specified areas in binary.
Formats [5-8] displays the contents of the specified areas in octal or decimal.

3. VARIABLE FIELD DEFINITIONS

a	Level of indirectness.
b	Base address.
c	Address increment.
d	Indicates a mask definition used in reading the displayed location. Decimal size of the mask.
e	Decimal displacement of the mask.
f	Disposition of the request: ABORTED — Function failed. COMPLETED — Function finished successfully. MSG COMPLETED — Partitioned message finished successfully. MSG IN PROGRESS — Partitioned output message is proceeding. MSG STARTED — First segment or partitioned message printed successfully. STOPPED — Function failed.
g	Additional failure information.
h	Address of the first location on the displayed line.
i	Contents of the specified locations.
j	Utility memory indicator.
k	CC register indicator.
l	A list of CC register mnemonics with the corresponding data.

4. ACTION TO BE TAKEN

If message is ABORTED or STOPPED retry after verifying input ranges and parameters.

5. REFERENCES

PIDENTs
GULPIMDT
GULPUTPP
GULPUTXP
GULRUTCR

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Message
DUMP:CC

SEE PROPRIETARY NOTICE ON COVER PAGE

1. FORMAT

SEE PROPRIETARY NOTICE ON COVER PAGE

```
[4]  DUMP:CS,INDIR a,[X]ADR b,INC c[,SIZE d,DISP e] f [g]
      hhhhhhhhhh iiii iiii iiii iiii
              iiii iiii iiii iiii
      .
      .
      .
      hhhhhhhhhh iiii iiii iiii iiii
              iiii iiii iiii iiii

[5]  DUMP:CS,INDIR a,UMEM j,INC c[,SIZE d,DISP e] f [g]
      hhhhhhhhhh iiii iiii iiii iiii
              iiii iiii iiii iiii
      .
      .
      .
      hhhhhhhhhh iiii iiii iiii iiii
              iiii iiii iiii iiii

[6]  DUMP:CS,INDIR a,k,INC c[,SIZE d,DISP e] f [g]
      hhhhhhhhhh iiii iiii iiii iiii
              iiii iiii iiii iiii
      .
      .
      .
      hhhhhhhhhh iiii iiii iiii iiii
              iiii iiii iiii iiii
```

2. REASON FOR OUTPUT

To dump data that was requested via the DUMP:CS input message.
 Formats 1-3 displays the contents of the specified areas in binary.
 Formats 4-6 displays the contents of the specified areas in octal or decimal.

3. VARIABLE FIELD DEFINITIONS

a	Level of indirectness.						
b	Base address.						
c	Address increment.						
d	Indicates a mask definition used in reading the displayed location. Decimal size of the mask.						
e	Decimal displacement of the mask.						
f	Disposition of the request: <table> <tr> <td>ABORTED</td><td>— Function failed.</td></tr> <tr> <td>COMPLETED</td><td>— Function finished successfully.</td></tr> <tr> <td>MSG COMPLETED</td><td>— Partitioned message finished successfully.</td></tr> </table>	ABORTED	— Function failed.	COMPLETED	— Function finished successfully.	MSG COMPLETED	— Partitioned message finished successfully.
ABORTED	— Function failed.						
COMPLETED	— Function finished successfully.						
MSG COMPLETED	— Partitioned message finished successfully.						

SEE PROPRIETARY NOTICE ON COVER PAGE

MSG IN PROGRESS — Partitioned output message is proceeding.

MSG STARTED — First segment or partitioned message printed successfully.

STOPPED — Function failed.

- g Additional failure information.
- h Address of the first location on the displayed line.
- i Contents of the specified locations.
- j Utility memory indicator.
- k Central control (CC) register indicator. (B, F, G, J, K, L, X, Y, or Z.)

4. ACTION TO BE TAKEN

If message is ABORTED or STOPPED retry after verifying input ranges and parameters.

5. REFERENCES

PIDENTs
GULPUTPP
GULPUTXP
GULRUTCR

Input Message
DUMP:CS

SEE PROPRIETARY NOTICE ON COVER PAGE

1. FORMAT

SEE PROPRIETARY NOTICE ON COVER PAGE

```
[4]  DUMP:CSS,INDIR a,[X]ADR b,INC c[,SIZE d,DISP e] f [g]
      hhhhhhhhhh iiiiiiii iiiiiiii iiiiiiii iiiiiiii
              iiiiiiii iiiiiiii iiiiiiii iiiiiiii
      .
      .
      .
      hhhhhhhhhh iiiiiiii iiiiiiii iiiiiiii iiiiiiii
              iiiiiiii iiiiiiii iiiiiiii iiiiiiii

[5]  DUMP:CSS,INDIR a,UMEM j,INC c[,SIZE d,DISP e] f [g]
      hhhhhhhhhh iiiiiiii iiiiiiii iiiiiiii iiiiiiii
              iiiiiiii iiiiiiii iiiiiiii iiiiiiii
      .
      .
      .
      hhhhhhhhhh iiiiiiii iiiiiiii iiiiiiii iiiiiiii
              iiiiiiii iiiiiiii iiiiiiii iiiiiiii

[6]  DUMP:CSS,INDIR a,k,INC c[,SIZE d,DISP e] f [g]
      hhhhhhhhhh iiiiiiii iiiiiiii iiiiiiii iiiiiiii
              iiiiiiii iiiiiiii iiiiiiii iiiiiiii
      .
      .
      .
      hhhhhhhhhh iiiiiiii iiiiiiii iiiiiiii iiiiiiii
              iiiiiiii iiiiiiii iiiiiiii iiiiiiii
```

2. REASON FOR OUTPUT

To dump data that was requested via the DUMP:CSS input message.
 Formats 1-3 displays the contents of the specified areas in binary.
 Formats 4-6 displays the contents of the specified areas in octal or decimal.

3. VARIABLE FIELD DEFINITIONS

a	Level of indirectness.						
b	Base address.						
c	Address increment.						
d	Indicates a mask definition used in reading the displayed location. Decimal size of the mask.						
e	Decimal displacement of the mask.						
f	Disposition of the request: <table> <tr> <td>ABORTED</td><td>— Function failed.</td></tr> <tr> <td>COMPLETED</td><td>— Function finished successfully.</td></tr> <tr> <td>MSG COMPLETED</td><td>— Partitioned message finished successfully.</td></tr> </table>	ABORTED	— Function failed.	COMPLETED	— Function finished successfully.	MSG COMPLETED	— Partitioned message finished successfully.
ABORTED	— Function failed.						
COMPLETED	— Function finished successfully.						
MSG COMPLETED	— Partitioned message finished successfully.						

SEE PROPRIETARY NOTICE ON COVER PAGE

MSG IN PROGRESS — Partitioned output message is proceeding.

MSG STARTED — First segment or partitioned message printed successfully.

STOPPED — Function failed.

- g Additional failure information.
- h Address of the first location on the displayed line.
- i Contents of the specified locations.
- j Utility memory indicator.
- k Central control (CC) register indicator. (B, F, G, J, K, L, X, Y, or Z.)

4. ACTION TO BE TAKEN

If message is ABORTED or STOPPED retry after verifying input ranges and parameters.

5. REFERENCES

PIDENTs
GULPUTPP
GULPUTXP
GULRUTCR

Input Message
DUMP:CSS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:DIF
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP:DIF a, [CONTR b,]c d-e!
ffffffff

2. REASON FOR OUTPUT

To dump a range of E-Store Number (ESN), Miscellaneous Scanner Number (MSN), or Universal Scanner Number (USN) for the Digital Interface Frame (DIF).

3. VARIABLE FIELD DEFINITIONS

a	Member number.
b	Controller out (active if defaulted).
c	ESN — E-store number. MSN — Miscellaneous scanner number. USN — Universal scanner number.
d	First store number.
e	Last store number ($e - d \leq 1000$, in octal).
f	Repeated as needed ($(e - d) / 24$). A store is only one bit long.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:DIF-BUF
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP:DIF a, [CONTR b,] BUF c!

dddddddd eeeeeeee 00000000 00000000 00000000 00000000 00000000 00000000
ffffffff

2. REASON FOR OUTPUT

Dumps a specified digital interface frame buffer for DIF, domestic frame DIF-E1(D), or frame-export1 DIF-E1.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | DIF, DIF-E1(D), or DIF-E1 member number. |
| b | Controller number (if none specified, dump is from the active controller). |
| c | Buffer number:
0 — Unused.
1 — Unused.
2 — Scan point (SP) digit buffer.
3 — SP digit buffer. First decimal 128, address bounds octal 1400-1500.
4 — Unused.
5 — SP low priority buffer.
6 — SP high priority buffer.
7 — SP seizure buffer.
10 — Unused.
11 — Unused.
12 — Unused.
13 — Maintenance buffer. |
| d | Write and read pointers for buffer. |
| e | MP maintenance buffer status word when c = 13.
00000000, if c ≠ 13. |
| f | Buffer contents repeated as needed per size of buffer. |

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:DIF-CREG
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP: DIF a, CREG!

b...b	c...c	d...d	e...e	f...f	g...g	0...0	0...0
h...h	i...i	j...j	k...k	l...l	m...m	0...0	0...0
n...n	o...o	p...p	q...q	r...r	s...s	0...0	0...0
t...t	u...u	v...v	w...w	x...x	y...y	0...0	0...0
z...z	a ¹ ...a ¹	b ¹ ...b ¹	c ¹ ...c ¹	d ¹ ...d ¹	e ¹ ...e ¹	0...0	0...0
f ¹ ...f ¹	g ¹ ...g ¹	h ¹ ...h ¹	i ¹ ...i ¹	j ¹ ...j ¹	k ¹ ...k ¹	0...0	0...0
UTMN	l ¹ ...l ¹	7...7	7...7	7...7	7...7	7...7	7...7
b...b	c...c	d...d	e...e	f...f	g...g	0...0	0...0
h...h	i...i	j...j	k...k	l...l	m...m	0...0	0...0
n...n	o...o	p...p	q...q	r...r	s...s	0...0	0...0
t...t	u...u	v...v	w...w	x...x	y...y	0...0	0...0
z...z	a ¹ ...a ¹	b ¹ ...b ¹	c ¹ ...c ¹	d ¹ ...d ¹	e ¹ ...e ¹	0...0	0...0
f ¹ ...f ¹	g ¹ ...g ¹	h ¹ ...h ¹	i ¹ ...i ¹	j ¹ ...j ¹	k ¹ ...k ¹	0...0	0...0

NOTE: The triple dots in the message represent six characters. For example, c...c is actually cccccccc. The top half of the dump is from controller 0; the lower half is from controller 1.

2. REASON FOR OUTPUT

To dump the Digital Interface Frame (DIF) critical registers.

3. VARIABLE FIELD DEFINITIONS

a	DIF member number.
b	Software status (controller).
c	Hardware status (controller).
d	MA data.
e	Software frame status.
f	Software Digital Interface Unit (DIU) out-of-service status for DIU 23-0.
g	Software DIU out-of-service status for DIU 33-24.
h	Controller Error Source Register (ESR).
i	Pest register.
j	Hardware MP ESR.
k	Firmware MP ESR.

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l	DIU 23-0 error summary.
m	DIU 33-24 error summary.
n	Clock ESR.
o	Signal processor ESR.
p	Internal bus ESR.
q	Exercise register.
r	Protection switch reg low.
s	Protection switch reg high.
t	Protection switch verify low.
u	Protection switch verify high.
v	Extended bus cutoff low.
w	Extended bus cutoff high.
x	Arithmetic Unit Data Register (AUDR).
y	SP trunk counters.
z	Buffer status register.
a ¹	High priority buffer pointers.
b ¹	Low priority buffer pointers.
c ¹	Digit buffer pointers.
d ¹	Seizure buffer pointers.
e ¹	Maintenance buffer pointers.
f ¹	SP status register.
g ¹	LUSP link error DIU 23-0.
h ¹	LUSP link error DIU 33-24.
i ¹	LUSP link pest DIU 23-0.
j ¹	LUSP link pest DIU 33-24.
k ¹	Maintenance buffer status word.
l ¹	First word of DIF unit type translator.

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:DIF-DIU
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP:DIF a, [CONTR b,] DIU c, IREG!

d...d e...e f...f g...g h...h i...i j...j k...k
l...l m...m n...n o...o p...p q...q r...r s...s
t...t 0...0 0...0 0...0 0...0 0...0 0...0 0...0
u...u v...v w...w x...x y...y z...z 0...0 0...0
u...u v...v w...w x...x y...y z...z 0...0 0...0
u...u v...v w...w x...x y...y z...z 0...0 0...0
u...u v...v w...w x...x y...y z...z 0...0 0...0
u...u v...v w...w x...x y...y z...z 0...0 0...0

NOTE: The triple dots in the message represent six characters. For example, c...c is actually CCCCCC.

2. REASON FOR OUTPUT

To dump the digroup maintenance and status data for a particular Digital Interface Unit (DIU) of the Digital Interface Frame (DIF).

3. VARIABLE FIELD DEFINITIONS

a	Member number (octal for nongeneric message).
b	Controller.
c	Subunit number.
d	Unit Status Register (USTATUS).
e	Digroup Alarm Data 1 (DGALM1).
f	Digroup Report Function Data 1 (DGRF1).
g	00000000.
h	Digroup Alarm Data 2 (DGALM2).
i	Digroup Report Function Data 2 (DGRF2).
j	00000000.
k	Digroup Alarm Data 3 (DGALM3).
l	Digroup Report Function Data 3 (DGRF3).
m	00000000.
n	Digroup Alarm Data 4 (DGALM4).

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o	Digroup Report Function Data 4 (DGRF4).
p	00000000.
q	Digroup Alarm Data 5 (DGALM5).
r	Digroup Report Function Data 5 (DGRF5).
s	00000000.
t	DIU Common Alarm (CALM) data.
u	Digroup Status (DGSTAT).
v	Forced Digit (FD).
w	Local Alarm (LCA).
x	Remote Alarm (RMA).
y	Frame Error High (FEHIGH) count.
z	Frame Error Low (FELOW) count.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:DIF-EXCRAM
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP:DIF a, [CONTR b,]EXCRA c-d
eeeeeeee

2. REASON FOR OUTPUT

Dumps a range of executive buffer random access memory (EXCRAM) from the domestic digital interface frame, DIF-E1(D), or from the digital interface frame-export 1, DIF-E1.

3. VARIABLE FIELD DEFINITIONS

a	DIF-E1(D) or DIF-E1 member number.
b	Controller 0 or 1 (active is defaulted).
c	Starting memory address (0-1777, in octal); (d - c < 10, in octal).
d	Last memory address (0-1777, in octal); (d - c < 10, in octal).
e	Repeat as needed (d - c). One data word per memory location with bits 0 to 23 valid.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:DIF-IREG
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP:DIF a, IREG!

b...b	c...c	d...d	e...e	f...f	g...g	0...0	0...0
h...h	i...i	j...j	k...k	l...l	m...m	0...0	0...0
n...n	o...o	p...p	q...q	r...r	s...s	0...0	0...0
t...t	u...u	v...v	w...w	x...x	y...y	0...0	0...0
z...z	a ¹ ...a ¹	b ¹ ...b ¹	c ¹ ...c ¹	d ¹ ...d ¹	e ¹ ...e ¹	0...0	0...0
f ¹ ...f ¹	g ¹ ...g ¹	h ¹ ...h ¹	i ¹ ...i ¹	j ¹ ...j ¹	k ¹ ...k ¹	0...0	0...0
l ¹ ...l ¹	m ¹ ...m ¹	n ¹ ...n ¹	o ¹ ...o ¹	p ¹ ...p ¹	q ¹ ...q ¹	0...0	0...0
r ¹ ...r ¹	s ¹ ...s ¹	t ¹ ...t ¹	u ¹ ...u ¹	v ¹ ...v ¹	w ¹ ...w ¹	0...0	0...0
x ¹ ...x ¹	y ¹ ...y ¹	z ¹ ...z ¹	a ² ...a ²	b ² ...b ²	c ² ...c ²	0...0	0...0
d ² ...d ²	e ² ...e ²	f ² ...f ²	g ² ...g ²	h ² ...h ²	i ² ...i ²	0...0	0...0
j ² ...j ²	k ² ...k ²	l ² ...l ²	0...0	0...0	0...0	0...0	0...0
UTMN	m ² ...m ²	7...7	7...7	7...7	7...7	7...7	7...7
b...b	c...c	d...d	e...e	f...f	g...g	0...0	0...0
h...h	i...i	j...j	k...k	l...l	m...m	0...0	0...0
n...n	o...o	p...p	q...q	r...r	s...s	0...0	0...0
t...t	u...u	v...v	w...w	x...x	y...y	0...0	0...0
z...z	a ¹ ...a ¹	b ¹ ...b ¹	c ¹ ...c ¹	d ¹ ...d ¹	e ¹ ...e ¹	0...0	0...0
f ¹ ...f ¹	g ¹ ...g ¹	h ¹ ...h ¹	i ¹ ...i ¹	j ¹ ...j ¹	k ¹ ...k ¹	0...0	0...0
l ¹ ...l ¹	m ¹ ...m ¹	n ¹ ...n ¹	o ¹ ...o ¹	p ¹ ...p ¹	q ¹ ...q ¹	0...0	0...0
r ¹ ...r ¹	s ¹ ...s ¹	t ¹ ...t ¹	u ¹ ...u ¹	v ¹ ...v ¹	w ¹ ...w ¹	0...0	0...0
x ¹ ...x ¹	y ¹ ...y ¹	z ¹ ...z ¹	a ² ...a ²	b ² ...b ²	c ² ...c ²	0...0	0...0
d ² ...d ²	e ² ...e ²	f ² ...f ²	g ² ...g ²	h ² ...h ²	i ² ...i ²	0...0	0...0
j ² ...j ²	k ² ...k ²	l ² ...l ²	0...0	0...0	0...0	0...0	0...0

NOTE: The triple dots in the message represent six characters. For example, c...c is actually cccccccc. The top half of the dump is from controller 0; the lower half is from controller 1.

2. REASON FOR OUTPUT

To dump the Digital Interface Frame (DIF) internal registers. The first 11 lines are dumps from controller 0 registers; the last 11 lines are dumps from controller 1 registers.

3. VARIABLE FIELD DEFINITIONS

- a DIF member number.
- b Software status (controller).
- c Hardware status (controller).

SEE PROPRIETARY NOTICE ON COVER PAGE

d	MA data.
e	Software frame status.
f	Software Digital Interface Unit (DIU) out-of-service status for DIU 23-0.
g	Software DIU out-of-service status for DIU 33-24.
h	Controller Error Source Register (ESR).
i	Pest register.
j	Hardware MP ESR.
k	Firmware MP ESR.
l	DIU 23-0 error summary.
m	DIU 33-24 error summary.
n	Clock Error Source Register (ESR).
o	Signal processor ESR.
p	Internal bus ESR.
q	Exercise register.
r	Protection switch register low.
s	Protection switch register high.
t	Protection switch verify low.
u	Protection switch verify high.
v	Extended bus cutoff low.
w	Extended bus cutoff high.
x	Arithmetic Unit Data Register (AUDR).
y	SP trunk counters.
z	Buffer status register.
a ¹	High priority buffer pointers.
b ¹	Low priority buffer pointers.
c ¹	Digit buffer pointers.
d ¹	Seizure buffer pointers.
e ¹	Maintenance buffer pointers.
f ¹	SP status register.
g ¹	LUSP link error DIU 23-0.
h ¹	LUSP link error DIU 33-24.
i ¹	LUSP link pest DIU 23-0.
j ¹	LUSP link pest DIU 33-24.

SEE PROPRIETARY NOTICE ON COVER PAGE

k ¹	Maintenance buffer status word.
l ¹	Common alarm raw data for DIU 2-0.
m ¹	Common alarm raw data for DIU 5-3.
n ¹	Common alarm raw data for DIU 8-6.
o ¹	Common alarm raw data for DIU 11-9.
p ¹	Common alarm raw data for DIU 14-12.
q ¹	Common alarm raw data for DIU 17-15.
r ¹	Common alarm raw data for DIU 20-18.
s ¹	Common alarm raw data for DIU 23-21.
t ¹	Common alarm raw data for DIU 26-24.
u ¹	Common alarm raw data for DIU 29-27.
v ¹	Common alarm raw data for DIU 32-30.
w ¹	Common alarm raw data for DIU 33.
x ¹	Common alarm pests for DIU 23-0.
y ¹	Common alarm pests for DIU 33-24.
z ¹	MP interrupt enable status.
a ²	MP routine task inhibit state.
b ²	MP maintenance buffer seizure flag.
c ²	00000000.
d ²	Digroup alarm pests for DIU 23-0.
e ²	Digroup alarm pests for DIU 33-24.
f ²	Digroup report function pests for DIU 23-0.
g ²	Digroup report function pests for DIU 33-24.
h ²	Protection switch firmware status low.
i ²	Protection switch firmware status high.
i ²	Common alarms DIU 0-15.
j ²	Common alarms DIU 16-33.
l ²	Interject register.
m ²	First word of DIF unit type translator.

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:DIF-MAPRT
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP:DIF a, [CONTR b,]MAPRT c-d
eeeeeeee

2. REASON FOR OUTPUT

Dumps a range of the map rate table (MAPRT) memory from the domestic digital interface frame, DIF-E1(D), or from the digital interface frame-export 1, DIF-E1.

3. VARIABLE FIELD DEFINITIONS

a	DIF-E1(D) or DIF-E1 member number.
b	Controller 0 or 1 (active is defaulted).
c	Starting memory address (0-177, in octal); (d - c < 10, in octal).
d	Last memory address (0-177, in octal); (d - c < 10, in octal).
e	Repeat as needed (d - c). One data word per memory location with bits 0 to 23 valid.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:DIF-MEM
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP:DIF a, [CONTR b,] MEM c-d!
eeeeeeee

2. REASON FOR OUTPUT

Dumps a range of digital interface frame (DIF) memory.

3. VARIABLE FIELD DEFINITIONS

a	Member number.
b	Controller 0 or 1 (active if defaulted).
c	First memory address.
d	Last memory address ($d - c \leq 500$, in octal).
e	Repeated as needed ($(d - c) / 3$). Memory is eight bits wide; three memory words are packed into one 24-bit output word.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:DIF-PTSRPS
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP:DIF a, [CONTR b,] PTSRP c-d
eeeeeeee

2. REASON FOR OUTPUT

Dumps a range of P-bit trunk status rate pointer store (PTSRPS) memory from the domestic digital interface frame, DIF-E1(D), or from the digital interface frame-export 1, DIF-E1.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | DIF-E1(D) or DIF-E1 member number. |
| b | Controller 0 or 1 (active is defaulted). |
| c | Starting memory address (0-7777, in octal); (d - c < 10, in octal). |
| d | Last memory address (0-7777, in octal); (d - c < 10, in octal). |
| e | Repeat as needed (d - c). One data word per memory location with bits 0 to 6 valid. |

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:DIF-PTSS
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP:DIF a, [CONTR b,]PTSS c-d
eeeeeeee

2. REASON FOR OUTPUT

Dumps a range of P-bit trunk status store (PTSS) memory from the domestic digital interface frame, DIF-E1(D), or from the digital interface frame-export 1, DIF-E1.

3. VARIABLE FIELD DEFINITIONS

a	DIF-E1(D) or DIF-E1 member number.
b	Controller 0 or 1 (active is defaulted).
c	Starting memory address (0-7777, in octal); (d - c < 10, in octal).
d	Last memory address (0-7777, in octal); (d - c < 10, in octal).
e	Repeat as needed (d - c). One data word per memory location with bits 0 to 19 valid.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:DIF-SPSTS
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP:DIF a, [CONTR b,]SPSTS c-d
eeeeeeee

2. REASON FOR OUTPUT

Dumps a range of signaling processor (SP) state translator store (SPSTS) memory from the domestic digital interface frame, DIF-E1(D), or from the digital interface frame-export 1, DIF-E1.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | DIF-E1(D) or DIF-E1 member number. |
| b | Controller (0 or 1), active is defaulted. |
| c | Starting memory address (0-27777, in octal); (d - c < 10, in octal). |
| d | Last memory address (0-27777, in octal); (d - c < 10, in octal). |
| e | Repeat as needed (d - c). One data word per memory location with bits 0 to 17 valid. |

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:DIF-SPTSS
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP:DIF a, [CONTR b,]SPTSS c-d
eeeeeeee

2. REASON FOR OUTPUT

Dumps a range of signaling processor (SP) trunk status store (SPTSS) memory from the domestic digital interface frame, DIF-E1(D), or from the digital interface frame-export 1, DIF-E1.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | DIF-E1(D) or DIF-E1 member number. |
| b | Controller (0 or 1), active is defaulted. |
| c | Starting memory address (0-7777, in octal); (d - c < 10, in octal). |
| d | Last memory address (0-7777, in octal); (d - c < 10, in octal). |
| e | Repeat as needed (d - c). One data word per memory location with bits 0 to 18 valid. |

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:DIF-TBIT
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP:DIF a, [CONTR b,] TBIT c-d!
eeeeeeee

2. REASON FOR OUTPUT

Dumps a range of digital interface frame (DIF) TBITs.

3. VARIABLE FIELD DEFINITIONS

a	Member number.
b	Controller (0 or 1), active if defaulted.
c	First TBIT in 17 bit test (TST) format.
d	Last TBIT in 17 bit TST format ($d - c \leq 1000$, in octal).
e	Repeat as needed ($d - c / 4$). The value contains up to four sets of TBITs.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:DISK-SCS
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP:DISK;SCS a, SCU b c

2. REASON FOR OUTPUT

Response to a Service Circuit Unit (SCU) disk dump request.

3. VARIABLE FIELD DEFINITIONS

- a Service Circuit System (SCS) member number (0-7).
- b SCU member number (0-15). Software status controller.
- c Response to a SCU disk dump request.
- ABORTED MACRO REJECTED — The SCS controller did not accept the SCU disk dump macro.
- ABORTED MACRO TIMEOUT — The SCS controller did not reply to the SCU disk dump macro.
- COMPLETED — The SCU disk dump has completed.
- FAILED — The SCU disk dump has failed.
- STOPPED ANN UPD IP — An announcement update is in progress. The SCU disk dump cannot run concurrently with an announcement update.
- STOPPED CONFIG FAILED OR UNEQ — Both controllers in the SCS frame are either unequipped or cannot be configured.
- STOPPED DISK UNEQ — The SCU disk pair is unequipped.
- STOPPED SCU DISK IN USE — An inter/intra SCU file copy, inter/intra SCU raw disk copy, or an SCU disk dump job is already in progress. The SCU disk dump cannot run concurrently with these jobs.
- STOPPED SCU UNEQ — The SCU is unequipped.

4. ACTION TO BE TAKEN

If variable c is:

- ABORTED MACRO REJECTED — Diagnose the active controller and re-enter the input message.
- ABORTED MACRO TIMEOUT — Diagnose the active controller and re-enter the input message.

SEE PROPRIETARY NOTICE ON COVER PAGE

COMPLETED — No action required.

FAILED — Diagnose the SCU and re-enter the input message.

STOPPED ANN UPD IP — Re-enter the input message after the announcement update has completed.

STOPPED CONFIG FAILED OR UNEQ — Equip the SCS or diagnose the controllers and re-enter the input message.

STOPPED DISK UNEQ — Correct the SCU disk pair number or equip the disk pair and re-enter the input message.

STOPPED SCU DISK IN USE — Re-enter the input message after the interfering job in the SCS has completed or stop the interfering job.

STOPPED SCU UNEQ — Correct the SCU number or equip the SCU and re-enter the input message.

5. REFERENCES

PIDENT
SCSFPUMP

Input Message
DUMP:DISK-SCS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:DT-CREG
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP:DT a,CREG! b

cccccccc dddddddd eeeeeeee ffffffff gggggggg hhhhhhhh iiiiii
jjjjjjjj

2. REASON FOR OUTPUT

To print the critical registers for the specified digroup terminal (DT).

3. VARIABLE FIELD DEFINITIONS

a	DT member number (0-127).
b	Disposition of message: COMPLETED NOT STARTED - CONTROLLER NOT IN SERVICE NOT STARTED - ILLEGAL MESSAGE NOT STARTED - INVALID INPUT FOR UNIT TYPE OR FUNCTION SPECIFIED NOT STARTED - INVALID MEMBER, CONTROLLER, SUBUNIT, ADDRESS, OR RANGE SPECIFIED NOT STARTED - UNIT OR SUBUNIT UNEQUIPPED REPEAT LATER - THIS UNIT IS BEING DIAGNOSED
c	Software status for controller (CONTR) 0.
d	Software status for CONTR 1.
e	Routing.
f	Pests.
g	Start word.
h	Control summary error source register (ESR).
i	Unit summary ESR.
j	Select status register.

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:DT-IREG
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP:DT a, IREG! b

c...c	d...d	e...e	f...f	g...g	h...h	i...i	j...j
k...k	l...l	m...m	n...n	o...o	p...p	q...q	r...r
s...s	t...t	u...u	v...v	w...w	x...x	y...y	z...z
a ₁ ...a ₁	b ₁ ...b ₁	c ₁ ...c ₁	d ₁ ...d ₁	e ₁ ...e ₁	f ₁ ...f ₁	g ₁ ...g ₁	h ₁ ...h ₁
i ₁ ...i ₁	j ₁ ...j ₁	k ₁ ...k ₁	l ₁ ...l ₁	m ₁ ...m ₁	n ₁ ...n ₁	o ₁ ...o ₁	p ₁ ...p ₁
q ₁ ...q ₁	r ₁ ...r ₁	s ₁ ...s ₁	t ₁ ...t ₁	u ₁ ...u ₁	v ₁ ...v ₁	w ₁ ...w ₁	x ₁ ...x ₁
y ₁ ...y ₁	z ₁ ...z ₁	a ₂ ...a ₂	b ₂ ...b ₂	c ₂ ...c ₂	d ₂ ...d ₂	e ₂ ...e ₂	f ₂ ...f ₂
g ₂ ...g ₂	h ₂ ...h ₂	i ₂ ...i ₂	j ₂ ...j ₂	k ₂ ...k ₂	l ₂ ...l ₂	m ₂ ...m ₂	n ₂ ...n ₂
o ₂ ...o ₂	p ₂ ...p ₂	q ₂ ...q ₂	r ₂ ...r ₂	s ₂ ...s ₂	t ₂ ...t ₂	u ₂ ...u ₂	v ₂ ...v ₂
w ₂ ...w ₂	x ₂ ...x ₂	y ₂ ...y ₂	z ₂ ...z ₂	a ₃ ...a ₃	b ₃ ...b ₃	c ₃ ...c ₃	d ₃ ...d ₃
e ₃ ...e ₃	f ₃ ...f ₃	g ₃ ...g ₃	h ₃ ...h ₃	i ₃ ...i ₃	j ₃ ...j ₃	k ₃ ...k ₃	l ₃ ...l ₃
m ₃ ...m ₃	n ₃ ...n ₃	o ₃ ...o ₃	p ₃ ...p ₃	q ₃ ...q ₃	r ₃ ...r ₃	s ₃ ...s ₃	t ₃ ...t ₃
u ₃ ...u ₃	v ₃ ...v ₃	w ₃ ...w ₃	x ₃ ...x ₃	y ₃ ...y ₃	z ₃ ...z ₃	a ₄ ...a ₄	b ₄ ...b ₄

NOTE: The triple dots in the message represent six characters. For example, c...c is actually ccccccc.

2. REASON FOR OUTPUT

To print the digroup terminal (DT) internal register dump.

3. VARIABLE FIELD DEFINITIONS

a DT member number (0-127).
b Disposition of message:

Dumped data is as follows:

COMPLETED

NOT STARTED - CONTROLLER NOT IN SERVICE

NOT STARTED - ILLEGAL MESSAGE

NOT STARTED - INVALID INPUT FOR UNIT TYPE OR FUNCTION
SPECIFIED

NOT STARTED - INVALID MEMBER, CONTROLLER, SUBUNIT,
ADDRESS, OR RANGE SPECIFIED

NOT STARTED - UNIT OR SUBUNIT UNEQUIPPED

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REPEAT LATER - THIS UNIT IS BEING DIAGNOSED

c	Status register 0.
d	Status register 1.
e	Routing.
f	Pests.
g	Start word.
h	Control summary error source register (ESR).
i	Unit summary ESR.
j	Select status register.
k	0.0 Error sources for digroup terminal unit (DTU) 0.
l	0.1 Error sources for DTU 0.
m	0.2 Error sources for DTU 0.
n	0.3 Error Sources for DTU 0.
o	0.4 Error sources for DTU 0.
p	0.5 Error sources for DTU 0.
q	0.6 Error sources for DTU 0.
r	0.7 Error sources for DTU 0.
s	1.0 Error sources for DTU 1.
t	1.1 Error sources for DTU 1.
u	1.2 Error sources for DTU 1.
v	1.3 Error sources for DTU 1.
w	1.4 Error sources for DTU 1.
x	1.5 Error sources for DTU 1.
y	1.6 Error sources for DTU 1.
z	1.7 Error sources for DTU 1.
a ¹	2.0 Error sources for DTU 2.
b ¹	2.1 Error sources for DTU 2.
c ¹	2.2 Error sources for DTU 2.
d ¹	2.3 Error sources for DTU 2.
e ¹	2.4 Error sources for DTU 2.
f ¹	2.5 Error sources for DTU 2.
g ¹	2.6 Error sources for DTU 2.
h ¹	2.7 Error sources for DTU 2.

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i ¹	3.0 Error sources for DTU 3.
j ¹	3.1 Error sources for DTU 3.
k ¹	3.2 Error sources for DTU 3.
l ¹	3.3 Error sources for DTU 3.
m ¹	3.4 Error sources for DTU 3.
n ¹	3.5 Error sources for DTU 3.
o ¹	3.6 Error sources for DTU 3.
p ¹	3.7 Error sources for DTU 3.
q ¹	4.0 Error sources for DTU 4.
r ¹	4.1 Error sources for DTU 4.
s ¹	4.2 Error sources for DTU 4.
t ¹	4.3 Error sources for DTU 4.
u ¹	4.4 Error sources for DTU 4.
v ¹	4.5 Error sources for DTU 4.
w ¹	4.6 Error sources for DTU 4.
x ¹	4.7 Error sources for DTU 4.
y ¹	5.0 Error sources for DTU 5.
z ¹	5.1 Error sources for DTU 5.
a ²	5.2 Error sources for DTU 5.
b ²	5.3 Error sources for DTU 5.
c ²	5.4 Error sources for DTU 5.
d ²	5.5 Error sources for DTU 5.
e ²	5.6 Error sources for DTU 5.
f ²	5.7 Error sources for DTU 5.
g ²	6.0 Error sources for DTU 6.
h ²	6.1 Error sources for DTU 6.
i ²	6.2 Error sources for DTU 6.
j ²	6.3 Error sources for DTU 6.
k ²	6.4 Error sources for DTU 6.
l ²	6.5 Error sources for DTU 6.
m ²	6.6 Error sources for DTU 6.
n ²	6.7 Error sources for DTU 6.
o ²	7.0 Error sources for DTU 7.

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p^2	7.1 Error sources for DTU 7.
q^2	7.2 Error sources for DTU 7.
r^2	7.3 Error sources for DTU 7.
s^2	7.4 Error sources for DTU 7.
t^2	7.5 Error sources for DTU 7.
u^2	7.6 Error sources for DTU 7.
v^2	7.7 Error sources for DTU 7.
w^2	8.0 Error sources for DTU 8.
x^2	8.1 Error sources for DTU 8.
y^2	8.2 Error sources for DTU 8.
z^2	8.3 Error sources for DTU 8.
a^3	8.4 Error sources for DTU 8.
b^3	8.5 Error sources for DTU 8.
c^3	8.6 Error sources for DTU 8.
d^3	8.7 Error sources for DTU 8.
e^3	13.0 Miscellaneous status registers.
f^3	13.1 Miscellaneous status registers.
g^3	13.2 Miscellaneous status registers.
h^3	13.3 Miscellaneous status registers.
i^3	13.4 Miscellaneous status registers.
j^3	13.5 Miscellaneous status registers.
k^3	13.6 Miscellaneous status registers.
l^3	13.7 Miscellaneous status registers.
m^3	14.0 Controller ESR.
n^3	14.1 Controller ESR.
o^3	14.2 Controller ESR.
p^3	14.3 Controller ESR.
q^3	14.4 Controller ESR.
r^3	14.5 Controller ESR.
s^3	14.6 Controller ESR.
t^3	14.7 Controller ESR.
u^3	15.0 Intermediate DTU summary ESR.
v^3	15.1 Intermediate DTU summary ESR.

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w ³	15.2 Intermediate DTU summary ESR.
x ³	15.3 Intermediate DTU summary ESR.
y ³	15.4 Intermediate DTU summary ESR.
z ³	15.5 Intermediate DTU summary ESR.
a ⁴	15.6 Intermediate DTU summary ESR.
b ⁴	15.7 Intermediate DTU summary ESR.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:EST-CREG
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

```
DUMP:EST a, CREG!  
b...b c...c d...d e...e f...f g...g h...h i...i  
j...j k...k l...l m...m n...n o...o p...p q...q  
r...r s...s 0...0 0...0 0...0 0...0 0...0 0...0  
7...7 7...7 7...7 7...7 7...7 7...7 7...7 7...7  
b...b c...c d...d e...e f...f g...g h...h i...i  
j...j k...k l...l m...m n...n o...o p...p q...q  
r...r s...s 0...0 0...0 0...0 0...0 0...0 0...0
```

NOTE: The triple dots in the message represent six characters. For example, c...c is actually cccccccc. The top half of the dump is from controller 0; the lower half is from controller 1.

2. REASON FOR OUTPUT

To dump a group of predetermined registers from both controllers of an echo suppressor terminal (EST).

3. VARIABLE FIELD DEFINITIONS

a	EST member number.
b	CSTATUS.
c	STATR.
d	USTATUS.
e	USTAR.
f	CESR1.
g	CESR2.
h	CESR3.
i	CESR4.
j	PEST12.
k	PEST34.
l	USR.
m	UPR.
n	EXR.

SEE PROPRIETARY NOTICE ON COVER PAGE

o	PSR.
p	PCM.
q	UPA.
r	LLSSR.
s	TSSSR.

NOTE: All words may be found in COMPOOL by adding ES4 as a prefix.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
PULPESTU

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:EST-ESU
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP:EST a, [CONTR b,] LLMEM!

```
c...c d...d e...e f...f g...g h...h i...i j...j
k...k l...l m...m n...n o...o p...p q...q r...r
s...s t...t u...u v...v w...w x...x y...y z...z
a1...a1 b1...b1 c1...c1 d1...d1 e1...e1 f1...f1 g1...g1 h1...h1
7...7 7...7 7...7 7...7 7...7 7...7 7...7 7...7
c...c d...d e...e f...f g...g h...h i...i j...j
k...k l...l m...m n...n o...o p...p q...q r...r
s...s t...t u...u v...v w...w x...x y...y z...z
a1...a1 b1...b1 c1...c1 d1...d1 e1...e1 f1...f1 g1...g1 h1...h1
```

NOTE: The triple dots in the message represent six characters. For example, c...c is actually cccccccc. The top half of the dump is from controller 0; the lower half is from controller 1.

2. REASON FOR OUTPUT

To dump the two error source registers (ESRs) associated with each of the 16 echo suppressor units (ESUs).

3. VARIABLE FIELD DEFINITIONS

a	Echo suppressor terminal (EST) member number.
b	Controller 0 or 1.
c	ESU 0, ESR 0.
d	ESU 0, ESR 1.
e	ESU 1, ESR 0.
f	ESU 1, ESR 1.
g	ESU 2, ESR 0.
h	ESU 2, ESR 1.
i	ESU 3, ESR 0.
j	ESU 3, ESR 1.
k	ESU 4, ESR 0.
l	ESU 4, ESR 1.

SEE PROPRIETARY NOTICE ON COVER PAGE

m	ESU 5, ESR 0.
n	ESU 5, ESR 1.
o	ESU 6, ESR 0.
p	ESU 6, ESR 1.
q	ESU 7, ESR 0.
r	ESU 7, ESR 1.
s	ESU 8, ESR 0.
t	ESU 8, ESR 1.
u	ESU 9, ESR 0.
v	ESU 9, ESR 1.
w	ESU 10, ESR 0.
x	ESU 10, ESR 1.
y	ESU 11, ESR 0.
z	ESU 11, ESR 1.
a ¹	ESU 12, ESR 0.
b ¹	ESU 12, ESR 1.
c ¹	ESU 13, ESR 0.
d ¹	ESU 13, ESR 1.
e ¹	ESU 14, ESR 0.
f ¹	ESU 14, ESR 1.
g ¹	ESU 15, ESR 0.
h ¹	ESU 15, ESR 1.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
PULPESTU

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:EST-MEM
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP:EST a, [CONTR b,] LLMEM!
c...c d...d e...e f...f g...g h...h i...i j...j
k...k l...l m...m n...n o...o p...p q...q r...r
s...s t...t u...u v...v w...w x...x y...y z...z
a¹...a¹ b¹...b¹ c¹...c¹ d¹...d¹ e¹...e¹ f¹...f¹ g¹...g¹ h¹...h¹

NOTE: The triple dots in the message represent six characters. For example, c...c is actually cccccccc. The top half of the dump is from controller 0; the bottom half is from controller 1.

2. REASON FOR OUTPUT

To dump the two error source registers (ESRs) associated with each of the 16 echo suppressor units (ESUs).

3. VARIABLE FIELD DEFINITIONS

a	Echo suppressor terminal (EST) member number.
b	Controller (0 or 1).
c	ESU 0, ESR 0.
d	ESU 0, ESR 1.
e	ESU 1, ESR 0.
f	ESU 1, ESR 1.
g	ESU 2, ESR 0.
h	ESU 2, ESR 1.
i	ESU 3, ESR 0.
j	ESU 3, ESR 1.
k	ESU 4, ESR 0.
l	ESU 4, ESR 1.
m	ESU 5, ESR 0.
n	ESU 5, ESR 1.
o	ESU 6, ESR 0.
p	ESU 6, ESR 1.

SEE PROPRIETARY NOTICE ON COVER PAGE

q	ESU 7, ESR 0.
r	ESU 7, ESR 1.
s	ESU 8, ESR 0.
t	ESU 8, ESR 1.
u	ESU 9, ESR 0.
v	ESU 9, ESR 1.
w	ESU 10, ESR 0.
x	ESU 10, ESR 1.
y	ESU 11, ESR 0.
z	ESU 11, ESR 1.
a ¹	ESU 12, ESR 0.
b ¹	ESU 12, ESR 1.
c ¹	ESU 13, ESR 0.
d ¹	ESU 13, ESR 1.
e ¹	ESU 14, ESR 0.
f ¹	ESU 14, ESR 1.
g ¹	ESU 15, ESR 0.
h ¹	ESU 15, ESR 1.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
PULPESTU

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:EST-TSMEM
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP:EST a, [CONTR b,] ESU c, TSMEM d-e!
0fg 0fg 0fg 0fg 0fg 0fg 0fg 0fg

2. REASON FOR OUTPUT

To dump the specified trunk status store words.

3. VARIABLE FIELD DEFINITIONS

a	Echo suppressor terminal (EST) member number.
b	Controller 0 or 1.
c	Number of echo suppressor unit (ESU).
d	First memory address. Bits 10-7 contain ESU number (c value); bits 6-0 contain the address.
e	Last memory address. Bits 10-7 contain ESU number (c value); bits 6-0 contain the address.
f	0 — Disabled. 1 — Enabled.
g	0 — Split. 1 — Full.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
PULPESTU

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE


```

ID ..... DUMP:FS
WORK CENTER.. MAC, MOC, NMOC, TEC,
              TOC
GENERIC ..... 4E21 and later
APPLICATION .. 4E,1B
TYPE ..... Output

```

[illegible]

To dump data that was requested via the `DUMP:FS` input message.
 Format [1] displays the contents of the specified areas in binary.
 Format [2] displays the contents of the specified areas in octal or decimal.

- | | |
|---|--|
| a | Identification tag mnemonic. |
| b | File system base address. |
| c | Address increment. |
| d | Indicates a mask definition used in reading the displayed location.
Decimal size of the mask. |
| e | Decimal displacement of the mask. |

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:IOUS
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP:IOUS a, IOUC b, CREG! c

dddddddd eeeeeeee ffffffff gggggggg hhhhhhhh iiiiiiiii jjjjjjjj

2. REASON FOR OUTPUT

To print the input/output (I/O) unit selector (IOUS) critical register (CREG) dump.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | IOUS number (0-7). |
| b | I/O unit controller (IOUC) number (0-15). |
| c | Disposition of message:

COMPLETED

NOT STARTED - CONTROLLER NOT IN SERVICE

NOT STARTED - ILLEGAL MESSAGE

NOT STARTED - INVALID INPUT FOR UNIT TYPE OR FUNCTION
SPECIFIED

NOT STARTED - INVALID MEMBER, CONTROLLER, SUBUNIT,
ADDRESS, OR RANGE SPECIFIED

NOT STARTED - UNIT OR SUBUNIT UNEQUIPPED

REPEAT LATER - THIS UNIT IS BEING DIAGNOSED |
| d | IOUS software status. |
| e | IOUS hardware status bits (0-8). |
| f | Contents of error source register. |
| g | Contents of reply register. |
| h | IOUC software status. |
| i | IOUC status bits (0-23). |
| j | Contents of port isolation register (PIR). |

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:LIBSYS
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DUMP:LIBSYS

ACCESS=a INDEX=bb NWORDS=cc UNITNO=dd TESTNO=eee
SWITCHES=ffffffffffffffffffffffff
AUXICB=gggggggg
LOCK=h REFRNCD=i IDENT=j BUSY=k CHAN=l
.
.
.

2. REASON FOR OUTPUT

To dump the contents of all of the input control blocks (ICBs) as requested in a DUMP:LIBSYS input message.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | 1 — Auxiliary ICB is in access state (auxiliary ICB is full).
0 — Auxiliary ICB is not in the access state. |
| b | Index into auxiliary ICB where the next word is to be stored. |
| c | Number of words expected to be input. |
| d | Unit number. |
| e | Test number. |
| f | 24 binary flags used by the client. |
| g | Start address of auxiliary input control block. |
| h | 1 — ICB is locked from teletypewriter (TTY) access.
0 — ICB is available. |
| i | Referenced by indicator:
0 — No access.
1 — LIBRINPT access.
2 — LIBREXER access.
3 — LIBRSTOP access. |
| j | Identity of owning client. |

SEE PROPRIETARY NOTICE ON COVER PAGE

k 1 — ICB is busy (owned).
 0 — ICB is not busy.

l Channel number stored in ICB for client use.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
LIBRINPT

Practice 254-280-214, *Library Control Program*

Input Message
DUMP:LIBSYS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:LIBSYS-CL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

DUMP:LIBSYS,CLIENT a

ACCESS=b INDEX=cc NWORDS=dd UNITNO=ee TESTNO=fff
SWITCHES=gggggggggggggggggggggggggggggg
AUXICB=hhhhhhhh
LOCK=i REFRNCD=j IDENT=k BUSY=l CHAN=m

nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn

2. REASON FOR OUTPUT

To dump the contents of the input control block (ICB) and auxiliary ICB of a client as requested in a DUMP:LIBSYS input message.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | Client number. |
| b | 1 — Auxiliary ICB is in access state (auxiliary ICB is full).
0 — Auxiliary ICB is not in the access state. |
| c | Index into auxiliary ICB where the next word is to be stored. |
| d | Number of words expected to be input. |
| e | Unit number. |
| f | Test number. |
| g | 24 binary flags used by the client. |
| h | Start address of auxiliary input control block. |
| i | 1 — ICB is locked from teletypewriter (TTY) access.
0 — ICB is available. |
| j | Referenced by indicator:
0 — No access.
1 — LIBRINPT access.
2 — LIBREXER access. |

SEE PROPRIETARY NOTICE ON COVER PAGE

	3 —	LIBRSTOP access.
k		Identity of owning client.
l	1 —	ICB is busy (owned).
	0 —	ICB is not busy.
m		Channel number stored in ICB for client use.
n		Contents of auxiliary ICB in octal.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
LIBRINPT

Practice 254-280-214, *Library Control Program*

Input Message
DUMP:LIBSYS

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5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:MEMORY-SCS
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] DUMP:MEMORY SCS a CONTR[b] COMPLETED
cccccc dddddddddddddddd [d..d] [d..d] [d..d]
.
.
.
- [2] DUMP:MEMORY SCS a CONTR[b] COMPLETED
eeeeee ffffffff [f..f] [f..f] [f..f] [f..f] [f..f] [f..f] [f..f]
.
.
.
- [3] DUMP:MEMORY SCS a CONTR[b] COMPLETED
gggggg hhhhhhhh [h..h] [h..h] [h..h] [h..h] [h..h] [h..h] [h..h]
.
.
.
- [4] DUMP:MEMORY SCS a CONTR[b] i
- [5] DUMP:MEMORY SCS a SCU j COMPLETED
kkkkk llllllllllll [l..l] [l..l] [l..l]
.
.
.
- [6] DUMP:MEMORY SCS a SCU j COMPLETED
m nnnn oooo [o..o] [o..o] [o..o] [o..o] [o..o] [o..o] [o..o]
.
.
.
- [7] DUMP:MEMORY SCS a SCU j p

2. REASON FOR OUTPUT

This message prints in response to a DUMP:MEMORY—SCS input message. Format [1], [2], [3] or [4] is output when the input request specified a read of Service Circuit System (SCS) controller memory. Format [5], [6], or [7] is output if the input request specified a read of Service Circuit Unit (SCU) memory. More than one output message may be printed depending on the number of words of memory read.

SEE PROPRIETARY NOTICE ON COVER PAGE

3. VARIABLE FIELD DEFINITIONS

- a SCS member number in decimal (0-7).
- b Controller (0 or 1). Default is the active controller.
- c SCS controller micro-instruction Random Access Memory (RAM) memory address in hexadecimal. Valid range is 0 through FFFF.
- d Controller micro-instruction (64 bits) in hexadecimal. Repeated as necessary, 4 per line.
- e SCS controller global RAM memory address in hexadecimal. Valid range is 0 through 3FFFF.
- f Controller global RAM data (32 bits) in hexadecimal. Repeated as necessary, 8 per line.
- g SCS controller local RAM memory address in hexadecimal. Valid range is 0 thru FFFF.
- h Controller local RAM data (32 bits) in hexadecimal. Repeated as necessary, 8 per line.
- i Controller request fail code:
 - DENIED - CONTR DUP Request denied because the frame is duplex and a controller was specified. This will result in an interrupt from the frame.
 - DENIED - SCS UNEQ Request denied because the frame is unequipped.
 - RL - CONTR LOM Request denied because the a frame controller is in listen-only mode and a controller was specified.
- j SCU number in decimal (0-15).
- k SCU micro-instruction Read Only Memory (ROM) (0-3FFF)/RAM (4000-BFFF) memory address in hexadecimal. Valid range is 0 - BFFF.
- l SCU micro-instruction (48 bits) in hexadecimal. Repeated as necessary, 4 per line. If a "?" prints the read failed, see the ACTION TO BE TAKEN.
- m SCU table RAM memory address segment number in hexadecimal. Valid range is 0 thru F.
- m SCU table RAM memory address in hexadecimal. Valid range is 0 thru FFFF.
- o SCU table RAM data (16 bits) in hexadecimal. Repeated as necessary, 8 per line. If a "?" prints the read failed, see the ACTION TO BE TAKEN.

SEE PROPRIETARY NOTICE ON COVER PAGE

p SCU request fail code:

DENIED - SCU UNEQ Request for the given SCU was denied because the SCU is unequipped.

FAILED - INTERNAL ERROR Request for the given SCU failed because of an unexpected software error when processing the read command.

4. ACTION TO BE TAKEN

If variable i is:

RL - CONTR LOM then retry later, as this condition should be cleared quickly.

If variable l has:

a ? printed as data then the read for the given SCU failed because

- the SCS frame rejected the read command, or
- the SCS frame did not reply to the read command, or
- the SCU failed in processing the read command, or
- another software error occurred.

Contact the Technical Assistance Center for further information.

If variable o has:

a ? printed as data then the read for the given SCU failed because

- the SCS frame rejected the read command, or
- the SCS frame did not reply to the read command, or
- the SCU failed in processing the read command, or
- another software error occurred.

Contact the Technical Assistance Center for further information.

If variable p is:

FAILED - INTERNAL ERROR then contact the Technical Assistance Center for further information.

5. REFERENCES

PIDENT
SCSBPMEM

Input Message
DUMP:MEMORY-SCS

Output Messages
DUMP:MEMORY-SCS
LOAD:MEMORY-SCS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:MUP
WORK CENTER.. MOC
GENERIC 4E22 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

```
DUMP:MUP ADR a b [c]
X'dddddddd X'eeeeeeee X'eeeeeeee X'eeeeeeee X'eeeeeeee
               X'eeeeeeee X'eeeeeeee X'eeeeeeee X'eeeeeeee
               X'eeeeeeee X'eeeeeeee X'eeeeeeee X'eeeeeeee
               X'eeeeeeee X'eeeeeeee X'eeeeeeee X'eeeeeeee
               .
               .
               .
```

2. REASON FOR OUTPUT

To dump data that was requested via the DUMP:MUP input message for the Master Control Complex (MCC) And Utility Processor (MUP).

3. VARIABLE FIELD DEFINITIONS

- | | | | | | | | |
|-----------|--|---------|--------------------|-----------|-----------------------------------|---------|--|
| a | A hexadecimal address expression defining the designated location(s) to dump. | | | | | | |
| b | Disposition of the request: <table border="0" style="margin-left: 20px;"> <tr> <td>ABORTED</td> <td>— Function failed.</td> </tr> <tr> <td>COMPLETED</td> <td>— Function finished successfully.</td> </tr> <tr> <td>STOPPED</td> <td>— Function failed. Possible reasons for failure: <ul style="list-style-type: none"> • Direct Memory Access (DMA) timed out. • Dump MUP request failed. • MUP internal error. • No active MUP. • Unused MUP address. </td> </tr> </table> | ABORTED | — Function failed. | COMPLETED | — Function finished successfully. | STOPPED | — Function failed. Possible reasons for failure: <ul style="list-style-type: none"> • Direct Memory Access (DMA) timed out. • Dump MUP request failed. • MUP internal error. • No active MUP. • Unused MUP address. |
| ABORTED | — Function failed. | | | | | | |
| COMPLETED | — Function finished successfully. | | | | | | |
| STOPPED | — Function failed. Possible reasons for failure: <ul style="list-style-type: none"> • Direct Memory Access (DMA) timed out. • Dump MUP request failed. • MUP internal error. • No active MUP. • Unused MUP address. | | | | | | |
| c | If present, additional failure information. | | | | | | |
| d | Address of the first location on the displayed line. | | | | | | |
| e | Contents of the specified locations printed in hexadecimal. | | | | | | |

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
GULPUTPP
GULPUTXP
GULRUTCR

Input Message
DUMP:MUP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:NCLK
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP:NCLK 0,CREG ! a

b...b c...c d...d e...e f...f g...g 0...0 0...0
h...h i...i j...j k...k l...l m...m 0...0 0...0

NOTE: The triple dots in the message represent six characters. For example, c...c is actually ccccccc.

2. REASON FOR OUTPUT

To print the network clock (NCLK) critical register (CREG) dump.

3. VARIABLE FIELD DEFINITIONS

- a Dumped data is as follows:
- COMPLETED
- NOT STARTED - CONTROLLER NOT IN SERVICE
- NOT STARTED - ILLEGAL MESSAGE
- NOT STARTED - INVALID INPUT FOR UNIT TYPE OR FUNCTION SPECIFIED
- NOT STARTED - INVALID MEMBER, CONTROLLER, SUBUNIT, ADDRESS, OR RANGE SPECIFIED
- NOT STARTED - UNIT OR SUBUNIT UNEQUIPPED
- b Register 0 (chain 0 to 0).
- c Register 1 (chain 0 to 0).
- d Call store status for chain (0 to 0).
- e Register 0 (chain 0 to 1).
- f Register 1 (chain 0 to 1).
- g Call store status for chain 0 to 1.
- h Register 0 (chain 1 to 0).
- i Register 1 (chain 1 to 0).
- j Call store status for chain 1 to 0.
- k Register 0 (chain 1 to 1).

SEE PROPRIETARY NOTICE ON COVER PAGE

l Register 1 (chain 1 to 1).
m Call store status for chain 1 to 1.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

1. FORMAT

SEE PROPRIETARY NOTICE ON COVER PAGE

```
[4]  DUMP:PSS,INDIR a,[X]ADR b,INC c[,SIZE d,DISP e] f [g]
      hhhhhhhhhh iiii iiii iiii iiii
              iiii iiii iiii iiii
      .
      .
      .
      hhhhhhhhhh iiii iiii iiii iiii
              iiii iiii iiii iiii

[5]  DUMP:PSS,INDIR a,UMEM j,INC c[,SIZE d,DISP e] f [g]
      hhhhhhhhhh iiii iiii iiii iiii
              iiii iiii iiii iiii
      .
      .
      .
      hhhhhhhhhh iiii iiii iiii iiii
              iiii iiii iiii iiii

[6]  DUMP:PSS,INDIR a,k,INC c[,SIZE d,DISP e] f [g]
      hhhhhhhhhh iiii iiii iiii iiii
              iiii iiii iiii iiii
      .
      .
      .
      hhhhhhhhhh iiii iiii iiii iiii
              iiii iiii iiii iiii
```

2. REASON FOR OUTPUT

To dump data that was requested via the DUMP:PSS input message.

Formats 1-3 displays the contents of the specified areas in binary.

Formats 4-6 displays the contents of the specified areas in octal or decimal.

3. VARIABLE FIELD DEFINITIONS

a	Level of indirectness.						
b	Base address.						
c	Address increment.						
d	Indicates a mask definition used in reading the displayed location. Decimal size of the mask.						
e	Decimal displacement of the mask.						
f	Disposition of the request: <table> <tr> <td>ABORTED</td><td>— Function failed.</td></tr> <tr> <td>COMPLETED</td><td>— Function finished successfully.</td></tr> <tr> <td>MSG COMPLETED</td><td>— Partitioned message finished successfully.</td></tr> </table>	ABORTED	— Function failed.	COMPLETED	— Function finished successfully.	MSG COMPLETED	— Partitioned message finished successfully.
ABORTED	— Function failed.						
COMPLETED	— Function finished successfully.						
MSG COMPLETED	— Partitioned message finished successfully.						

SEE PROPRIETARY NOTICE ON COVER PAGE

MSG IN PROGRESS — Partitioned output message is proceeding.

MSG STARTED — First segment or partitioned message printed successfully.

STOPPED — Function failed.

- g Additional failure information.
- h Address of the first location on the displayed line.
- i Contents of the specified locations.
- j Utility memory indicator.
- k Central control (CC) register indicator. (B, F, G, J, K, L, X, Y, or Z.)

4. ACTION TO BE TAKEN

If message is ABORTED or STOPPED retry after verifying input ranges and parameters.

5. REFERENCES

PIDENTs
GULPUTPP
GULPUTXP
GULRUTCR

Input Message
DUMP:PSS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:SCLK-M
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP:SCLK 0, CREG!

a...a	b...b	c...c	d...d	e...e	[f...f	0...0	0...0
g...g	h...h	i...i	j...j	k...k	l...l	0...0	0...0
m...m	n...n	o...o	p...p	q...q	r...r	0...0	0...0
s...s	t...t	u ¹ ...u ¹	v ¹ ...v ¹	w ¹ ...w ¹	x ¹ ...x ¹	0...0	0...0
y...y	z...z	a ¹ ...a ¹	b ¹ ...b ¹	c ¹ ...c ¹	d ¹ ...d ¹	0...0	0...0]
UTMN	7...7	7...7	7...7	7...7	7...7	7...7	7...7
a...a	b...b	c...c	d...d	e...e	[f...f	0...0	0...0
g...g	h...h	i...i	j...j	k...k	l...l	0...0	0...0
m...m	n...n	o...o	p...p	q...q	r...r	0...0	0...0
s...s	t...t	u ¹ ...u ¹	v ¹ ...v ¹	w ¹ ...w ¹	x ¹ ...x ¹	0...0	0...0
y...y	z...z	a ¹ ...a ¹	b ¹ ...b ¹	c ¹ ...c ¹	d ¹ ...d ¹	0...0	0...0]

NOTE: The triple dots in the message represent six characters. For example, c...c is actually ccccccc.

NOTE: Values f through d¹ are dumped only if NCSU is equipped.

2. REASON FOR OUTPUT

To print the system clock (SCLK) critical register dump. The first 5 lines of output are a dump from SCLK controller 0; the last 5 lines of output are a dump from SCLK controller 1.

3. VARIABLE FIELD DEFINITIONS

a	Controller software status.
b	Controller hardware status.
c	Error source register.
d	Pest register.
e	Time of day (TOD) counter A.
f	TOD counter B.
g	Network clock synchronization unit (NCSU) software status.
h	All seems well failure (ASWF) error source register (ESR) bits 23-12.
h	Hardware status 11-0.
i	Office data (ODA) reference bits 23-18.

SEE PROPRIETARY NOTICE ON COVER PAGE

i	Reference register bits 16-9.
i	Mode register bits 7-0.
j	Base ESR last look bits 19-12.
j	Base ESR 0 bits 7-0.
k	Base ESR 1 bits 19-12.
k	Secondary ESR bits 7-0.
l	Outgoing signaling characteristics (OSCs) word (master) 15-0.
m	Integral register 0 most - bits 15-0.
n	Integral register 0 least - bits 15-0.
o	Integral register 1 most - bits 15-0.
p	Integral register 1 least - bits 15-0.
q	Integral register 2 most - bits 15-0.
r	Integral register 2 least - bits 15-0.
s	Integral register 3 most - bits 15-0.
t	Integral register 3 least - bits 15-0.
u	Proportional register bits 15-0.
v	Misframe counter bits 19-12.
v	Reference outage counter bits 7-0.
w	Phase build-out counter bits 19-12.
w	Freerun occurrence counter bits 7-0.
x	Network clock software status register.
y	Miscellaneous register.
z	MAC-8 program error class.
a ¹	MAC-8 program counter low byte (bits 0-7) MAC-8 program counter high byte (bits 8-15).
b ¹	Oscillator update lap counter low byte (bits 0-7). Oscillator update lap counter high byte (bits 8-15).
c ¹	Microprocessor routines states.
d ¹	Indicator word set to the SCLK controller from which the NCSU was dumped through.

4. ACTION TO BE TAKEN

If the request is NOT STARTED, correct the input message, or the problem, and re-enter the input message.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

Input Message
DUMP:SCLK

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:SCLK-NCSU
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP:SCLK 0, CONTR a, NCSU 0, MEM b-c!
dddddddd

2. REASON FOR OUTPUT

To dump the network clock synchronization unit (NCSU) memory through the system clock (SCLK) controller.

3. VARIABLE FIELD DEFINITIONS

a	Active SCLK controller.
b	First memory address.
c	Last memory address ($c - b \leq 200$).
d	Repeated as needed ($c - b$).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
PULP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:SCS-IREG
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP:SCS a, IREG!

CSTATUS	HWSTATR	MADATA	FSTATUS	SCU0S	CESR	0...0	0...0
PEST	CONTROL	EBLKSTATL	EBLKSTATH	EBLKADR	GRESR	0...0	0...0
GRCNTRM	GADRM0	GADRM1	EXESR	EXCSTATML	EXCSTATMH	0...0	0...0
EXFPR	EXPC	EXSANTIM	EXSTKBL	EXSTKBH	EXSTRPTR	0...0	0...0
EXINTR	RLBPTR	WLPBPTR	RDBPTR	WDBPTR	MBPTRS	0...0	0...0
SDOWMBPTR	MBSTAT	SCU0ESR	SCU1ESR	SCU2ESR	SCU3ESR	0...0	0...0
SCU4ESR	SCU5ESR	SCU6ESR	SCU7ESR	SCU8ESR	SCU9ESR	0...0	0...0
SCU10ESR	SCU11ESR	SCU12ESR	SCU13ESR	SCU14ESR	SCU15ESR	0...0	0...0
FWERRBUF0	FWERRBUF1	FWERRBUF2	FWERRBUF3	FWERRBUF4	FWERRBUF5	0...0	0...0
FWERRBUF6	FWERRBUF7	FWERRBUF8	FWERRBUF9	EBERRORM	EBLKADRM	0...0	0...0
EBLKSTATML	EBLKSTATMH	0...0	0...0	0...0	0...0	0...0	0...0
MEMN	XLATE	7...7	7...7	7...7	7...7	7...7	7...7
CSTATUS	HWSTATR	MADATA	FSTATUS	SCU0S	CESR	0...0	0...0
PEST	CONTROL	EBLKSTATL	EBLKSTATH	EBLKADR	GRESR	0...0	0...0
GRCNTRM	GADRM0	GADRM1	EXESR	EXCSTATML	EXCSTATMH	0...0	0...0
EXFPR	EXPC	EXSANTIM	EXSTKBL	EXSTKBH	EXSTRPTR	0...0	0...0
EXINTR	RLBPTR	WLPBPTR	RDBPTR	WDBPTR	MBPTRS	0...0	0...0
SDOWMBPTR	MBSTAT	SCU0ESR	SCU1ESR	SCU2ESR	SCU3ESR	0...0	0...0
SCU4ESR	SCU5ESR	SCU6ESR	SCU7ESR	SCU8ESR	SCU9ESR	0...0	0...0
SCU10ESR	SCU11ESR	SCU12ESR	SCU13ESR	SCU14ESR	SCU15ESR	0...0	0...0
FWERRBUF0	FWERRBUF1	FWERRBUF2	FWERRBUF3	FWERRBUF4	FWERRBUF5	0...0	0...0
FWERRBUF6	FWERRBUF7	FWERRBUF8	FWERRBUF9	EBERRORM	EBLKADRM	0...0	0...0
EBLKSTATML	EBLKSTATMH	0...0	0...0	0...0	0...0	0...0	0...0

2. REASON FOR OUTPUT

To dump the Service Circuit System (SCS) internal registers. The first 11 lines are dumps from controller 0 registers; the last 11 lines are dumps from controller 1 registers.

3. VARIABLE FIELD DEFINITIONS

a	SCS member number.
CSTATUS	Software status controller.
HWSTATR	Hardware status controller.
MADATA	MA data response.
FSTATUS	Software frame status.
SCU0S	Software Service Circuit Unit (SCU) out-of-service status.

SEE PROPRIETARY NOTICE ON COVER PAGE

CESR	Primary controller Error Source Register (ESR).
PEST	Programmable Error Source Trigger (PEST) control register.
CONTROL	Controller control register.
EBLKSTATL	Extended bus link status low register.
EBLKSTATH	Extended bus link status high register.
EBLKADR	Extended bus link address register.
GRESR	Global ram ESR.
GRCNTRM	Global ram control register memory.
GADRM0	Global address memory 0.
GADRM1	Global address memory 1.
EXESR	Execute (EXEC) ESR.
EXCSTATML	EXEC control/status register memory low.
EXCSTATMH	EXEC control/status register memory high.
EXFPR	EXEC frame pointer register.
EXPC	EXEC program counter.
EXSANTIM	EXEC sanity timer.
EXSTKBL	EXEC stack boundary register low.
EXSTKBH	EXEC stack boundary register high.
EXSTRPTR	EXEC stack pointer.
EXINTR	EXEC interrupt/mask register.
RLBPTR	LP buffer read pointer.
WLPBPTR	LP buffer write pointer.
RDBPTR	Digit buffer read pointer.
WDBPTR	Digit buffer write pointer.
MBPTRS	Maintenance buffer pointers.
SDOWMBPTR	Shadow maintenance buffer pointers.
MBSTAT	Maintenance buffer status.
SCU0-15ESR	SCU 0-15 primary ESRs.
FWERRBUF0	Firmware error register and buffer word 0. Contains the F-level/interject level error code.
FWERRBUF1-9	Firmware error register and buffer words 1-9. Contains additional information based on the error code.
EBERRORM	Extended bus error code memory.

SEE PROPRIETARY NOTICE ON COVER PAGE

EBLKADRM	Extended bus link address memory.
EBLKSTATML	Extended bus link status memory low.
EBLKSTATMH	Extended bus link status memory high.
MEMN	SCS member number.
XLATE	Base translation address.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
PULPDFSS
PULPMAIN

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:SP-BUF
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP:SP a[,CONTR b], BUF c ! d

e...e f...f 7...7 7...7 7...7 7...7 7...7 7...7
g...g

NOTE: The triple dots in the message represent six characters. For example, e...e is actually eeeeeeee.

2. REASON FOR OUTPUT

To print the signaling processor (SP) buffer dump.

3. VARIABLE FIELD DEFINITIONS

a SP (0-31).

b Controller (0-1).

c Buffer:

Code	Buffer Dumped	Size of Buffer
0	Dial pulse in worklist	128 words
1	Dial pulse out worklist	128 words
2	Digit buffer	128 words
3	MF reception worklist	32 words
4	MF out worklist	32 words
5	Low-priority buffer	32 words
6	High-priority buffer	8 words
7	Seizure buffer	8 words
(SP2 ONLY)		
10	DT start words	16 words
11	Outgoing DT maintenance message halves	32 words
12	Incoming DT maintenance message halves	32 words

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:SP-CREG
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP:SP a,CREG! b

c...c d...d e...e f...f g...g 0...0 0...0 0...0
h...h i...i j...j k...k l...l 0...0 0...0 0...0
m...m n...n o...o p...p q...q 0...0 0...0 0...0
r...r s...s t...t u...u v...v 0...0 0...0 0...0

NOTE: The triple dots in the message represent six characters. For example, c...c is actually ccccccc.

2. REASON FOR OUTPUT

To print the signaling processor (SP) critical register dump.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | SP member number (0-31). |
| b | Disposition of message:

COMPLETED

NOT STARTED - CONTROLLER NOT IN SERVICE

NOT STARTED - ILLEGAL MESSAGE

NOT STARTED - INVALID INPUT FOR UNIT TYPE OR FUNCTION
SPECIFIED

NOT STARTED - INVALID MEMBER, CONTROLLER, SUBUNIT,
ADDRESS, OR RANGE SPECIFIED

NOT STARTED - UNIT OR SUBUNIT UNEQUIPPED

REPEAT LATER - THIS UNIT IS BEING DIAGNOSED |
| c | Software status for controller 0. |
| d | Hardware status for controller 0. |
| e | Error source register (ESR) 1 for controller 0. |
| f | ESR 2 for controller 0. |
| g | Pest register for controller 0. |

SEE PROPRIETARY NOTICE ON COVER PAGE

(SP2 Only)

h	Software lower receives status register for controller 0.
i	Software upper receives status register for controller 0.
j	Hardware lower receives status register for controller 0.
k	Hardware upper receives status register for controller 0.
l	ESR 3 for controller 0.

(SP and SP2)

m	Software status for controller 1.
n	Hardware status for controller 1.
o	ESR 1 for controller 1.
p	ESR 2 for controller 1.
q	Pest register for controller 1.

(SP2 Only)

r	Software lower receive status register for controller 1.
s	Software upper receive status register for controller 1.
t	Hardware lower receive status register for controller 1.
u	Hardware upper receive status register for controller 1.
v	ESR 3 for controller 1.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:SP-IREG
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP:SP a, IREG!

```

b...b  c...c  d...d  e...e  f...f  g...g  h...h  i...i
j...j  k...k  l...l  m...m  n...n  o...o  p...p  q...q
r...r  s...s  t...t  u...u  v...v  w...w  x...x  y...y
z...z  a1...a1 b1...b1 c1...c1 d1...d1 e1...e1 f1...f1 g1...g1
h1...h1 i1...i1 j1...j1 k1...k1 l1...l1 m1...m1 n1...n1 o1...o1
o1...o1 p1...p1 q1...q1 r1...r1 s1...s1 t1...t1 u1...u1 v1...v1
w1...w1 x1...x1 y1...y1 z1...z1 a2...a2 b2...b2 c2...c2 d2...d2
e2...e2 f2...f2 0...0  0...0  0...0  0...0  0...0  0...0
7...7  7...7  7...7  7...7  7...7  7...7  7...7  7...7
b...b  c...c  d...d  e...e  f...f  g...g  h...h  i...i
j...j  k...k  l...l  m...m  n...n  o...o  p...p  q...q
r...r  s...s  t...t  u...u  v...v  w...w  x...x  y...y
z...z  a1...a1 b1...b1 c1...c1 d1...d1 e1...e1 f1...f1 g1...g1
h1...h1 i1...i1 j1...j1 k1...k1 l1...l1 m1...m1 n1...n1 o1...o1
o1...o1 p1...p1 q1...q1 r1...r1 s1...s1 t1...t1 u1...u1 v1...v1
w1...w1 x1...x1 y1...y1 z1...z1 a2...a2 b2...b2 c2...c2 d2...d2
e2...e2 f2...f2 0...0  0...0  0...0  0...0  0...0  0...0
7...7  7...7  7...7  7...7  7...7  7...7  7...7  7...7

```

NOTE: The triple dots in the message represent six characters. For example, c...c is actually cccccccc. The top half of the dump is from controller 0; the bottom half is from controller 1.

2. REASON FOR OUTPUT

To print the internal registers for the specified signaling processor (SP).

3. VARIABLE FIELD DEFINITIONS

a	SP member number (0-31).
b	KCODE and controller.
c	Software status.
d	Hardware status.
e	Error source register (ESR) 1.
f	ESR 2.
g	Programmable error source trigger (PEST).

SEE PROPRIETARY NOTICE ON COVER PAGE

h	MAR.
i	MDR.
j	METP.
k	CDR.
l	MXAR.
m	MXWR.
n	MXHR.
o	MSCR.
p	MXTP.
q	MFWR.
r	DPWR.
s	TBSR.
t	PLSR.
u	EDST.
v	SDST.
w	MMST.
x	MSEC.
y	XMCA.
z	XMCA.
a ¹	CEDB.
b ¹	PSTATE.
c ¹	HPBR.
d ¹	HPBW.
e ¹	SZBR.
f ¹	SZBW.
g ¹	LPBR.
h ¹	LPBW.
i ¹	DGBR.
j ¹	DGBW.
k ¹	DPIR.
l ¹	DPIW.
m ¹	DPOR.
n ¹	DPOW.

SEE PROPRIETARY NOTICE ON COVER PAGE

(SP2 Only)

o ¹	Software DTRCVL.
p ¹	Software DTRCVU.
q ¹	Hardware DTRCVL.
r ¹	Hardware DTRCVU.
s ¹	ESR 3.
t ¹	DTBST.
u ¹	DTCNT.
v ¹	DTSQFF.
w ¹	DTSANT.
x ¹	DTARA.
y ¹	DTABR.
z ¹	DTDOPA.
a ²	DTDOPB.
b ²	CCMMA.
c ²	DTDSRA.
d ²	DTRAD.
e ²	DTMMA.
f ²	DTSRD.

4. ACTION TO BE TAKEN

Correct the message.

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:SP-MAT
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP:SP a, b c-d! e

ffffffff

2. REASON FOR OUTPUT

To print the signaling processor (SP) matrix dump.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | SP (0-31). |
| b | MDN — Miscellaneous distributor number.
MSN — Miscellaneous scanner number.
PP
TDN — Trunk distributor number.
TSN — Trunk scanner number. |
| c | First point to be dumped. |
| d | Last point to be dumped. |
| e | Disposition of message:
COMPLETED
NOT STARTED - CONTROLLER NOT IN SERVICE
NOT STARTED - ILLEGAL MESSAGE
NOT STARTED - INVALID INPUT FOR UNIT TYPE OR FUNCTION SPECIFIED
NOT STARTED - INVALID MEMBER, CONTROLLER, SUBUNIT, ADDRESS, OR RANGE SPECIFIED
NOT STARTED - UNIT OR SUBUNIT UNEQUIPPED
REPEAT LATER - THIS UNIT IS BEING DIAGNOSED |
| f | As needed to dump c through d bits 23-16 are content of row; bits 15-0 are matrix row number. |

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:SP-MEM
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP:SP a[,CONTR b],MEM c-d ! e
ffffffff

2. REASON FOR OUTPUT

To print the signaling processor (SP) memory dump.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | SP (0-31). |
| b | Controller (0 or 1). |
| c | First address to be dumped limiting condition: [(c to d) + 1] ≤ 200, in octal |
| d | Last address to be dumped (d ≤ 3777 for SP; d ≤ 5777 for SP2) |
| e | Disposition of message:

COMPLETED

NOT STARTED - CONTROLLER NOT IN SERVICE

NOT STARTED - ILLEGAL MESSAGE

NOT STARTED - INVALID INPUT FOR UNIT TYPE OR FUNCTION SPECIFIED

NOT STARTED - INVALID MEMBER, CONTROLLER, SUBUNIT, ADDRESS, OR RANGE SPECIFIED

NOT STARTED - UNIT OR SUBUNIT UNEQUIPPED

REPEAT LATER - THIS UNIT IS BEING DIAGNOSED |
| f | Memory dumped as needed from c to d. |

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:TGR-CREG
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP:TGR a, TER b, CREG! c

d...d e...e f...f g...g h...h 01234567 01234567 01234567
i...i j...j k...k l...l m...m 01234567 01234567 01234567
n...n o...o p...p q...q r...r 01234567 01234567 01234567
s...s t...t u...u v...v w...w 01234567 01234567 01234567

NOTE: The triple-dots in the message represent six characters. For example, d...d is actually dddddddd.

2. REASON FOR OUTPUT

To print the critical registers for the specified terminal grouping (TGR).

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | TGR member number (0-15). |
| b | Terminal (TER) member number (0-15). |
| c | Disposition of message:

COMPLETED

NOT STARTED - CONTROLLER NOT IN SERVICE

NOT STARTED - ILLEGAL MESSAGE

NOT STARTED - INVALID INPUT FOR UNIT TYPE OR FUNCTION SPECIFIED

NOT STARTED - INVALID MEMBER, CONTROLLER, SUBUNIT, ADDRESS, OR RANGE SPECIFIED

NOT STARTED - UNIT OR SUBUNIT UNEQUIPPED |
| d | Software status C0. |
| e | Hardware status C0. |
| f | Error source register (ESR) C0. |
| g | Controller polling mask. |
| h | Terminal polling mask. |
| i | Software status C1. |
| j | Hardware status C1. |

SEE PROPRIETARY NOTICE ON COVER PAGE

k	ESR C1.
l	Controller polling mask (repeat).
m	Terminal polling mask (repeat).
n	Software status via C0 register.
o	Mode register.
p	ESR.
q	Control register.
r	Instruction address register.
s	Software status via C1 register.
t	Hardware status via C1 register.
u	ESR.
v	Control register.
w	Instruction address (ADDR) register.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:TGR-IREG
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP:TGR a, IREG! b

c...c d...d e...e f...f g...g h...h 01234567 01234567

NOTE: The triple dots in the message represent six characters. For example, c...c is actually ccccccc.

2. REASON FOR OUTPUT

To print the internal registers for the specified terminal grouping (TGR).

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | TGR member number (0-15). |
| b | Disposition of message:

COMPLETED

NOT STARTED - CONTROLLER NOT IN SERVICE

NOT STARTED - ILLEGAL MESSAGE

NOT STARTED - INVALID INPUT FOR UNIT TYPE OR FUNCTION
SPECIFIED

NOT STARTED - INVALID MEMBER, CONTROLLER, SUBUNIT,
ADDRESS, OR RANGE SPECIFIED

NOT STARTED - UNIT OR SUBUNIT UNEQUIPPED |
| c | Terminal information register 0. |
| d | False all seems well (ASW) register 0. |
| e | Trouble indicator 0. |
| f | Terminal information register 1. |
| g | False ASW register 1. |
| h | Trouble indicator 1. |

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:TGR-MEM
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP:TGR a,TER b,MEM c-d ! e

ffffffff

01234567 01234567 01234567 01234567 01234567 01234567 01234567

ggggggggg

2. REASON FOR OUTPUT

To print the terminal grouping (TGR) terminal memory dump.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | TGR (0-15). |
| b | Terminal (TER) (0-15). |
| c | First address to be dumped. |
| d | Last address to be dumped. |
| e | Disposition of message:

COMPLETED

NOT STARTED - CONTROLLER NOT IN SERVICE

NOT STARTED - ILLEGAL MESSAGE

NOT STARTED - INVALID INPUT FOR UNIT TYPE OR FUNCTION
SPECIFIED

NOT STARTED - INVALID MEMBER, CONTROLLER, SUBUNIT,
ADDRESS, OR RANGE SPECIFIED

NOT STARTED - UNIT OR SUBUNIT UNEQUIPPED |
| f | Repeated as necessary from c through d data memory Sections A and B. Bits 23-12 apply to Section A; bits 11-0 apply to Section B. |
| g | Same as f for data memory Section C. Bits 23-11 apply to Section E; bits 11-0 are all zeros. |

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:TMSP-CONT
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

```
DUMP:TMSP a[,CONTR b],MEM (c,d-e)!  
ffffffff gggggggg hhhhhhhh iiiiiiiii 00000000 00000000  
ffffffff gggggggg hhhhhhhh iiiiiiiii 00000000 00000000
```

2. REASON FOR OUTPUT

To print the memory for the specified time multiplexed switch (TMS) pair (TMSP). First line is for TMS 0; second line is for TMS 1.

3. VARIABLE FIELD DEFINITIONS

a	TMSP member number (0-3).
b	Controller number (0-1).
c	Memory number dumped (0-177).
d	First time slot dumped.
e	Last time slot dumped ($e - d \leq 177$).
f	Software status for TMS 0 or 1.
g	Controller status for TMS 0 or 1.
h	All seems well (ASW) error source register (ESR).
i	Autonomous interrupt (AINT) ESR.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:TMSP-CREG
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP:TMSP a,CREG! b

c...c d...d e...e f...f 0...0 0...0 0...0 0...0
g...g h...h i...i j...j 0...0 0...0 0...0 0...0

NOTE: The triple dots in the message represent six characters. For example, c...c is actually ccccccc.

2. REASON FOR OUTPUT

To print the critical registers for the specified time multiplexed switch pair (TMSP).

3. VARIABLE FIELD DEFINITIONS

a	TMSP member number (0-3).
b	Disposition of message: COMPLETED NOT STARTED - CONTROLLER NOT IN SERVICE NOT STARTED - ILLEGAL MESSAGE NOT STARTED - INVALID INPUT FOR UNIT TYPE OR FUNCTION SPECIFIED NOT STARTED - INVALID MEMBER, CONTROLLER, SUBUNIT, ADDRESS, OR RANGE SPECIFIED NOT STARTED - UNIT OR SUBUNIT UNEQUIPPED
c	Software status 0 for controller 0.
d	CONT 0 status for controller 0.
e	All seems well (ASW) error source register (ESR) for controller 0.
f	Autonomous interrupt (AINT) ESR for controller 0.
g	Software status 1 for controller 1.
h	CONT 1 status for controller 1.
i	ASW ESR for controller 1.
j	AINT ESR for controller 1.

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:TMSP-MEM
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP:TMSP a[,CONTR b],MEM(c,d-e)! f

ggggggggg

2. REASON FOR OUTPUT

To print the time multiplexed switch pair (TMSP) memory dump.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | TMSP (0-3). |
| b | Controller (0 or 1). |
| c | Memory to be dumped. |
| d | First time slot to be dumped. |
| e | Last time slot to be dumped. |
| f | Disposition of message:

COMPLETED

NOT STARTED - CONTROLLER NOT IN SERVICE

NOT STARTED - ILLEGAL MESSAGE

NOT STARTED - INVALID INPUT FOR UNIT TYPE OR FUNCTION
SPECIFIED

NOT STARTED - INVALID MEMBER, CONTROLLER, SUBUNIT,
ADDRESS, OR RANGE SPECIFIED

NOT STARTED - UNIT OR SUBUNIT UNEQUIPPED |
| g | Repeated as necessary for d through e. Bits 23-18 and 111-6 apply to
upper port; bits 17-12 and 5-0 apply to lower port. |

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:TSI-CREG
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VINTAGE TSI CRITICAL REGISTER DUMP:

[1] DUMP:TSI a,CREG! b

c...c	d...d	e...e	f...f	g...g	h...h	0...0	0...0
i...i	0...0	j...j	0...0	k...k	0...0	0...0	0...0
l...l	0...0	m...m	0...0	0...0	0...0	0...0	0...0
n...n	0...0	o...o	0...0	p...p	0...0	0...0	0...0
q...q	0...0	r...r	0...0	0...0	0...0	0...0	0...0
s...s	t...t	u...u	v...v	w...w	0...0	0...0	0...0
x...x	y...y	z...z	a ¹ ...a ¹	b ¹ ...b ¹	0...0	0...0	0...0
c ¹ ...c ¹	d ¹ ...d ¹	0...0	0...0	e ¹ ...e ¹	0...0	0...0	0...0
7...7	7...7	7...7	7...7	7...7	7...7	7...7	7...7
f ¹ ...f ¹	g ¹ ...g ¹	h ¹ ...h ¹	i ¹ ...i ¹	j ¹ ...j ¹	k ¹ ...k ¹	0...0	0...0

CRTSI CRITICAL REGISTER DUMP:

[2] DUMP:TSI a, CREG! b

c ¹ ...c ¹	d ¹ ...d ¹	e ¹ ...e ¹	f ¹ ...f ¹	g ¹ ...g ¹	h ¹ ...h ¹	0...0	0...0
l ¹ ...l ¹	m ¹ ...m ¹	n ¹ ...n ¹	o ¹ ...o ¹	p ¹ ...p ¹	q ¹ ...q ¹	0...0	0...0
r ¹ ...r ¹	s ¹ ...s ¹	t ¹ ...t ¹	u ¹ ...u ¹	0...0	0...0	0...0	0...0
v ¹ ...v ¹	w ¹ ...w ¹	x ¹ ...x ¹	y ¹ ...y ¹	z ¹ ...z ¹	a ² ...a ²	0...0	0...0
b ² ...b ²	c ² ...c ²	d ² ...d ²	e ² ...e ²	0...0	0...0	0...0	0...0
f ² ...f ²	g ² ...g ²	h ² ...h ²	i ² ...i ²	j ² ...j ²	0...0	0...0	0...0
0...0	0...0	0...0	0...0	0...0	0...0	0...0	0...0
c ¹ ...c ¹	d ¹ ...d ¹	k ² ...k ²	l ² ...l ²	e ¹ ...e ¹	e ¹ ...e ¹	0...0	0...0
7...7	7...7	7...7	7...7	7...7	7...7	7...7	7...7
m ² ...m ²	g ¹ ...g ¹	h ¹ ...h ¹	i ¹ ...i ¹	j ¹ ...j ¹	k ¹ ...k ¹	0...0	0...0

NOTE: The triple dots in the message represent six characters. For example, c...c is actually ccccccc.

2. REASON FOR OUTPUT

To print the critical registers for the specified Time Slot Interchange (TSI).

Format [1] dumps TSI critical register information.

Format [2] dumps Cost Reduced Time Slot Interchange (CRTSI) critical register information. Both formats repeat for C1. Columns 6, 7, and 8 are added for utility dump only. An F-level dump prints columns 0-5 only.

SEE PROPRIETARY NOTICE ON COVER PAGE

3. VARIABLE FIELD DEFINITIONS

a	TSI member number (0-63).
b	Disposition of message: Dumped data is as follows: COMPLETED NOT STARTED - CONTROLLER NOT IN SERVICE NOT STARTED - ILLEGAL MESSAGE NOT STARTED - INVALID INPUT FOR UNIT TYPE OR FUNCTION SPECIFIED NOT STARTED - INVALID MEMBER, CONTROLLER, SUBUNIT, ADDRESS, OR RANGE SPECIFIED NOT STARTED - UNIT OR SUBUNIT UNEQUIPPED REPEAT LATER - THIS UNIT IS BEING DIAGNOSED
c	Software status.
d	Hardware status.
e	All Seems Well (ASW) Error Source Register (ESR).
f	Autonomous Interrupt (AINT) ESR.
g	S&L ESR.
h	MISC1 ESR.
i	RTSMP.
j	TTSMMP.
k	MISC2 ESR.
l	BAMPF.
m	BMBPF.
n	TRPF.
o	TSW.
p	RSW.
q	RMM.
r	TMM.
s	RMT0.
t	RMT1.
u	RMT2.
v	RMT3.

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w	RMT4.
x	TMT0.
y	TMT1.
z	TMT2.
a ¹	TMT3.
b ¹	TMT4.
c ¹	SPC0 pest (port).
d ¹	SPC1 pest (port).
e ¹	Software pest (port).
f ¹	Software status.
g ¹	Hardware status.
h ¹	ASW ESR.
i ¹	AINTESR.
j ¹	S&L ESR.
k ¹	MISC1 ESR.
l ¹	RTSMP0.
m ¹	RTSMP1.
n ¹	TTSMP0.
o ¹	TTSMP1.
p ¹	BIMPF0.
q ¹	BIMPF1.
r ¹	BAMPF0.
s ¹	BAMPF1.
t ¹	BMBPF0.
u ¹	BMBPF1.
v ¹	TRPF0.
w ¹	TRPF1.
x ¹	TRPF1.
y ¹	TSW0.
z ¹	TSW1.
a ²	RSW1.
b ²	RMM0.
c ²	RMM1.

SEE PROPRIETARY NOTICE ON COVER PAGE

d ²	TMM0.
e ²	TMM1.
f ²	S&L0.
g ²	S&L1.
h ²	S&L2.
i ²	S&L3.
j ²	FLYW.
k ²	SPC2 pest (port).
l ²	SPC3 pest (port).
m ²	Software status 0.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:TSI-CREG-X
WORK CENTER.. MOC, TEC
GENERIC 4E21 through 4E23
APPLICATION .. 4E
TYPE Output

1. FORMAT

TSI CRITICAL REGISTER DUMP:
DUMP:TSI a, CREG!

CSTATUS	STATR	MADATA	FSTATUS0	FSTATUS1	CESR	0.....0
PEST	CNTL	EXCNTLSTATL	EXCNTLSTATH	XESR	GESR	0.....0
GCNTL	GADDR0	GADDR1	EXINTR	CIAESCL	EXSANTIM	0.....0
EXSTKBNDL	EXSTKBNDH	MBPTR	SHDWMBPTR	CIARADDRL	CIARADDRH	0.....0
CIADATAL	CIADATAH	PSSNS	XTFERSUM	TSICTL	TSITSC	0.....0
TSISTAT	TSITSEL	TSIEXR0	TSIEXR1	TSIESR0	TSIESR1	0.....0
TSICCSB	FBICTL	PSCSUM	PSCPEST	PSCPSE	PSCPCMCO	0.....0
PSCCBC0	ALFESR0	ALFESR1	TRPFER0	TRPFER1	ALNKER0	0.....0
ALNKER1	PSCEQUIP	PSCINSRV	0.....0	0.....0	0.....0	0.....0
MEMN	XLATE	7.....7	7.....7	7.....7	7.....7	7.....7
CSTATUS	STATR	MADATA	FSTATUS0	FSTATUS1	CESR	0.....0
PEST	CNTL	EXCNTLSTATL	EXCNTLSTATH	EXESR	GESR	0.....0
GCNTL	GADDR0	GADDR1	EXINTR	CIAESCL	EXSANTIM	0.....0
EXSTKBNDL	EXSTKBNDH	MBPTR	SHDWMBPTR	CIARADDRL	CIARADDRH	0.....0
CIADATAL	CIADATAH	PSSNS	XTFERSUM	TSICTL	TSITSC	0.....0
TSISTAT	TSITSEL	TSIEXR0	TSIEXR1	TSIESR0	TSIESR1	0.....0
TSICCSB	FBICTL	PSCSUM	PSCPEST	PSCPSE	PSCPCMCO	0.....0
PSCCBC0	ALFESR0	ALFESR1	TRPFER0	TRPFER1	ALNKER0	0.....0
ALNKER1	PSCEQUIP	PSCINSRV	0.....0	0.....0	0.....0	0.....0

2. REASON FOR OUTPUT

To print the Critical Registers (CREG) for the specified Expanded Time Slot Interchange (XTSI).

NOTE: The dots in the message represent repeated characters. For example, 7...7 is actually 77777777. The top half of the dump is from controller 0; the lower half is from controller 1.

3. VARIABLE FIELD DEFINITIONS

a XTSI member number (0-63).

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

Practice 234-010-107, *Maintenance Reference Handbook* - Description of XTSI internal registers. (critical registers are a subset of the internal registers)

Input Messages

DUMP:XTSI - IREG
LOAD:XTSI - IREG

Output Messages

DUMP:XTSI - IREG
LOAD:XTSI - IREG

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:TSI-HI
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP:TSI a[, CONTR b], SPC c, MEM(0,d,e-f)! g

hhhhhhh

2. REASON FOR OUTPUT

To print the Time Slot Interchange (TSI) time-slot memory dump.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | TSI (0-63). |
| b | Controller (0 or 1). |
| c | Switching and permuting controller (0 or 1). |
| d | Time-slot memory level |
| e | First address to be dumped. |
| f | Last address to be dumped. |
| g | Disposition of message:
COMPLETED
NOT STARTED - CONTROLLER NOT IN SERVICE
NOT STARTED - ILLEGAL MESSAGE
NOT STARTED - INVALID INPUT FOR UNIT TYPE OR FUNCTION SPECIFIED
NOT STARTED - INVALID MEMBER, CONTROLLER, SUBUNIT, ADDRESS, OR RANGE SPECIFIED
NOT STARTED - UNIT OR SUBUNIT UNEQUIPPED
REPEAT LATER - THIS UNIT IS BEING DIAGNOSED |
| h | Repeated as necessary to satisfy range e through f. Bits 23-12 apply to transmit TSM; bits 11-0 apply to receive TSM. |

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:TSI-MEM
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP:TSI a[, CONTR b], MEM(2, 0, c-d)! e

ffffffff

2. REASON FOR OUTPUT

To print the time slot interchange (TSI) buffer memory 0 dump.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | TSI (0-63). |
| b | Controller (0 or 1). |
| c | First buffer memory 0 address to be dumped. |
| d | Last buffer memory 0 address to be dumped. |
| e | Disposition of message:

COMPLETED

NOT STARTED - CONTROLLER NOT IN SERVICE

NOT STARTED - ILLEGAL MESSAGE

NOT STARTED - INVALID INPUT FOR UNIT TYPE OR FUNCTION
SPECIFIED

NOT STARTED - INVALID MEMBER, CONTROLLER, SUBUNIT,
ADDRESS, OR RANGE SPECIFIED

NOT STARTED - UNIT OR SUBUNIT UNEQUIPPED

REPEAT LATER - THIS UNIT IS BEING DIAGNOSED |
| f | Repeated as necessary to satisfy range c through d. Bits 20-11 apply to
SPC1 buffer memory D; bits 8-0 apply to SPC0 buffer memory D. |

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:TSI-SPC
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP:TSI a[, CONTR b], SPC c, MEM(1, 0, d-e)! f

ggggggggg

2. REASON FOR OUTPUT

To print the time slot interchange (TSI) busy-idle map memory dump.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | TSI (0-63). |
| b | Controller (0 or 1). |
| c | Switching and permuting controller (0 or 1). |
| d | First address to be dumped. |
| e | Last address to be dumped. |
| f | Disposition of message:

COMPLETED

NOT STARTED - CONTROLLER NOT IN SERVICE

NOT STARTED - ILLEGAL MESSAGE

NOT STARTED - INVALID INPUT FOR UNIT TYPE OR FUNCTION
SPECIFIED

NOT STARTED - INVALID MEMBER, CONTROLLER, SUBUNIT,
ADDRESS, OR RANGE SPECIFIED

NOT STARTED - UNIT OR SUBUNIT UNEQUIPPED

REPEAT LATER - THIS UNIT IS BEING DIAGNOSED |
| g | As necessary to satisfy range d through e. Bits 8-0 apply to BIMM. |

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:TSIFILE
WORK CENTER.. MOC, TEC
GENERIC 4E21 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP:TSIFILE;XTSI a,[CONTR b,]FILE c,HADR d,[L e]
f

2. REASON FOR OUTPUT

Prints in response to a DUMP:TSIFILE input command. Indicates the status of Expanded Time Slot Interchange (XTSI) file dump request.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | XTSI member number (0-63). (32 XTSI frames -- allows only even XTISIs). |
| b | XTSI controller number (0-1). Optional parameter. If simplex, the default is the active controller. If duplex failed, this parameter must have been specified. |
| c | XTSI file descriptor number (0-127). |
| d | Hex address offset within a file (23 bit hex address). |
| e | Number of hex words to be read from the file (1-64). The default is 1 word. |
| f | Dumped data:

ABORTED - CANT CONFIG CONTR—The out of service XTSI controller cannot be brought into a state in which it will communicate with the 1B processor. One likely reason for this is that the controller is powered down.

ABORTED - FILE NOT ALLOCATED—The XTSI file specified in the dump command has a file allocation size of zero and cannot be read using this command.

ABORTED - FLASH JOB FAILED—The XTSI frame failed executing the dump command. If the frame did not F-level when trying the dump request, try again, and if this status is seen again, contact support.

ABORTED - FRAME ERROR - (error data)—The 1B processor has received an invalid error from the XTSI frame. Contact support with the erroneous error data.

ABORTED - MACRO ERROR - (error data)—The 1B processor returned an invalid error. Contact support with the erroneous error data. |

SEE PROPRIETARY NOTICE ON COVER PAGE

ABORTED - MACRO REJECTED—The XTSI frame is not accepting the dump request. If the frame did not F-level when trying the dump request, try again, and if this status is seen again, contact support.

ABORTED - MACRO TIMEOUT—The 1B processor is not waiting long enough for the dump request to be completed. If the frame did not F-level when trying the dump request, try again, and if this status is seen again, contact support.

ABORTED - RESPONSE NOT READY—The 1B processor did not receive a response from the XTSI frame. If the frame did not F-level when trying the dump request, try again, and if this status is seen again, contact support.

ABORTED - SOFTWARE ERROR—The status should never come up. If it does, please contact support.

ABORTED - UNUSED ADDRESS—This address (HADR) is outside the range of the file allocation.

COMPLETE—The XTSI file dump request has completed.

DENIED - CONTR CANT BE SPECIFIED—The CONTR keyword and it's argument must not be specified when the XTSI is in a duplex state.

DENIED - CONTR MUST BE SPECIFIED—The CONTR keyword and it's argument must be specified when the XTSI is in a duplex failed state.

DENIED - INV TSI TYPE OR UNEQ—This TSI is not an XTSI, or is unequipped. The dump command must be sent to equipped XTSI frames only.

DENIED - ODD TSI MEMBER—This TSI is an XTSI odd member. The dump command must be sent to even XTSI members only.

DENIED - TSI LOM—The XTSI is in Listen Only Mode (LOM). The dump command will be denied when either XTSI controller is in the LOM state.

4. ACTION TO BE TAKEN

Correct the message.

5. REFERENCES

PIDENT
XTSIFILU

Input Message
DUMP:TSIFILE

SEE PROPRIETARY NOTICE ON COVER PAGE

WARNING
INAPPROPRIATE USE OF THIS
MESSAGE MAY INTERRUPT OR
DEGRADE SERVICE. READ PURPOSE
CAREFULLY.

ID DUMP:TSIMEM
WORK CENTER.. MOC
GENERIC 4E24 Rel. 2 and later
APPLICATION .. 4E
TYPE Output

WARNING

1. FORMAT

- [1] DUMP:TSIMEM XTSI a [CONTR b] MRAM c L d COMPLETED
cccc eeeeeeeeeeeeeeee
.
.
.
- [2] DUMP:TSIMEM XTSI a [CONTR b] {GRAM|LRAM|CRAM} f L d COMPLETED
fffff gggggggg
.
.
.
- [3] DUMP:TSIMEM XTSI a [CONTR b] MRAM c L d h
- [4] DUMP:TSIMEM XTSI a [CONTR b] {GRAM|LRAM|CRAM} f L d h
- [5] DUMP:TSIMEM XTSI a SPC i PRTI j [LEVEL k] ADR l L d COMPLETED
llllll mmmmmmm
.
.
.
- [6] DUMP:TSIMEM XTSI a [CONTR b] SPC i PRTI j [LEVEL k] ADR l L d h
- [7] DUMP:TSIMEM XTSI a D3U n HADR o L d COMPLETED
pppppp qqqqqqqq
- [8] DUMP:TSIMEM XTSI a D3U n HADR o L d r
- [9] DUMP:TSIMEM XTSI a SPU s HADR o L d COMPLETED
pppppp qqqqqqqq
- [10] DUMP:TSIMEM XTSI a SPU s HADR o L d r
- [11] DUMP:TSIMEM XTSI a IBU 0 HADR o L d COMPLETED
- [12] DUMP:TSIMEM XTSI a IBU 0 HADR o L d r

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- [13] DUMP:TSIMEM XTSI a [CONTR b] {ES|MS|TBITS} t L d COMPLETED
tttt gg
.
.
.
- [14] DUMP:TSIMEM XTSI a [CONTR b] {ES|MS|PCIS|TBITS} t L d h
- [15] DUMP:TSIMEM XTSI a [CONTR b] SPC i PCIS t L d COMPLETED
tttt gg
.
.
.
- [16] DUMP:TSIMEM XTSI a [CONTR b] SPC i PCIS t L d h
- [17] DUMP:TSIMEM XTSI a IBU 0 {SD|SCAN|MTBITS} u L d COMPLETED
uuuu gg
.
.
.
- [18] DUMP:TSIMEM XTSI a IBU 0 {SD|SCAN|MTBITS} u L d r

2. REASON FOR OUTPUT

This message prints in response to a DUMP:TSIMEM input message.

Formats [1-4] are output if the input request specified a read of Expanded Time Slot Interchange (XTSI) controller memory.

Formats [5-6] are output if the input request specified a read (dump) of Time Slot Memory (TSM). More than one output message may be printed depending on the number of words of memory read.

Formats [7-8] are output if the input request specified a read (dump) of Digital Signal Level 3 Unit (D3U) memory.

Formats [9-10] are output if the input request specified a read (dump) of Signal Processing Unit (SPU) memory.

Formats [11-12] are output if the input request specified a read (dump) of In-Band Unit (IBU) memory.

Formats [13-18] are output if the input request specified a read (dump) of the Controller Signal Processor (CSP) memory.

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3. VARIABLE FIELD DEFINITIONS

a	XTSI member number in decimal.
b	Controller.
c	XTSI controller Micro-Store Instruction Random Access Memory (MRAM) memory address in hexadecimal (0-FFFF).
d	Number of words read in decimal. In the D3U case, the number of 4-byte increments read in decimal.
e	Controller micro-instruction (64 bits) in hexadecimal. Repeated as necessary, 4 per line.
f	Controller address read in hexadecimal.
g	Controller memory read in hexadecimal.
h	Controller request fail code: DENIED - INV TSI OR UNEQ — Request denied because the frame is unequipped. DENIED - ODD TSI MEMBER — Request denied because the XTSI specified was an odd member number. DENIED - TSI DUP — Request denied because the frame is duplex and a controller was specified. DENIED - TSI DUPF — Request denied because the frame is duplex failed. DENIED - TSI LOM — Request denied because the frame controller is in listen-only mode and a controller was specified. Retry later, as this condition should be cleared quickly.
i	Switching And Permuting Controller (SPC) (0-1).
j	Partition (PRTI) (0-3).
k	A-link level number (0-7).
l	TSM address in octal.
m	TSM memory contents in octal. Repeated as necessary, 4 per line.
n	D3U number in decimal.
o	D3U, SPU or IBU memory address output in hexadecimal. Address is also preceded by the digit 0, 1 or 2 to indicate memory access type long, word or byte respectively. For example "0 FF" represents an access type of "long" and an address of FF and "2 401FFF" represents an access type of "byte" and an address of 401FFF.
p	D3U, SPU or IBU address read in hexadecimal.
q	D3U, SPU or IBU memory read in hexadecimal.

SEE PROPRIETARY NOTICE ON COVER PAGE

r	D3U, SPU or IBU request fail code: ABORTED - BAD ADDRESS — Address is out-of-range. ABORTED - INTERNAL CONFIG ERROR — Request for the given D3U, SPU or IBU was aborted due to problems configuring an Out-Of-Service (OOS) XTSI on a good bus. Contact the Technical Assistance Center for further information. ABORTED - INTERNAL FRAME ERROR — Request for the given D3U, SPU or IBU failed because of an unknown error code returned when processing the read command. Contact the Technical Assistance Center for further information. ABORTED - INTERNAL MACRO ERROR — If message dispenser returns any other error code. Contact the Technical Assistance Center for further information. ABORTED - MACRO REJECTED — Request for the given D3U, SPU or IBU failed because the XTSI frame returned a macro failure. Contact the Technical Assistance Center for further information. ABORTED - MACRO TIMEOUT — Request for the given D3U, SPU or IBU failed because the XTSI frame did not reply to the read command. Contact the Technical Assistance Center for further information. ABORTED - NON-ADDRESSABLE BYTE Request for the given D3U, SPU or IBU was aborted because address is not on a word boundary. ABORTED - READ FAILED — This request failed due to a read failure. Contact the Technical Assistance Center for further information. ABORTED - UNUSED-ADDRESS Request for the given D3U, SPU or IBU was aborted because of an invalid access type or because this address is currently unused by the software. DENIED NOT AN EQUIP XTSI DENIED - ODD XTSI MEMBER
s	SPU number in decimal.
ES	E-Store memory.
MS	M-Store memory.
PCIS	Per channel inhibit state memory.
TBITS	Trunk bits.
t	Controller Signal Processor (CSP) trunk designation, controller, in octal (0-7777).
SD	Signal distribute point.

SEE PROPRIETARY NOTICE ON COVER PAGE

SCAN	Scan point.
MTBITS	Miscellaneous trunk bits.
u	Controller Signal Processor (CSP) trunk designation in octal (3000-3430).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
XTSIMEMU

Input Messages
DUMP:TSIMEM
LOAD:TSIMEM

Output Message
LOAD:TSIMEM

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:UMEM
WORK CENTER.. MAC, MOC, NMOC, TEC,
TOC
GENERIC 4E20 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

```
[1]  DUMP:UMEM a[,SIZE D'b,DISP D'c] d [e]
      ffffffff ggggggggggggggggggggggggggggggg ggggggggggggggggggggggggggggggg
      ggggggggggggggggggggggggggggggggggggggggggg ggggggggggggggggggggggggggggggg
      ggggggggggggggggggggggggggggggggggggggggggg ggggggggggggggggggggggggggggggg
      ggggggggggggggggggggggggggggggggggggggggggg ggggggggggggggggggggggggggggggg
      .
      .
      .
      ffffffff ggggggggggggggggggggggggggggggg ggggggggggggggggggggggggggggggg
      ggggggggggggggggggggggggggggggggggggggggggg ggggggggggggggggggggggggggggggg
      ggggggggggggggggggggggggggggggggggggggggggg ggggggggggggggggggggggggggggggg
      ggggggggggggggggggggggggggggggggggggggggggg ggggggggggggggggggggggggggggggg

[2]  DUMP:UMEM a[,SIZE D'b,DISP D'c] d [e]
      ffffffff gggggggggg gggggggggg gggggggggg gggggggggg
      gggggggggg gggggggggg gggggggggg gggggggggg
      .
      .
      .
      ffffffff gggggggggg gggggggggg gggggggggg gggggggggg
      gggggggggg gggggggggg gggggggggg gggggggggg
```

2. REASON FOR OUTPUT

To dump data that was requested via the DUMP:UMEM input message. Format [1] displays the contents of the specified areas in binary. Format [2] displays the contents of the specified areas in octal or decimal.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | Utility memory indicator. |
| b | Indicates a mask definition used in reading the displayed location.
Decimal size of the mask. |
| c | Decimal displacement of the mask. |

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- d Disposition of the request:
- | | |
|-----------|-----------------------------------|
| ABORTED | — Function failed. |
| COMPLETED | — Function finished successfully. |
| STOPPED | — Function failed. |
- e Additional failure information.
- f Address of the first location on the displayed line.
- g Contents of the specified locations.

4. ACTION TO BE TAKEN

If message is ABORTED or STOPPED retry after verifying input ranges and parameters.

5. REFERENCES

PIDENTs
GULPIMDT
GULPUTPP
GULPUTXP
GULRUTCR

Practice 234-301-003, *1B Processor Generic Utility Program (GULP) Application - Description*

PA-4A002-01, *4ESSTM User's Manual*

Input Message
DUMP:UMEM

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:VIF-CREG
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP:VIF a,CREG! b

c...c d...d 0...0 0...0 0...0 0...0 0...0 0...0
e...e f...f g...g h...h i...i j...j k...k l...l
m...m n...n o...o p...p q...q r...r s...s t...t

NOTE: The triple dots in the message represent six characters. For example, c...c is actually ccccccc.

2. REASON FOR OUTPUT

To print the critical registers (CREGs) for the specified voiceband interface frame (VIF).

3. VARIABLE FIELD DEFINITIONS

- a VIF member number (1-127).
- b Disposition of message:
- COMPLETED — The input request was successful. When this occurs the information identified by variables c...c through t...t will be printed. The last six words of the first line are zero-filled and have no meaning at this time.
- NOT STARTED - CONTROLLER NOT IN SERVICE
- NOT STARTED - ILLEGAL MESSAGE
- NOT STARTED - INVALID INPUT FOR UNIT TYPE OR FUNCTION SPECIFIED
- NOT STARTED - INVALID MEMBER, CONTROLLER, SUBUNIT, ADDRESS, OR RANGE SPECIFIED
- NOT STARTED - UNIT OR SUBUNIT UNEQUIPPED
- REPEAT LATER - THIS UNIT IS BEING DIAGNOSED
- c Software status register 0.
- d Software status register 1.
- e Error source register (ESR) 1-0 for controller 0.
- f ESR 3-2 for controller 0.
- g ESR 5-4 for controller 0.

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h	ESR 7-6 for controller 0.
i	ESR 9-8 for controller 0.
j	ESR 11-10 for controller 0.
k	ESR 13-12 for controller 0.
l	ESR 15-14 for controller 0.
m	ESR 1-0 for controller 1.
n	ESR 3-2 for controller 1.
o	ESR 5-4 for controller 1.
p	ESR 7-6 for controller 1.
q	ESR 9-8 for controller 1.
r	ESR 11-10 for controller 1.
s	ESR 13-12 for controller 1.
t	ESR 15-14 for controller 1.

4. ACTION TO BE TAKEN

If the request is NOT STARTED, correct the input message, or the problem, and re-enter the input message.

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:VIF-IREG
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP:VIF a, IREG! b

c...c d...d e...e f...f g...g h...h i...i j...j
k...k l...l m...m n...n o...o p...p q...q r...r

NOTE: The triple dots in the message represent six characters. For example, c...c is actually ccccccc.

2. REASON FOR OUTPUT

To print the internal registers (IREGs) for the specified voiceband interface frame (VIF).

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | VIF member number (1-127). |
| b | Disposition of message:

COMPLETED — The input request was successful. When this occurs, the information identified by variables c...c through r...r will be printed.

NOT STARTED - CONTROLLER NOT IN SERVICE

NOT STARTED - ILLEGAL MESSAGE

NOT STARTED - INVALID INPUT FOR UNIT TYPE OR FUNCTION SPECIFIED

NOT STARTED - INVALID MEMBER, CONTROLLER, SUBUNIT, ADDRESS, OR RANGE SPECIFIED

NOT STARTED - UNIT OR SUBUNIT UNEQUIPPED

REPEAT LATER - THIS UNIT IS BEING DIAGNOSED |
| c | Error source register (ESR) 13-12 for voiceband interface unit (VIU) 0. |
| d | ESR 15-14 for VIU 0. |
| e | ESR 13-12 for VIU 1. |
| f | ESR 15-14 for VIU 1. |
| g | ESR 13-12 for VIU 2. |
| h | ESR 15-14 for VIU 2. |
| i | ESR 13-12 for VIU 3. |

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j	ESR 15-14 for VIU 3.
k	ESR 13-12 for VIU 4.
l	ESR 15-14 for VIU 4.
m	ESR 13-12 for VIU 5.
n	ESR 15-14 for VIU 5.
o	ESR 13-12 for VIU 6.
p	ESR 15-14 for VIU 6.
q	ESR 13-12 for VIU 7.
r	ESR 15-14 for VIU 7.

4. ACTION TO BE TAKEN

If the request is NOT STARTED, correct the input message, or the problem, and re-enter the input message.

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:VIF-MEM
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP:VIF a[,CONT b],MEM c-d! e

ffffffff

2. REASON FOR OUTPUT

To print the voiceband interface frame (VIF) memory dump.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | VIF member number (1-127). |
| b | Controller number (0 or 1). |
| c | First memory address. |
| d | Last memory address; the range cannot exceed octal 200 addresses. |
| e | Disposition of message:

COMPLETED — The input request was successful. When this occurs, the contents of the the memory (variable f...f) specified will be printed.

NOT STARTED - CONTROLLER NOT IN SERVICE
NOT STARTED - ILLEGAL MESSAGE
NOT STARTED - INVALID INPUT FOR UNIT TYPE OR FUNCTION SPECIFIED
NOT STARTED - INVALID MEMBER, CONTROLLER, SUBUNIT, ADDRESS, OR RANGE SPECIFIED
NOT STARTED - UNIT OR SUBUNIT UNEQUIPPED
REPEAT LATER - THIS UNIT IS BEING DIAGNOSED |
| f | Contents of the memory address(s) specified, repeated as necessary to satisfy range c through d. |

4. ACTION TO BE TAKEN

If the request is NOT STARTED, correct the input message, or the problem, and re-enter the input message.

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5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

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ID DUMP:XS
WORK CENTER.. MAC, MOC, NMOC, TEC,
TOC
GENERIC 4E21 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

- [1] DUMP:XS,XSINDIR a,[ID b,][X]ADR c,INC d[,SIZE e,DISP f] g [h]
iiiiiiiiiii jooooooooooooooooooooooooooooo joooooooooooooooooooooooooooooooooooo
oo
oo
oo
.
.
.
iiiiiiiiiii joooooooooooooooooooooooooooooooooooo joooooooooooooooooooooooooooooooooooo
oo
oo
oo
- [2] DUMP:XS,XSINDIR a,k,INC d[,SIZE e,DISP f] g [h]
iiiiiiiiiii joooooooooooooooooooooooooooooooooooo joooooooooooooooooooooooooooooooooooo
oo
oo
oo
.
.
.
iiiiiiiiiii joooooooooooooooooooooooooooooooooooo joooooooooooooooooooooooooooooooooooo
oo
oo
oo
- [3] DUMP:XS,XSINDIR a,[ID b,][X]ADR c,INC d[,SIZE e,DISP f] g [h]
iiiiiiiiiii jooooojoo jooooojoo jooooojoo jooooojoo
ooooojoo oooooojoo oooooojoo oooooojoo
.
.
.
iiiiiiiiiii jooooojoo jooooojoo jooooojoo jooooojoo
ooooojoo oooooojoo oooooojoo oooooojoo

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2. REASON FOR OUTPUT

3. VARIABLE FIELD DEFINITIONS

- | | | | | | | | | | | | | | |
|-----------------|--|---------|--------------------|-----------|-----------------------------------|---------------|--|-----------------|---|-------------|--|---------|--------------------|
| a | Level of indirectness. | | | | | | | | | | | | |
| b | File system ID tag. (Must be in file segments 1 through 3 since this is used for extended memory access.) | | | | | | | | | | | | |
| c | Base address. | | | | | | | | | | | | |
| d | Address increment. | | | | | | | | | | | | |
| e | Indicates a mask definition used in reading the displayed location.
Decimal size of the mask. | | | | | | | | | | | | |
| f | Decimal displacement of the mask. | | | | | | | | | | | | |
| g | Disposition of the request: <table border="0" style="margin-left: 40px;"> <tr> <td>ABORTED</td> <td>— Function failed.</td> </tr> <tr> <td>COMPLETED</td> <td>— Function finished successfully.</td> </tr> <tr> <td>MSG COMPLETED</td> <td>— Partitioned message finished successfully.</td> </tr> <tr> <td>MSG IN PROGRESS</td> <td>— Partitioned output message is proceeding.</td> </tr> <tr> <td>MSG STARTED</td> <td>— First segment or partitioned message printed successfully.</td> </tr> <tr> <td>STOPPED</td> <td>— Function failed.</td> </tr> </table> | ABORTED | — Function failed. | COMPLETED | — Function finished successfully. | MSG COMPLETED | — Partitioned message finished successfully. | MSG IN PROGRESS | — Partitioned output message is proceeding. | MSG STARTED | — First segment or partitioned message printed successfully. | STOPPED | — Function failed. |
| ABORTED | — Function failed. | | | | | | | | | | | | |
| COMPLETED | — Function finished successfully. | | | | | | | | | | | | |
| MSG COMPLETED | — Partitioned message finished successfully. | | | | | | | | | | | | |
| MSG IN PROGRESS | — Partitioned output message is proceeding. | | | | | | | | | | | | |
| MSG STARTED | — First segment or partitioned message printed successfully. | | | | | | | | | | | | |
| STOPPED | — Function failed. | | | | | | | | | | | | |
| h | Additional failure information. | | | | | | | | | | | | |
| i | Address of the first location on the displayed line. | | | | | | | | | | | | |
| j | Contents of the specified locations. | | | | | | | | | | | | |
| k | Central control (CC) register indicator. (B, F, G, J, K, L, X, Y, or Z.) | | | | | | | | | | | | |

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4. ACTION TO BE TAKEN

If message is ABORTED or STOPPED retry after verifying input ranges and parameters.

5. REFERENCES

PIDENTs
GULPUTPP
GULPUTXP
GULRUTCR

Input Message
DUMP:XS

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ID DUMP:XTSI-CREG
WORK CENTER.. MOC, TEC
GENERIC 4E24 Rel. 2 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP:XTSI a, CREG

CSTATUS	STATR	MADATA	FSTATUS0	FSTATUS1	CESR	0.....0
PEST	CNTL	EXCNTLSTATL	EXCNTLSTATH	XESR	GESR	0.....0
GCNTL	GADDR0	GADDR1	EXINTR	CIAESCL	EXSANTIM	0.....0
EXSTKBNDL	EXSTKBNDH	MBPTR	SHDWMBPTR	CIARADDRL	CIARADDRH	0.....0
CIADATAL	CIADATAH	PSSNS	XTFERSUM	TSICTL	TSITSC	0.....0
TSISTAT	TSITSEL	TSIEXR0	TSIEXR1	TSIESR0	TSIESR1	0.....0
CSPETSC	FBICTL	PSCSUM	PSCPEST	PSCPSE	PSCPCMCO	0.....0
PSCCBC0	ALFESR0	ALFESR1	TRPFER0	TRPFER1	ALNKER0	0.....0
ALNKER1	CSPEsr0	CSPEsr1	CSPSTAT	CSPCTL0	CSPCTL1	0.....0
CSPTCERR	PSCEQUIP	PSCINSRV	0.....0	0.....0	0.....0	0.....0
MEMN	XLATE	7.....7	7.....7	7.....7	7.....7	7.....7
CSTATUS	STATR	MADATA	FSTATUS0	FSTATUS1	CESR	0.....0
PEST	CNTL	EXCNTLSTATL	EXCNTLSTATH	EXESR	GESR	0.....0
GCNTL	GADDR0	GADDR1	EXINTR	CIAESCL	EXSANTIM	0.....0
EXSTKBNDL	EXSTKBNDH	MBPTR	SHDWMBPTR	CIARADDRL	CIARADDRH	0.....0
CIADATAL	CIADATAH	PSSNS	XTFERSUM	TSICTL	TSITSC	0.....0
TSISTAT	TSITSEL	TSIEXR0	TSIEXR1	TSIESR0	TSIESR1	0.....0
CSPETSC	FBICTL	PSCSUM	PSCPEST	PSCPSE	PSCPCMCO	0.....0
PSCCBC0	ALFESR0	ALFESR1	TRPFER0	TRPFER1	ALNKER0	0.....0
ALNKER1	CSPEsr0	CSPEsr1	CSPSTAT	CSPCTL0	CSPCTL1	0.....0
CSPTCERR	PSCEQUIP	PSCINSRV	0.....0	0.....0	0.....0	0.....0

2. REASON FOR OUTPUT

To print the Critical Registers (CREG) for the specified Expanded Time Slot Interchange (XTSI).

NOTE: The dots in the message represent repeated characters. For example, 7...7 is actually 77777777. The top half of the dump is from controller 0; the lower half is from controller 1.

3. VARIABLE FIELD DEFINITIONS

a XTSI member number (0-63).

4. ACTION TO BE TAKEN

None.

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5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

Practice 234-010-107, *Maintenance Reference Handbook* - Description of XTSI internal registers. (critical registers are a subset of the internal registers)

Input Messages

DUMP:XTSI - IREG
LOAD:XTSI - IREG

Output Messages

DUMP:XTSI - IREG
LOAD:XTSI - IREG

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ID DUMP:XTSI-D3U
WORK CENTER.. MOC, TEC
GENERIC 4E24 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP:XTSI a,D3U b,IREG

c...c	d...d	e...e	f...f	g...g	h...h	i...i	j...j
k...k	l...l	m...m	n...n	o...o	p...p	q...q	0...0
r...r	s...s	t...t	u...u				

2. REASON FOR OUTPUT

To print the Internal Registers (IREG), of the specified Digital Signal Level 3 Unit (D3U), for a particular Expanded Time Slot Interchange (XTSI) frame.

NOTE: The triple dots in the message represent six characters. For example, d...d is actually dddddddd.

3. VARIABLE FIELD DEFINITIONS

a	XTSI member number (0-63).
b	D3U unit number (0-7).
c	D3U Software Status (D3USTATUS).
d	D3U Hardware Status (D3USTAT).
e	D3U Error Source Register (D3UESR).
f	D3U Controller (D3UCTL).
g	D3U Exercise Register (D3UEXR).
h	XL4USTARTTS - Group Equipage
i	XL4USFVD3US - Spare software version and hardware version.
j	XL4UVD3Ux - D3U software version, hardware version, and In-Band enabled state.
k	XL4UDU_EQDG01 - Equipage of Digroup 1-4
l	XL4UDU_EQDG05 - Equipage of Digroup 5-8
m	XL4UDU_EQDG09 - Equipage of Digroup 9-12
n	XL4UDU_EQDG13 - Equipage of Digroup 13-16
o	XL4UDU_EQDG17 - Equipage of Digroup 17-20

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p	XL4UDU_EQDG21 - Equipage of Digroup 21-24
q	XL4UDU_EQDG25 - Equipage of Digroup 25-28
r	Least significant 24 bits of firmware version number.
s	Most significant 8 bits of firmware version number.
t	Least significant 24 bits of software version number.
u	Most significant 8 bits of software version number.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

Practice 234-010-107, *Maintenance Reference Handbook* - Description of XTSI internal registers. (critical registers are a subset of the internal registers)

Input Messages
DUMP:XTSI-D3U
LOAD:XTSI-D3U

Output Message
LOAD:XTSI-D3U

SEE PROPRIETARY NOTICE ON COVER PAGE

ID DUMP:XTSI-IBU
WORK CENTER.. MOC, TEC
GENERIC 4E24 Rel. 2 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP:XTSI a, IBU b, IREG

c...c d...d e...e f...f g...g h...h i...i j...j
k...k l...l

2. REASON FOR OUTPUT

To print the Internal Registers (IREG), of the specified In-Band Unit (IBU), for a particular Expanded Time Slot Interchange (XTSI) frame.

NOTE: The triple dots in the message represent six characters. For example, d...d is actually dddddddd.

3. VARIABLE FIELD DEFINITIONS

a	XTSI member number (0-63).
b	IBU unit number (0).
c	IBU Software Status (IBUSTATUS).
d	IBU Hardware Status (IBUSTAT).
e	IBU Error Source Register (IBUESR).
f	IBU Controller (IBUCTL).
g	IBU Exercise Register (IBUEXR).
h	XL4UHVIBU - IBU type of signaling, type of miscellaneous service circuits, software version, hardware version and equipage.
i	Least significant 24 bits of firmware version number.
j	Most significant 8 bits of firmware version number.
k	Least significant 24 bits of software version number.
l	Most significant 8 bits of software version number.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
PULP

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Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

Practice 234-010-107, *Maintenance Reference Handbook* - Description of XTSI internal registers. (critical registers are a subset of the internal registers)

Input Messages

DUMP:XTSI - IBU

LOAD:XTSI - IBU

Output Message

LOAD:XTSI - IBU

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ID DUMP:XTSI-IREG
WORK CENTER.. MOC, TEC
GENERIC 4E24 Rel. 2 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP:XTSI a, IREG

CSTATUS	STATR	MADATA	FSTATUS0	FSTATUS1	CESR	0.....0
PEST	CNTL	EXCNTLSTATL	EXCNTLSTATH	XESR	GESR	0.....0
GCNTL	GADDR0	GADDR1	EXINTR	CIAESCL	EXSANTIM	0.....0
EXSTKBNDL	EXSTKBNDH	MBPTR	SHDWMBPTR	CIARADDRL	CIARADDRH	0.....0
CIADATAL	CIADATAH	PSSNS	XTFERSUM	TSICTL	TSITSC	0.....0
TSISTAT	TSITSEL	TSIEXR0	TSIEXR1	TSIESR0	TSIESR1	0.....0
CSPETSC	FBICTL	PSCSUM	PSCPEST	PSCPSE	PSCPCMCO	0.....0
PSCCBC0	ALFESR0	ALFESR1	TRPFER0	TRPFER1	ALNKER0	0.....0
ALNKER1	CSPEsr0	CSPEsr1	CSPSTAT	CSPCTL0	CSPCTL1	0.....0
CSPTCERR	PSCEQUIP	PSCINSRV	GRSVRCODE	GRSVCAUSE	GRSVMISC1	0.....0
GRSVMISC2	GRSVSP	GRSVSTK	GRSVFP	GRSVPC	GRSVLOAD	0.....0
GRSVCHKSUM	CTLEQUIP	0.....0	0.....0	0.....0	0.....0	0.....0
MEMN	XLATE	7.....7	7.....7	7.....7	7.....7	7.....7
CSTATUS	STATR	MADATA	FSTATUS0	FSTATUS1	CESR	0.....0
PEST	CNTL	EXCNTLSTATL	EXCNTLSTATH	EXESR	GESR	0.....0
GCNTL	GADDR0	GADDR1	EXINTR	CIAESCL	EXSANTIM	0.....0
EXSTKBNDL	EXSTKBNDH	MBPTR	SHDWMBPTR	CIARADDRL	CIARADDRH	0.....0
CIADATAL	CIADATAH	PSSNS	XTFERSUM	TSICTL	TSITSC	0.....0
TSISTAT	TSITSEL	TSIEXR0	TSIEXR1	TSIESR0	TSIESR1	0.....0
CSPETSC	FBICTL	PSCSUM	PSCPEST	PSCPSE	PSCPCMCO	0.....0
PSCCBC0	ALFESR0	ALFESR1	TRPFER0	TRPFER1	ALNKER0	0.....0
ALNKER1	CSPEsr0	CSPEsr1	CSPSTAT	CSPCTL0	CSPCTL1	0.....0
CSPTCERR	PSCEQUIP	PSCINSRV	GRSVRCODE	GRSVCAUSE	GRSVMISC1	0.....0
GRSVMISC2	GRSVSP	GRSVSTK	GRSVFP	GRSVPC	GRSVLOAD	0.....0
GRSVCHKSUM	CTLEQUIP	0.....0	0.....0	0.....0	0.....0	0.....0

2. REASON FOR OUTPUT

To print the Internal Registers (IREG) for the specified Expanded Time Slot Interchange (XTSI).

NOTE: The dots in the message represent repeated characters. For example, 7...7 is actually 77777777. The top half of the dump is from controller 0; the lower half is from controller 1.

3. VARIABLE FIELD DEFINITIONS

a XTSI member number (0-63).

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4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

Practice 234-010-107, *Maintenance Reference Handbook* - Description of XTSI internal registers. (critical registers are a subset of the internal registers)

Input Messages

DUMP:XTSI - IREG
LOAD:XTSI - IREG

Output Messages

DUMP:XTSI - CREG
LOAD:XTSI - IREG

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ID DUMP:XTSI-SPU
WORK CENTER.. MOC, TEC
GENERIC 4E24 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

DUMP:XTSI a,SPU b,IREG

c...c d...d e...e f...f g...g h...h i...i j...j
k...k l...l m...m n...n o...o p...p

2. REASON FOR OUTPUT

To print the Internal Registers (IREG), of the specified Signal Processing Unit (SPU), for a particular Expanded Time Slot Interchange (XTSI) frame.

NOTE: The triple dots in the message represent six characters. For example, d...d is actually dddddddd.

3. VARIABLE FIELD DEFINITIONS

a	XTSI member number (0-63).
b	SPU unit number (0-11).
c	SPU Software Status (SPUSTATUS).
d	SPU Hardware Status (SPUSTAT).
e	SPU Error Source Register (SPUESR).
f	SPU Controller (SPUCTL).
g	SPU Exercise Register (SPUEXR).
h	XL4USPSUES - Spare: Equipage, Hardware and Software versions.
i	XL4USFVSPS - SPU: Equipage, Hardware and Software versions.
j	RESERVED
k	RESERVED
l	RESERVED
m	Least significant 24 bits of firmware version number.
n	Most significant 8 bits of firmware version number.
o	Least significant 24 bits of software version number.
p	Most significant 8 bits of software version number.

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4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

Practice 234-010-107, *Maintenance Reference Handbook* - Description of XTSI internal registers. (critical registers are a subset of the internal registers)

Input Messages
DUMP:XTSI-SPU
LOAD:XTSI-SPU

Output Message
LOAD:XTSI-SPU

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:API
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1A-APS
TYPE Output

1. FORMAT

EX:API a b c d

2. REASON FOR OUTPUT

To specify both the diagnostic results and the termination mode at the conclusion of the interactive diagnostic execution on an attached processor interface (API).

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit under diagnosis (0-15).
- b The termination mode for the diagnostic:
- ABORTED — The diagnostic was abnormally stopped because of an interrupt, error in execution, or because of a STOP:MACLI input request.
- COMPLETED — The diagnostic completed normally.
- STOPPED — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution.
- c The results of the diagnostic:
- ATP — All tests passed.
- CATP — All tests passed; however, some tests were skipped because of the unavailability of a system resource which was needed to perform the test.
- NTR — No tests were executed.
- STF — Some tests failed.
- STF-BOF — The number of failed tests has filled the buffer. Before any more tests are run, the system prints out the contents of the buffer and then clears it.
- d An optional field that will appear only if the results are not ATP.

If conditional all-tests-passed (CATP) or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (40000000 00001000), then tests were skipped for reasons 9 and 47. A complete list of CATP bit positions and their reasons can be found in the DGN:API output message.

SEE PROPRIETARY NOTICE ON COVER PAGE

If some tests failed (STF), this field gives the number of tests failures in addition to the reasons that the tests were skipped. For example, if d is (7,40000000 00001000), seven tests failed, plus tests were skipped for reasons 9 and 47.

If STF-B0F, the number of the test failures is the number of test failures up to the point of buffer overflow.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service if possible, so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

5. REFERENCES

PIDENTs

APDG--, where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=APDG, UTYPE=1XLUAPI

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages

EX:API

STOP:MACLI

Output Message

DGN:API

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:API-ADDR
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1A-APS
TYPE Output

1. FORMAT

EX:API a ILLEGAL ADDRESS b

2. REASON FOR OUTPUT

To indicate that an illegal address was used for an interactive diagnostic function on an attached processor interface (API).

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0-15).
- b The type of illegal address:
- ADVANCE — The address to which the diagnostic was advanced contains an illegal address.
- DOLLOOPS — The loop of code contains an illegal address.
- INVALID MUST COMPLETE PHASE IN PROGRESS — A pause was inserted in one phase and an attempt was made to start another phase before the pause was removed from the first phase.
- LOOP END — The second address specified is illegal.
- LOOP START — The first address specified is illegal.
- SUBROUTINES — The subroutine contains an illegal address.

4. ACTION TO BE TAKEN

If INVALID . . . PROGRESS, remove the pause from the first phase and retry the diagnostic.

In all other cases, correct the address and retry the diagnostic.

5. REFERENCES

PIDENT
DCONTABL

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Message
EX:API

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:API-ILL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1A-APS
TYPE Output

1. FORMAT

EX:API a ILLEGAL PHASE

2. REASON FOR OUTPUT

To report whenever one or more illegal interactive diagnostic phases have been requested on a partial interactive diagnostic request for an attached processor interface (API). The illegal phase will not be executed; however, all valid phases will be run.

3. VARIABLE FIELD DEFINITIONS

a The member number of the API being diagnosed (0-15).

4. ACTION TO BE TAKEN

Check PIDENT DCONTABL for PREFIX=APDG, UTYPE=1XLUAPI to obtain the list of valid phase numbers.

5. REFERENCES

PIDENTs
APFRBASE
DCONMAIN
DCONTABL
APDG--, where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=APDG, UTYPE=1XLUAPI

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Message
EX:API

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:API-LOOP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1A-APS
TYPE Output

1. FORMAT

EX:API a LOOPING b

2. REASON FOR OUTPUT

To indicate that the interactive diagnostic on an attached processor interface (API) has either started looping through the specified code or has completed the looping function.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0-15).
- b COMPLETE — Looping has terminated.
- STARTED — Looping has begun.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs

APDG--, where -- represents all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=APDG, UTYPE=1XLUAPI.

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Message

EX:API

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:API-NOT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1A-APS
TYPE Output

1. FORMAT

EX:API a NOT STARTED - b

2. REASON FOR OUTPUT

To report whenever the interactive diagnostic request cannot be started for an attached processor interface (API). This usually occurs when the unit for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0-15).
- b The reason the diagnostic was not started.

4. ACTION TO BE TAKEN

If the specified API cannot be removed from service because there is no spare, restore a spare unit to service.

5. REFERENCES

PIDENTs
APFRBASE
DCONMAIN
MIRA

Practice 254-280-210, *Maintenance Control Program*

PA-4A002-01, 4ESSTM *User's Manual*

Input Message
EX:API

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:API-SUSP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1A-APS
TYPE Output

1. FORMAT

- [1] EX:API a SUSPENDED
- [2] EX:API a SUSPENDED AT PH b ADR c [d]
- [3] EX:API a SUSPENDED AT PH b ADR c AFTER TEST e [d]
- [4] EX:API a SUSPENDED ILLEGAL INPUT

2. REASON FOR OUTPUT

To print, in general, whenever an interactive diagnostic execution has been suspended for an attached processor interface (API). Each of the four formats identifies a specific type of suspension.

Format [1] will be printed if there is no phase active.

Format [2] will be printed if the suspension occurred at an address specified by the input message.

Format [3] will be printed if the suspension occurred at a point immediately following a test.

Format [4] will be printed if the diagnostic was suspended because the input was illegal.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0-15).
- b The diagnostic phase in which the diagnostic was suspended.
- c The address in the diagnostic phase at which the suspension occurred.
- d The reason the suspension occurred:
 - ADVANCE — The diagnostic has been executed up to the specified address.
 - FIRST FAILURE — The diagnostic has been suspended because the first failure was encountered.
 - PAUSE — The diagnostic has been paused at the specified address.
 - STEP — The requested number of steps have been completed.

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e The last test executed before the suspension occurred.

4. ACTION TO BE TAKEN

Specify another EX:API input message. If no further interactive diagnostic execution is desired, specify a STOP:MACLI input message for the appropriate subclass.

5. REFERENCES

PIDENTs

APFRBASE

DCONMAIN

MIRA

APDG--, where -- represents all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=APDG, UTYPE=1XLUAPI

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages

EX:API

STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:API-TERM
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1A-APS
TYPE Output

1. FORMAT

EX:API a TERMINATED AT PH b ADR c AFTER TEST d [FORCED]

2. REASON FOR OUTPUT

To report whenever the interactive diagnostic terminates early for an attached processor interface (API). This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the API being diagnosed (0-15).
b	The diagnostic phase in which the termination occurred.
c	The address in the diagnostic phase at which the termination occurred.
d	The last test executed before the termination occurred.
FORCED	This indicates that the termination was unconditional. Terminating in this manner is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

Repair the faulty frame.

5. REFERENCES

PIDENTs
APDG--, where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=APDG, UTYPE=1XLUAPI

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Message
EX:API

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:API-TEST
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1A-APS
TYPE Output

1. FORMAT

EX:API a PH b c [d]
[TEST MISMATCH SUPPLEMENTARY DATA
ee ffffffff ffffffff]

2. REASON FOR OUTPUT

To report the interactive diagnostic results on a phase basis for an attached processor interface (API). This occurs in the case of a partial diagnosis or a test failure.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the API being diagnosed (0-15).
- b The diagnostic phase number for which the results are reported.
- c The results of the diagnostic:
- ATP — All tests passed.
- CATP — All tests passed; however, some tests were skipped because of the unavailability of a system resource which was needed to perform the test.
- NTR — No test were executed.
- STF — Some tests failed.
- STF-BOF — Some tests failed and the test failure buffer overflowed.
- d An optional field that will appear only if the results are not ATP.
- If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (40000000 00001000) then tests were skipped for reasons 9 and 47. A complete list of CATP bit positions and their reasons can be found in the DGN:API output message.
- If STF, this field gives the number of test failures in addition to the reasons that the tests were skipped. For example, if d is (7,40000000 00001000), seven tests failed, plus tests were skipped for reasons 9 and 47.
- If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

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The following appear only if the diagnostic was STF :

- e Test number of the failing test.
- f The bits that were in error; that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

5. REFERENCES

PIDENTs

APFRBASE

DCONMAIN

MIRA

APDG-- where -- represents all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=APDG, UTYPE=1XLUAPI

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Message

EX:API

Output Message

DGN:API

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:AUB
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:AUB a b c [d]

2. REASON FOR OUTPUT

To report both the interactive diagnostic results and the termination mode at the conclusion of the interactive diagnostic execution on an auxiliary unit bus (AUB).

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit under diagnosis (0 or 1).
- b The termination mode for the diagnostic:
- ABORTED — The diagnostic was abnormally stopped because of an interrupt, error in execution, or because of a STOP:MACLI input request.
- COMPLETED — The diagnostic completed normally.
- STOPPED — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution.
- c The results of the diagnostic:
- ATP — All tests passed.
- CATP — All tests passed; however, some tests were skipped because of the unavailability of a system resource which was needed to perform the test.
- NTR — No tests were executed.
- STF — Some tests failed.
- STF-BOF — The number of failed tests has filled the buffer. Before any more tests are run, the system prints out the contents of the buffer and then clears it.
- d An optional field that will appear only if the results are not ATP.
- CATP or NTR — This field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (00000000 40020000), then tests were skipped for reasons 13 and 23.

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The reasons are as follows:

Bit	Meaning
13	Auxiliary unit (AU) helper out of service.
20	Unit powered down or fuse alarmed.
21	Master control complex (MCC) override in effect (ON).
22	Auxiliary unit (AU) unit "KCODE trouble" bit set.
23	AU unit "Do not restore" bit set (unit removed via RMV: input message).

STF	— The number of failing phases, failing test at, and trouble number. For example (3,4,00101141) shows 3 phases failed, 4 tests failed, with trouble number 00101141.
STF-BOF	— The number of test failures up to the point of buffer overflow (BOF).

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service if possible, so that all tests may be executed. If STF, the unit should be repaired as quickly as possible. Otherwise, no action is needed.

Diagnostic may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs
AUFRDFOR
DCONMAIN
MIRA
ABDG--, where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=ABDG, UTYPE=1XLUAUB

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM User's Manual

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Messages

CLR:MACLI
EX:AUB
RMV:AUB
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:AUB-ADDR
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:AUB a ILLEGAL ADDRESS b

2. REASON FOR OUTPUT

To report an illegal address was used for an interactive diagnostic function on an auxiliary unit bus (AUB).

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The type of illegal address:
- ADVANCE — The address advanced to contains an illegal address.
- DOLLOOPS — The loop of code contains an illegal address.
- INVALID MUST COMPLETE PHASE IN PROGRESS — A pause was inserted in one phase and an attempt was made to start another phase before the pause was removed from the first phase.
- LOOP END — The second address specified is illegal.
- LOOP START — The first address specified is illegal.
- SUBROUTINES — The subroutine contains an illegal address.

4. ACTION TO BE TAKEN

If INVALID MUST COMPLETE PHASE IN PROGRESS , remove the pause from the first phase and retry the diagnostic.

In all other cases, correct the address and retry the diagnostic.

5. REFERENCES

PIDENTs
AUFRDFOR
DCONMAIN
MIRA

ABDG--, where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=ABDG, UTYPE=1XLUAUB

SEE PROPRIETARY NOTICE ON COVER PAGE

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, *4ESSTM User's Manual*

Input Messages

CLR:MACLI
EX:AUB
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:AUB-ILL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:AUB a ILLEGAL PHASE

2. REASON FOR OUTPUT

To report when only illegal diagnostic phases have been requested on a partial interactive diagnostic request for an Auxiliary Unit Bus (AUB).

3. VARIABLE FIELD DEFINITIONS

a The member number of the unit being diagnosed (0 or 1).

4. ACTION TO BE TAKEN

Check Pident DCONTABL for PREFIX=ABDG, UTYPE=1XLUAUB to obtain the list of valid phase numbers.

5. REFERENCES

PIDENTs
AUFRDFOR
DCONMAIN
MIRA
ABDG--, where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=ABDG, UTYPE=1XLUAUB

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages
CLR:MACLI
EX:AUB
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:AUB-LOOP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:AUB a LOOPING b

2. REASON FOR OUTPUT

To report that the interactive diagnostic on an auxiliary unit bus (AUB) has either started looping through the specified code, or has completed the looping function.

3. VARIABLE FIELD DEFINITIONS

a The member number of the unit being diagnosed (0 or 1).
b Status:

 COMPLETE — Looping has terminated.
 STARTED — Looping has begun.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
AUFRDFOR
DCONMAIN
MIRA
ABDG--, where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=ABDG, UTYPE=1XLUAUB

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages
CLR:MACLI
EX:AUB
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:AUB-NOT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:AUB a NOT STARTED - b

2. REASON FOR OUTPUT

To report an interactive diagnostic request cannot be started. This usually occurs when the auxiliary unit bus (AUB) for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
b The reason the diagnostic was not started.

4. ACTION TO BE TAKEN

If the specified AUB cannot be removed from service because there is no spare, restore a spare unit to service.

5. REFERENCES

PIDENTs
AUFRDFOR
DCONMAIN
MIRA
ABDG--, where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=ABDG, UTYPE=1XLUAUB

Input Messages
CLR:MACLI
EX:AUB
RST:AUB
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:AUB-SUSP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

- [1] EX:AUB a SUSPENDED
- [2] EX:AUB a SUSPENDED AT PH b ADR c [d]
- [3] EX:AUB a SUSPENDED AT PH b ADR c AFTER TEST e [d]
- [4] EX:AUB a SUSPENDED ILLEGAL INPUT

2. REASON FOR OUTPUT

To report an interactive diagnostic execution has been suspended for an auxiliary unit bus (AUB). Each of the four formats identifies a specific type of suspension.

Format [1] if no phase active.

Format [2] at a point specified by the input message.

Format [3] at a point immediately following a test.

Format [4] if the input is illegal.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The diagnostic phase in which the diagnostic suspended.
- c The address in the diagnostic phase at which the suspension occurred.
- d The reason the suspension occurred:
 - ADVANCE — The diagnostic has been executed up to the specified address.
 - FIRST FAILURE — The diagnostic has been suspended because the first failure was encountered.
 - PAUSE — The diagnostic has been paused at the specified address.
 - STEP — The requested number of steps have been completed.
- e The last test executed before the suspension occurred.

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

Specify another EX:AUB input. If no further interactive diagnostic execution is desired, specify a STOP:MACLI input message for the appropriate subclass.

5. REFERENCES

PIDENTs

AUFRDFOR

DCONMAIN

MIRA

ABDG--, where -- represents all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=ABDG, UTYPE=1XLUAUB

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages

CLR:MACLI

EX:AUB

STOP:EX

STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:AUB-TERM
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:AUB a TERMINATED AT PH b ADR c AFTER TEST d [FORCED]

2. REASON FOR OUTPUT

To report when the interactive diagnostic terminates early for an auxiliary unit bus (AUB). This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the unit being diagnosed (0 or 1).
b	The diagnostic phase in which the termination occurred.
c	The address in the diagnostic phase at which the termination occurred.
d	The last test executed before the termination occurred.
FORCED	Indicates that the termination was unconditional. The use of terminating in this way is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

Repair the faulty unit.

5. REFERENCES

PIDENTs
AUFRDFOR
DCONMAIN
MIRA
ABDG--, where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=ABDG, UTYPE=1XLUAUB

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

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SEE PROPRIETARY NOTICE ON COVER PAGE

Input Messages
CLR:MACLI
EX:AUB
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:AUB-TEST
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:AUB a PH b c [d]
[TEST MISMATCH SUPPLEMENTARY DATA
ee ffffffff gggggggg]

2. REASON FOR OUTPUT

To report when the diagnostic results are printed on a phase basis for an Auxiliary Unit Bus (AUB). This occurs in the case of a partial diagnosis, a test failure, or when RAW was requested on the input message.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The diagnostic phase number for which the results are reported.
- c The results of the diagnostic:
- ATP — All tests passed.
- CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.
- NTR — No tests were executed.
- STF — Some tests failed.
- STF-BOF — Some tests failed and the test failure buffer overflowed.
- d An optional field that will appear only if the results are not ATP.
- CATP or NTR — This field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (00000000 40020000), then tests were skipped for reasons 13 and 23.

SEE PROPRIETARY NOTICE ON COVER PAGE

The reasons are as follows:

Bit	Meaning
13	Auxiliary Unit (AU) helper out of service.
20	Unit powered down or fuse alarmed.
21	Master Control Complex (MCC) override in effect (ON).
22	Auxiliary Unit (AU) unit "KCODE trouble" bit set.
23	AU unit "Do not restore" bit set (unit removed via RMV: input message).

STF	— The number of failing phases, failing test at, and trouble number. For example (3,4,00101141) shows 3 phases failed, 4 tests failed, with trouble number 00101141.
STF-BOF	— The number of test failures up to the point of Buffer Overflow (BOF).

The following appear only if the diagnostic was STF.

e	Test number of the failing test.
f	The bits that were in error; that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.
g	An optional field containing supplementary data concerning the failing test if available. This field may contain up to seven words. See diagnostic Pident for an explanation of the data.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

5. REFERENCES

PIDENTs
 AUFRDFOR
 DCONMAIN
 MIRA
 ABDG--, where -- represents all valid phase numbers
 listed in PIDENT DCONTABL for PREFIX=ABDG, UTYPE=1XLUAUB

Practice 254-280-040, *Diagnostic Language - DL-1*
 Practice 254-280-220, *Diagnostic Programs - Description*

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PA-4A002-01, *4ESSTM User's Manual*

Input Messages

CLR:MACLI

EX:AUB

RMV:AUB

STOP:EX

STOP:MACLI

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ID EX:AUI
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:AUI a b c [d]

2. REASON FOR OUTPUT

To report both the diagnostic results and the termination mode at the conclusion of the interactive diagnostic execution on a auxiliary unit interface (AUI).

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit under diagnosis (0 or 1).
- b The termination mode for the diagnostic:
- ABORTED — The diagnostic was abnormally stopped because of an interrupt, error in execution, or because of a STOP:MACLI input request.
- COMPLETED — The diagnostic completed normally.
- STOPPED — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution.
- c The results of the diagnostic:
- ATP — All tests passed.
- CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.
- NTR — No tests were executed.
- STF — Some tests failed.
- STF-BOF — The number of failed tests has filled the buffer. Before any more tests are run the system prints out the contents of the buffer and then clears it.
- d An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (40000000 00010000), then tests were skipped for reasons 12 and 47.

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The reasons are as follows:

Bit	Meaning
12	Scan and signal distributor (SSD) out-of-service (OOS).
43	Power monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).
46	Frame request for PWRMON active.
47	Unit not in normal state.

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, if d is (7,40000000 00010000), seven tests failed, plus tests were skipped for reasons 12 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service if possible, so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

If a diagnostic request is made from the unit power switch, power monitor tests are NOT run. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs

DCONTABL

AIDG--, where -- represents all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=AIDG, UTYPE=1XLUAUI

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages

CLR:MACLI

EX:AUI

STOP:EX

STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

Output Message
DGN:AUI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:AUI-ADDR
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:AUI a ILLEGAL ADDRESS b

2. REASON FOR OUTPUT

To report that an illegal address was used for an interactive diagnostic function on an auxiliary unit interface (AUI) unit.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The type of illegal address:
- ADVANCE — The address advanced to contains an illegal address.
- DOLLOOPS — The loop of code contains an illegal address.
- INVALID MUST COMPLETE PHASE IN PROGRESS — A pause was inserted in one phase and an attempt was made to start another phase before the pause was removed from the first phase.
- LOOP END — The second address specified is illegal.
- LOOP START — The first address specified is illegal.
- SUBROUTINES — The subroutine contains an illegal address.

4. ACTION TO BE TAKEN

If INVALID MUST COMPLETE PHASE IN PROGRESS , remove the pause from the first phase and retry the diagnostic.

In all other cases, correct the address and retry the diagnostic.

5. REFERENCES

PIDENTs
DCONTABL
AIDG--, where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=AIDG, UTYPE=1XLUAUI

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM User's Manual

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Input Messages
CLR:MACLI
EX:AUI
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:AUI-ILL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:AUI a ILLEGAL PHASE

2. REASON FOR OUTPUT

To report when only illegal diagnostic phases have been requested on a partial interactive diagnostic request for an auxiliary unit interface (AUI).

3. VARIABLE FIELD DEFINITIONS

a The member number of the unit being diagnosed (0 or 1).

4. ACTION TO BE TAKEN

Check PIDENT DCONTABL for PREFIX=AIDG, UTYPE=1XLUAUI to obtain the list of valid phase numbers.

5. REFERENCES

PIDENTs
DCONTABL
AIDG--, where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=AIDG, UTYPE=1XLUAUI

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages
CLR:MACLI
EX:AUI
STOP:EX
STOP:MACLI

Output Message
DGN:AUI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:AUI-LOOP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:AUI a LOOPING b

2. REASON FOR OUTPUT

To report that the interactive diagnostic on an auxiliary unit interface (AUI) unit has either started looping through the specified code, or has completed the looping function.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b COMPLETE — Looping has terminated.
 STARTED — Looping has begun.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
DCONTABL
AIDG--, where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=AIDG, UTYPE=1XLUAUI

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages
CLR:MACLI
EX:AUI
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:AUI-NOT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:AUI a NOT STARTED - b

2. REASON FOR OUTPUT

To report when the interactive diagnostic request cannot be started for the auxiliary unit interface (AUI). This usually occurs when the unit for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The reason the diagnostic was not started.

4. ACTION TO BE TAKEN

If the specified unit cannot be removed from service because there is no spare, restore a spare unit to service.

5. REFERENCES

PIDENTs
AUFRTAUI
DCONTABL
AIDG--, where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=AIDG, UTYPE=1XLUAUI

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM User's Manual

Input Messages
CLR:MACLI
EX:AUI
STOP:EX
STOP:MACLI

Output Message
DGN:AUI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:AUI-SUSP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

- [1] EX:AUI a SUSPENDED
- [2] EX:AUI a SUSPENDED AT PH b ADR c [e]
- [3] EX:AUI a SUSPENDED AT PH b ADR c AFTER TEST d [e]
- [4] EX:AUI a SUSPENDED ILLEGAL INPUT

2. REASON FOR OUTPUT

To report when interactive diagnostic execution has been suspended for an auxiliary unit interface (AUI). Each of the four formats identifies a specific type of suspension:

Format [1] if there was no phase active.

Format [2] at the address specified by the input message.

Format [3] the point immediately following a test.

Format [4] if the input is illegal.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The diagnostic phase in which the diagnostic suspended.
- c The address in the diagnostic phase at which the suspension occurred.
- d The last test executed before the suspension occurred.
- e The reason the suspension occurred:
 - ADVANCE — The diagnostic has been executed up to the specified address.
 - FIRST FAILURE — The diagnostic has been suspended because the first failure has been encountered.
 - PAUSE — The diagnostic has been paused at the specified address.
 - STEP — The requested number of steps have been completed.

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4. ACTION TO BE TAKEN

Specify another EX: input. If no further interactive diagnostic execution is desired, specify a STOP:MACLI input message for the appropriate subclass.

5. REFERENCES

PIDENTs

DCONTABL

AIDG--, where -- represents all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=AIDG, UTYPE=1XLUAUI

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages

CLR:MACLI

EX:AUI

STOP:EX

STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:AUI-TERM
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:AUI a TERMINATED AT PH b ADR c AFTER TEST d [FORCED]

2. REASON FOR OUTPUT

To report when the interactive diagnostic terminates early for a auxiliary unit interface (AUI). This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the unit being diagnosed (0 or 1).
b	The diagnostic phase in which the termination occurred.
c	The address in the diagnostic phase at which the termination occurred.
d	The last test executed before the termination occurred.
FORCED	The termination is unconditional. Termination in this way is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

Repair the faulty frame. If further diagnostic execution is desired, specify UCL on the DGN: input message. This will inhibit all early terminations except those that are forced.

5. REFERENCES

PIDENTs
DCONTABL
AIDG--, where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=AIDG, UTYPE=1XLUAUI

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

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Input Messages

CLR:MACLI
DGN:AUI
EX:AUI
STOP:EX
STOP:MACLI

Output Message

DGN:AUI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:AUI-TEST
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:AUI a PH b c [d]
[TEST MISMATCH SUPPLEMENTARY DATA
ee ffffffff gggggggg]

2. REASON FOR OUTPUT

To report when the diagnostic results are printed on a phase basis for an Auxiliary Unit Interface (AUI). This occurs in the case of a partial diagnosis, a test failure, or when RAW was requested on the input message.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The diagnostic phase number for which the results are reported.
- c The results of the diagnostic:
- ATP — All tests passed.
- CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.
- NTR — No tests were executed.
- STF — Some tests failed.
- STF-BOF — Some tests failed and the test failure buffer overflowed.
- d An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (40000000 00010000), then tests were skipped for reasons 12 and 47.

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The reasons are as follows:

Bit	Meaning
12	Scan and Signal Distributor (SSD) Out-Of-Service (OOS).
43	Power Monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).
46	Frame request for PWRMON active.
47	Unit not in normal state.

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, if d is (7,40000000 00010000), seven tests failed, plus tests were skipped for reasons 12 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

The following appear only if the diagnostic was STF.

- e Test number of the failing test.
- f The bits that were in error; that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.
- g An optional field containing supplementary data concerning the failing test if available. This field may contain up to seven words. See diagnostic Pident for an explanation of the data.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

5. REFERENCES

PIDENTs

DCONTABL

AIDG--, where -- represents all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=AIDG, UTYPE=1XLUAUI

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

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SEE PROPRIETARY NOTICE ON COVER PAGE

Input Messages
CLR:MACLI
EX:AUI
STOP:EX
STOP:MACLI

Output Message
DGN:AUI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:CC
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:CC a b c [d]

2. REASON FOR OUTPUT

To report both the diagnostic results and the termination mode at the conclusion of the interactive diagnostic execution on a central control (CC).

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit under diagnosis (0 or 1).
- b The termination mode for the diagnostic:
- ABORTED — The diagnostic was abnormally stopped because of an interrupt, error in execution, or because of a STOP:MACLI input request.
- COMPLETED — The diagnostic completed normally.
- STOPPED — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution.
- c The results of the diagnostic:
- ATP — All tests passed.
- CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.
- NTR — No tests were executed.
- STF — Some tests failed.
- STF-BOF — The number of failed tests has filled the buffer. Before any more tests are run the system prints out the contents of the buffer and then clears it.
- d An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (40000000 00010000), then tests were skipped for reasons 12 and 47.

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The reasons are as follows:

Bit	Meaning
0	Call store bus (CSB) 0 out of service.
1	CSB 1 out of service.
2	Duplex master control complex (MCC) and utility processor (MUP) failure.
3	Program store bus (PSB) 0 out of service.
4	PSB 1 out of service.
6	Auxiliary unit interface (AUI) 0 helper out of service.
7	Auxiliary unit bus (AUB) 1 helper out of service.
8	Direct memory access (DMA) failure on active MUP.
12	Scan and signal distributor (SSD) out of service (OOS).
13	SSD 0 helper out of service.
14	SSD 1 helper out of service.
16	Interface bus (IFB) 0 helper out of service.
17	IFB 1 helper out of service.
18	MUP 0 helper out of service.
19	MUP 1 helper out of service.
20	CC forces in effect.
22	MUP forces in effect.
24	MUP executed code reports CATP.
25	Reserved for utility system diagnose (DGN).
26	Call store helper unit not available.
27	Program store helper unit not available.
43	Power monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).
46	Frame request for PWRMON active (try again).
47	Unit not in normal state.

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, if d is (7,40000000 00010000), seven tests failed, plus tests were skipped for reasons 12 and 47. If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

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4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service if possible, so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

If a diagnostic request is made from the unit power switch, power monitor tests are NOT run. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs

CCFRTEST

DCONTABL

CCDG--, where -- represents all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=CCDG, UTYPE=1XLUCC

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages

CLR:MACLI

EX:CC

STOP:EX

STOP:MACLI

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ID EX:CC-ADDR
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:CC a ILLEGAL ADDRESS b

2. REASON FOR OUTPUT

To report that an illegal address was used for an interactive diagnostic function on a central control (CC) unit.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The type of illegal address:
- ADVANCE — The address advanced to contains an illegal address.
- DOLLOOPS — The loop of code contains an illegal address.
- INVALID MUST COMPLETE PHASE IN PROGRESS — A pause was inserted in one phase and an attempt was made to start another phase before the pause was removed from the first phase.
- LOOP END — The second address specified is illegal.
- LOOP START — The first address specified is illegal.
- SUBROUTINES — The subroutine contains an illegal address.

4. ACTION TO BE TAKEN

If INVALID MUST COMPLETE PHASE IN PROGRESS , remove the pause from the first phase and retry the diagnostic.

In all other cases, correct the address and retry the diagnostic.

5. REFERENCES

PIDENTs
CCFRTEST
DCONTABL
CCDG--, where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=CCDG, UTYPE=1XLUCC

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

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PA-4A002-01, *4ESSTM User's Manual*

Input Messages

CLR:MACLI

EX:CC

STOP:EX

STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:CC-ILL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:CC a ILLEGAL PHASE

2. REASON FOR OUTPUT

To report when only illegal diagnostic phases have been requested on a partial interactive diagnostic request for a central control (CC) has been made.

3. VARIABLE FIELD DEFINITIONS

a The member number of the unit being diagnosed (0 or 1).

4. ACTION TO BE TAKEN

Check PIDENT DCONTABL for PREFIX=CCDG, UTYPE=1XLUCC to obtain the list of valid phase numbers.

5. REFERENCES

PIDENTs
CCFRTEST
DCONTABL
CCDG--, where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=CCDG, UTYPE=1XLUCC

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages
CLR:MACLI
EX:CC
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:CC-LOOP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:CC a LOOPING b

2. REASON FOR OUTPUT

To report that the interactive diagnostic on a central control (CC) unit has either started looping through the specified code, or has completed the looping function.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b COMPLETE — Looping has terminated.
 STARTED — Looping has begun.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
CCFRTEST
DCONTABL
CCDG--, where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=CCDG, UTYPE=1XLUCC

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages
CLR:MACLI
EX:CC
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:CC-NOT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:CC a NOT STARTED - b

2. REASON FOR OUTPUT

To report when the interactive diagnostic request cannot be started for the central control (CC). This usually occurs when the unit for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The reason the diagnostic was not started.

4. ACTION TO BE TAKEN

If the specified unit cannot be removed from service because there is no spare, restore a spare unit to service.

5. REFERENCES

PIDENTs
CCFRTEST
DCONTABL
CCDG--, where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=CCDG, UTYPE=1XLUCC

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM User's Manual

Input Messages
CLR:MACLI
EX:CC
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:CC-SUSP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

- [1] EX:CC a SUSPENDED
- [2] EX:CC a SUSPENDED AT PH b ADR c [e]
- [3] EX:CC a SUSPENDED AT PH b ADR c AFTER TEST d [e]
- [4] EX:CC a SUSPENDED ILLEGAL INPUT

2. REASON FOR OUTPUT

To report when interactive diagnostic execution has been suspended for a central control (CC). Each of the four formats identifies a specific type of suspension:

Format [1] if there was no phase active.

Format [2] at the address specified by the input message.

Format [3] the point immediately following a test.

Format [4] if the input is illegal.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The diagnostic phase in which the diagnostic suspended.
- c The address in the diagnostic phase at which the suspension occurred.
- d The last test executed before the suspension occurred.
- e The reason the suspension occurred:
 - ADVANCE — The diagnostic has been executed up to the specified address.
 - FIRST FAILURE — The diagnostic has been suspended because the first failure has been encountered.
 - PAUSE — The diagnostic has been paused at the specified address.
 - STEP — The requested number of steps have been completed.

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4. ACTION TO BE TAKEN

Specify another EX: input. If no further interactive diagnostic execution is desired, specify a STOP:MACLI input message for the appropriate subclass.

5. REFERENCES

PIDENTs

CCFRTEST

DCONTABL

CCDG--, where -- represents all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=CCDG, UTYPE=1XLUCC

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages

CLR:MACLI

EX:CC

STOP:EX

STOP:MACLI

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ID EX:CC-TERM
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:CC a TERMINATED AT PH b ADR c AFTER TEST d [FORCED]

2. REASON FOR OUTPUT

To report when the interactive diagnostic terminates early for a central control (CC). This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the unit being diagnosed (0 or 1).
b	The diagnostic phase in which the termination occurred.
c	The address in the diagnostic phase at which the termination occurred.
d	The last test executed before the termination occurred.
FORCED	The termination is unconditional. Termination in this way is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

Repair the faulty frame. If further diagnostic execution is desired, specify UCL on the DGN: input message. This will inhibit all early terminations except those that are forced.

5. REFERENCES

PIDENTs
CCFRTEST
DCONTABL
CCDG--, where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=CCDG, UTYPE=1XLUCC

Practice 254-280-040, *Diagnostic Language - DL-1*
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Input Messages
CLR:MACLI
DGN:CC
EX:CC
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:CC-TEST
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:CC a PH b c [d]
[TEST MISMATCH SUPPLEMENTARY DATA
ee ffffffff gggggggg]

2. REASON FOR OUTPUT

To report when the diagnostic results are printed on a phase basis for a Central Control (CC). This occurs in the case of a partial diagnosis, a test failure, or when RAW was requested on the input message.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The diagnostic phase number for which the results are reported.
- c The results of the diagnostic:
- ATP — All tests passed.
- CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.
- NTR — No tests were executed.
- STF — Some tests failed.
- STF-BOF — Some tests failed and the test failure buffer overflowed.
- d An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (40000000 00010000), then tests were skipped for reasons 12 and 47.

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The reasons are as follows:

Bit	Meaning
0	Call Store Bus (CSB) 0 out of service.
1	CSB 1 out of service.
2	Duplex Master Control Complex (MCC) and Utility Processor (MUP) failure.
3	Program Store Bus (PSB) 0 out of service.
4	PSB 1 out of service.
6	Auxiliary Unit Interface (AUI) 0 helper out of service.
7	Auxiliary Unit Bus (AUB) 1 helper out of service.
8	Direct Memory Access (DMA) failure on active MUP.
11	CC under test is powered down.
12	Scan and Signal Distributor (SSD) Out Of Service (OOS).
13	SSD 0 helper out of service.
14	SSD 1 helper out of service.
16	Interface Bus (IFB) 0 helper out of service.
17	IFB 1 helper out of service.
18	MUP 0 helper out of service.
19	MUP 1 helper out of service.
20	CC forces in effect.
22	MUP forces in effect.
24	MUP executed code reports CATP.
25	Reserved for utility system Diagnose (DGN).
26	Call store helper unit not available.
27	Program store helper unit not available.
43	Power Monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).
46	Frame request for PWRMON active (try again).
47	Unit not in normal state.

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, if d is (7,40000000 00010000), seven tests failed, plus tests were skipped for reasons 12 and 47. If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

The following appear only if the diagnostic was STF.

e	Test number of the failing test.
f	The bits that were in error; that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.

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- g An optional field containing supplementary data concerning the failing test if available. This field may contain up to seven words. See diagnostic Pident for an explanation of the data.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

5. REFERENCES

PIDENTs
CCFRTEST
DCONTABL
CCDG--, where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=CCDG, UTYPE=1XLUCC

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM User's Manual

Input Messages
CLR:MACLI
EX:CC
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:CMSLINK
WORK CENTER.. MAC, MOC, NMOC, TEC,
 TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:CMSLINK a

2. REASON FOR OUTPUT

To print a circuit maintenance system (CMS) only type output sent in response to an EX:CMSLINK message from CMS. It should not appear on an ESSTM teletypewriter (TTY) unless there is trouble with the CMS links.

3. VARIABLE FIELD DEFINITIONS

a Up to 21 ASCII characters that were input on the EX:CMSLINK input message.

4. ACTION TO BE TAKEN

Determine why the CMS links are down.

5. REFERENCES

PIDENT
TMAD0005

Input Message
EX:CMSLINK

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:CS
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:CS a b c [d]

2. REASON FOR OUTPUT

To report both the diagnostic results and the termination mode at the conclusion of the interactive diagnostic execution on a call store (CS).

3. VARIABLE FIELD DEFINITIONS

- a The member number of the call store under diagnosis (0 - 39).
- b The termination mode for the diagnostic:
- ABORTED — The diagnostic was abnormally stopped because of an interrupt, error in execution, or because of a STOP:MACLI input request.
- COMPLETED — The diagnostic completed normally.
- STOPPED — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution.
- c The results of the diagnostic:
- ATP — All tests passed.
- CATP — All tests passed; however, some tests were skipped because of the unavailability of a system resource which was needed to perform the test.
- NTR — No tests were executed.
- STF — Some tests failed.
- STF-BOF — The number of failed tests has filled the buffer. Before any more tests are run, the system prints out the contents of the buffer and then clears it.
- d An optional field that will appear only if the results are not ATP.
- If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit positions in the 16-digit octal number that is printed. For example, if d is (40000000 00010000), then tests were skipped for reasons 12 and 47.

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The reasons are as follows:

Bit	Meaning
12	Scan and signal distributor (SSD) out of service (OOS).
15	Standby central control (CC) out of service.
21	Master control complex (MCC) override in effect (ON).
43	Power monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).
46	Frame request for PWRMON active (try again).
47	Unit not in normal state.

If STF, this field gives the number of tests failures in addition to the reasons that tests were skipped. For example, if d is (7,40000000 00010000), seven tests failed, plus tests were skipped for reasons 12 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service if possible, so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

Diagnostic may also be requested via the unit power switch. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs

CSFRNORM

DCONTABL

MUDG--; where -- represents all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=MUDG,UTYPE=1XLUCS - core store

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM User's Manual

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Messages
CLR:MACLI
EX:CS
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:CS-ADDR
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:CS a ILLEGAL ADDRESS b

2. REASON FOR OUTPUT

To report that an illegal address was used for an interactive diagnostic function on a call store (CS).

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 - 39).
- b The type of illegal address:
- ADVANCE — The address advanced to contain an illegal address.
- DOLLOOPS — The loop of code contains an illegal address.
- INVALID MUST COMPLETE PHASE IN PROGRESS — A pause was inserted in one phase and an attempt was made to start another phase before the pause was removed from the first phase.
- LOOP END — The second address specified is illegal.
- LOOP START — The first address specified is illegal.
- SUBROUTINES — The subroutine contains an illegal address.

4. ACTION TO BE TAKEN

If INVALID MUST COMPLETE PHASE IN PROGRESS , remove the pause from the first phase and retry the diagnostic.

In all other cases, correct the address and retry the diagnostic.

5. REFERENCES

PIDENTs
CSFRNORM
DCONTABL
MUDG--; where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=MUDG,UTYPE=1XLUCS - core store

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM User's Manual

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Messages
CLR:MACLI
EX:CS
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:CS-ILL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:CS a ILLEGAL PHASE

2. REASON FOR OUTPUT

To report when only illegal diagnostic phases have been requested on a partial interactive diagnostic request for a call store (CS).

3. VARIABLE FIELD DEFINITIONS

a The member number of the unit being diagnosed (0 - 39).

4. ACTION TO BE TAKEN

Check PIDENT DCONTABL for PREFIX=MUDG,UTYPE=1XLUCS to obtain the list of valid phase numbers for core store.

5. REFERENCES

PIDENTs
CSFRNORM
DCONTABL
MUDG--; where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=MUDG,UTYPE=1XLUCS - core store

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages
CLR:MACLI
EX:CS
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:CS-LOOP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:CS a LOOPING b

2. REASON FOR OUTPUT

To report that the interactive diagnostic on a call store (CS) has either started looping through the specified code or has completed the looping function.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0-39).
- b COMPLETE — Looping has terminated.
- STARTED — Looping has begun.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
CSFRNORM
DCONTABL
MUDG--; where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=MUDG,UTYPE=1XLUCS - core store

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages
CLR:MACLI
EX:CS
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:CS-NOT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:CS a NOT STARTED - b

2. REASON FOR OUTPUT

To report when the interactive diagnostic request cannot be started for a call store (CS). This usually occurs when the unit for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the call store being diagnosed (0 - 39).
- b The reason the diagnostic was not started.

4. ACTION TO BE TAKEN

If the specified CS cannot be removed from service because there is no spare, restore a spare unit to service.

5. REFERENCES

PIDENTs
CSFRNORM
DCONTABL
MUDG--; where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=MUDG,UTYPE=1XLUCS - core store

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM User's Manual

Input Messages
CLR:MACLI
EX:CS
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:CS-SUSP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

- [1] EX:CS a SUSPENDED
- [2] EX:CS a SUSPENDED at PH b ADR c [d]
- [3] EX:CS a SUSPENDED AT PH b ADR c AFTER TEST e[d]
- [4] EX:CS a SUSPENDED ILLEGAL INPUT

2. REASON FOR OUTPUT

To report that an interactive diagnostic execution has been suspended for a call store (CS). Each of the four formats identifies a specific type of suspension.

Format [1] if there is no phase active.

Format [2] at an address specified by the input message.

Format [3] at a point immediately following a test.

Format [4] if the input is illegal.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0-39).
- b The diagnostic phase in which the diagnostic suspended.
- c The address in the diagnostic phase at which the suspension occurred.
- d The reason the suspension occurred:
 - ADVANCE — The diagnostic has been executed up to the specified address.
 - FIRST FAILURE — The diagnostic has been suspended because the first failure was encountered.
 - PAUSE — The diagnostic has been paused at the specified address.
 - STEP — The requested number of steps have been completed.
- e The last test executed before the suspension occurred.

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4. ACTION TO BE TAKEN

Specify another EX:CS input. If no further interactive diagnostic execution is desired, specify a STOP:MACLI input message for the appropriate subclass.

5. REFERENCES

PIDENTs

CSFRNORM

DCONTABL

MUDG--; where -- represents all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=MUDG,UTYPE=1XLUCS - core store

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages

CLR:MACLI

EX:CS

STOP:EX

STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:CS-TERM
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:CS a TERMINATED AT PH b ADR c AFTER TEST d [FORCED]

2. REASON FOR OUTPUT

To report when the interactive diagnostic for a call store (CS) terminates early. This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the call store being diagnosed (0-39).
b	The diagnostic phase in which the termination occurred.
c	The address in the diagnostic phase at which the termination occurred.
d	The last test executed before the termination occurred.
FORCED	The termination was unconditional. Termination in this way is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

Repair the faulty frame.

5. REFERENCES

PIDENTs
CSFRNORM
DCONTABL
MUDG--; where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=MUDG,UTYPE=1XLUCS - core store

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM User's Manual

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Messages
CLR:MACLI
EX:CS
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:CS-TEST
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:CS a PH b c [d]
[TEST MISMATCH SUPPLEMENTARY DATA
ee ffffffff gggggggg]

2. REASON FOR OUTPUT

To report when the interactive diagnostic results are printed on a phase basis for a Call Store (CS). This occurs in the case of a partial diagnosis or a test failure.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the call store being diagnosed (0 - 39).
- b The diagnostic phase number for which the results are reported.
- c The results of the diagnostic:
- ATP — All tests passed.
- CATP — All tests passed; however, some tests were skipped because of the unavailability of a system resource which was needed to perform the test.
- NTR — No tests were executed.
- STF — Some tests failed.
- STF-BOF — Some tests failed and the test failure buffer overflowed.
- d An optional field that will appear only if the results are not ATP.

If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit positions in the 16-digit octal number that is printed. For example, if d is (40000000 00010000), then tests were skipped for reasons 12 and 47.

The reasons are as follows:

Bit	Meaning
12	Scan and Signal Distributor (SSD) Out Of Service (OOS).
15	Standby Central Control (CC) out of service.
21	Master Control Complex (MCC) override in effect (ON).

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Bit	Meaning
43	Power Monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).
46	Frame request for PWRMON active (try again).
47	Unit not in normal state.

If STF, this field gives the number of tests failures in addition to the reasons that tests were skipped. For example, if d is (7,40000000 00010000), seven tests failed, plus tests were skipped for reasons 12 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

The following appear only if the diagnostic was STF.

- e Test number of the failing test.
- f The bits that were in error; that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.
- g An optional field containing supplementary data concerning the failing test if available. This field may contain up to seven words. See diagnostic Pident for an explanation of the data.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service if possible, so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the Teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs
CSFRNORM
DCONTABL
MUDG--; where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=MUDG,UTYPE=1XLUCS - core store

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM User's Manual

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Messages
CLR:MACLI
EX:CS
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

1. FORMAT

2. REASON FOR OUTPUT

3. VARIABLE FIELD DEFINITIONS

d An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (40000000 00010000), tests were skipped for reasons 12 and 47.

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The reasons are as follows:

Bit	Meaning
12	Scan and signal distributor (SSD) out of service (OOS).
15	Standby central control (CC) out of service.
23	Disable auto peripheral controller (PC) in effect.
36	Call store helper not available.
43	Power monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).
46	Frame request for PWRMON active (try again).
47	Unit not in normal state.

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, if d is (7,40000000 00010000), seven tests failed, plus tests were skipped for reasons 12 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service if possible, so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs
CSFRNORM
DCONTABL
MBDG01

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Messages
CLR:MACLI
EX:CSB
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:CSB-ADDR
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:CSB a ILLEGAL ADDRESS b

2. REASON FOR OUTPUT

To report that an illegal address was used for an interactive diagnostic function on a call store bus (CSB).

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The type of illegal address:
- ADVANCE — The address advanced to contain an illegal address.
- DOLLOOPS — The loop of code contains an illegal address.
- INVALID MUST COMPLETE PHASE IN PROGRESS — A pause was inserted in one phase and an attempt was made to start another phase before the pause was removed from the first phase.
- LOOP END — The second address specified is illegal.
- LOOP START — The first address specified is illegal.
- SUBROUTINES — The subroutine contains an illegal address.

4. ACTION TO BE TAKEN

If INVALID MUST COMPLETE PHASE IN PROGRESS , remove the pause from the first phase and retry the diagnostic.

In all other cases, correct the address and retry the diagnostic.

5. REFERENCES

PIDENTs
CSFRNORM
DCONTABL
MBDG01

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM User's Manual

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Messages
CLR:MACLI
EX:CSB
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:CSB-ILL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:CSB a ILLEGAL PHASE

2. REASON FOR OUTPUT

To report when only illegal diagnostic phases have been requested on a partial interactive diagnostic request for a call store bus (CSB).

3. VARIABLE FIELD DEFINITIONS

a The member number of the CSB being diagnosed (0 or 1).

4. ACTION TO BE TAKEN

Check PIDENT DCONTABL for PREFIX=MBDG,UTYPE=1XLUCSB to obtain the list of valid phase numbers.

5. REFERENCES

PIDENTs
CSFRNORM
DCONTABL
MBDG01

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages
CLR:MACLI
EX:CSB
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:CSB-LOOP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:CSB a LOOPING b

2. REASON FOR OUTPUT

To report that the interactive diagnostic on a call store bus (CSB) has either started looping through the specified code or has completed the looping function.

3. VARIABLE FIELD DEFINITIONS

a The member number of the unit being diagnosed (0 or 1).
b COMPLETE — Looping has terminated.
 STARTED — Looping has begun.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
CSFRNORM
DCONTABL
MBDG01

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages
CLR:MACLI
EX:CSB
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:CSB-NOT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:CSB a NOT STARTED - b

2. REASON FOR OUTPUT

To report when the interactive diagnostic request cannot be started for a call store bus (CSB). This usually occurs when the unit for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the CSB being diagnosed (0 or 1).
- b The reason the diagnostic was not started.

4. ACTION TO BE TAKEN

If the specified CSB cannot be removed from service because there is no spare, restore a spare unit to service.

5. REFERENCES

PIDENTs
CSFRNORM
DCONTABL
MBDG01

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages
CLR:MACLI
EX:CSB
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:CSB-SUSP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

- [1] EX:CSB a SUSPENDED
- [2] EX:CSB a SUSPENDED AT PH b ADR c [d]
- [3] EX:CSB a SUSPENDED AT PH b ADR c AFTER TEST e[d]
- [4] EX:CSB a SUSPENDED ILLEGAL INPUT

2. REASON FOR OUTPUT

To report when an interactive diagnostic execution has been suspended for a call store bus (CSB). Each of the four formats identifies a specific type of suspension.

Format [1] if there is no phase active.

Format [2] at an address specified by the input message.

Format [3] at a point immediately following a test.

Format [4] if the input is illegal.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the call store bus being diagnosed (0 or 1).
- b The diagnostic phase in which the diagnostic suspended.
- c The address in the diagnostic phase at which the suspension occurred.
- d The reason the suspension occurred:
 - ADVANCE — The diagnostic has been executed up to the specified address.
 - FIRST FAILURE — The diagnostic has been suspended because the first failure was encountered.
 - PAUSE — The diagnostic has been paused at the specified address.
 - STEP — The requested number of steps have been completed.
- e The last test executed before the suspension occurred.

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

Specify another EX:CSB input. If no further interactive diagnostic execution is desired, specify a STOP:MACLI input message for the appropriate subclass.

5. REFERENCES

PIDENTs
CSFRNORM
DCONTABL
MBDG01

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages
CLR:MACLI
EX:CSB
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:CSB-TERM
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:CSB a TERMINATED AT PH b ADR c AFTER TEST d [FORCED]

2. REASON FOR OUTPUT

To report when the interactive diagnostic for a call store bus (CSB) terminates early. This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the CSB being diagnosed (0 or 1).
b	The diagnostic phase in which the termination occurred.
c	The address in the diagnostic phase at which the termination occurred.
d	The last test executed before the termination occurred.
FORCED	Indicates that the termination was unconditional. Termination in this way is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

Repair the faulty frame.

5. REFERENCES

PIDENTs
CSFRNORM
DCONTABL
MBDG01

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Messages
CLR:MACLI
EX:CSB
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:CSB-TEST
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:CSB a PH b c [d]
[TEST MISMATCH SUPPLEMENTARY DATA
ee ffffffff gggggggg]

2. REASON FOR OUTPUT

To report when the interactive diagnostic results are printed on a phase basis for a Call Store Bus (CSB). This occurs in the case of a partial diagnosis or a test failure.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the CSB being diagnosed (0 or 1).
- b The diagnostic phase number for which the results are reported.
- c The results of the diagnostic:
- ATP — All tests passed.
 - CATP — All tests passed; however, some tests were skipped because of the unavailability of a system resource which was needed to perform the test.
 - NTR — No tests were executed.
 - STF — Some tests failed.
 - STF-BOF — Some tests failed and the test failure buffer overflowed.
- d An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (40000000 00010000), tests were skipped for reasons 12 and 47.

The reasons are as follows:

Bit	Meaning
12	Scan and Signal Distributor (SSD) Out Of Service (OOS).
15	Standby Central Control (CC) out of service.
23	Disable auto Peripheral Controller (PC) in effect.
36	Call store helper not available.

SEE PROPRIETARY NOTICE ON COVER PAGE

Bit	Meaning
43	Power Monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).
46	Frame request for PWRMON active (try again).
47	Unit not in normal state.

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, if d is (7,40000000 00010000), seven tests failed, plus tests were skipped for reasons 12 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

The following appear only if the diagnostic was STF.

- e Test number of the failing test.
- f The bits that were in error; that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.
- g An optional field containing supplementary data concerning the failing test if available. This field may contain up to seven words. See diagnostic Pident for an explanation of the data.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service if possible, so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the Teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs
CSFRNORM
DCONTABL
MBDG01

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Messages
CLR:MACLI
EX:CSB
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:DIF
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:DIF a b c:PUB d e f [g]

2. REASON FOR OUTPUT

To specify both the diagnostic results and the termination mode at the conclusion of the diagnostic execution on a digital interface frame (DIF).

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | Member number of the DIF under diagnosis. |
| b | Type of subunit for which the diagnostic was requested. |
| c | Number of the subunit under diagnosis. |
| d | Helper peripheral unit bus (PUB) that was requested. |
| e | Termination mode for the diagnostic:

ABORTED — Diagnostic abnormally stopped because of an interrupt, error in execution, or a STOP:MACLI input request.

COMPLETED — Diagnostic completed normally.

STOPPED — Diagnostic terminated under program control since further testing would not improve diagnostic resolution. |
| f | The results of the diagnostic:

ATP — All tests passed.

CATP — All tests passed; however, some tests were skipped because of the unavailability of a system resource which was needed to perform the test.

NTR — No tests were executed.

STF — Some tests failed.

STF-BOF — The number of failed tests has filled the buffer. Before any more tests are run, the system prints out the contents of the buffer and then clears it. |

SEE PROPRIETARY NOTICE ON COVER PAGE

- g An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if g is (40000000 00001000), then tests were skipped for reasons 9 and 47. The reasons are contained in Table 1.

TABLE 1
DIF DIAGNOSTIC CATP CODES

Memory Word: DG1CATP

BIT	SYMBOL	FUNCTION
0	DG4CATPPUB0	Peripheral unit bus (PUB) 0 out-of-service
1	DG4CATPPUB1	PUB 1 out-of-service
2	DG4CATPSP0	Base signaling processor (SP) Frame out-of-service
3	DG4CATPSP1	Duplicate SP Frame out-of-service
4	DG4CATPMATE	Mate out-of-service
5	DG4CATPROS	Power converter in request out-of-service state
6	DG4CATPCC0	Central controller (CC) 0 out-of-service
7	DG4CATPCC1	CC 1 out-of-service
8	DG4CATPCI	Other frame responding to clock interrogation
9	DG4CATPMI	Other frame responding to this frame's member interrogation
10	DG4CATPGI	Other frame responding to this frame's group interrogation
11	DG4CATPPUBD	PUB not duplex
12	DZ4CATPAPUF	Other frame responding to autonomous peripheral unit failure (APUF) clock interrogation
13	DZ4CATPAPUT	Other frame responding to autonomous peripheral unit trouble (APUT) clock interrogation

SEE PROPRIETARY NOTICE ON COVER PAGE

TABLE 1
DIF DIAGNOSTIC CATP CODES

Memory Word: DG1CATP2

BIT	SYMBOL	FUNCTION
14	DZ4CATPAPUB	Other frame responding to autonomous peripheral unit bus (APUB) clock interrogation
15	DZ4CATPCONTRSM	Controller not duplex
16	DZ4CATPPSW	Protection switch has taken place
17	DZ4CATPPHP	Other frame responding to high priority polling
18	DZ4CATPPLP	Other frame responding to low priority polling
19	DZ4CATPPDG	Other frame responding to digit buffer polling
20	DZ4CATPPSZ	Other frame responding to seizure polling
21	DZ4CATPSWKEY	Protection switch (PSW) teletypewriter (TTY) keyword for requesting PSW tests is not specific
22	DZ4CATPC0OS	Controller 0 out-of-service
23	DZ4CATPC1OS	Controller 1 out-of-service
26		Interface peripheral unit bus (IPUB) out-of-service
0	DG4CATPPSPS	SP frame duplex failure
1	DG4CATPPSPB	SP frame configuration failure
23	DZ4CATPSELKEY	SELECT TTY keyword for requesting DIU bus selection tests is not specified

If STF, this field gives the number of failing phases, number of failing tests, trouble number. For example, (2,9, 00101545) indicates two phases failed, nine tests failed, and a trouble number of 0010545.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs

PUDGDC - if subunit type is CONTR

PUDGDU - if subunit type is DIU

PUDGD696 - if subunit type is IPUB

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Message

STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:DIF-ADDR
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:DIF a ILLEGAL ADDRESS b

2. REASON FOR OUTPUT

To indicate that an illegal address was used for an interactive diagnostic function on a digital interface frame (DIF).

3. VARIABLE FIELD DEFINITIONS

- a The member number of the DIF being diagnosed.
- b The type of illegal address:
- ADVANCE — The address advanced to contains an illegal address.
- DOLLOOPS — The loop of code contains an illegal address.
- INVALID MUST COMPLETE PHASE IN PROGRESS — A pause was inserted in one phase and an attempt was made to start another phase before the pause was removed from the first phase.
- LOOP END — The second address specified is illegal.
- LOOP START — The first address specified is illegal.
- SUBROUTINES — The subroutine contains an illegal address.

4. ACTION TO BE TAKEN

If INVALID . . . PROGRESS, remove the pause from the first phase and retry the diagnostic.

In all other cases, correct the address and retry the diagnostic.

5. REFERENCES

PIDENT
DCONTABL

Practice 234-280-040, *Diagnostic Language - DL-1*
Practice 234-280-220, *Diagnostic Programs Description*

PA-4A002-01, 4ESSTM User's Manual

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Message
EX:DIF

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:DIF-ILL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:DIF a,b c:d e ILLEGAL PHASE

2. REASON FOR OUTPUT

To report that one or more illegal interactive diagnostic phases have been requested on a partial interactive diagnostic request for the digital interface frame (DIF). The illegal phase will not be executed; however, all valid phases will be run.

3. VARIABLE FIELD DEFINITIONS

a	Member of the DIF being diagnosed.
b	Subunit number of the subunit being diagnosed.
c	Submember number of the subunit being diagnosed.
d	Helper unit type.
e	Helper member number.

4. ACTION TO BE TAKEN

Check the *Input Message Document* for the list of valid phase numbers.

5. REFERENCES

PIDENT
DCONTOLL

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:DIF-LOOP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:DIF a,b c:d e LOOPING f

2. REASON FOR OUTPUT

To indicate that the interactive diagnostic on the digital interface frame (DIF) is repeatedly executing one or more consecutive segments of code.

3. VARIABLE FIELD DEFINITIONS

a	Member number of the DIF being diagnosed.
b	Subunit type being diagnosed.
c	Submember number of the subunit being diagnosed.
d	Helper unit type, if specified.
e	Helper member number, if specified.
f	COMPLETE — Looping has terminated. STARTED — Looping has begun.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
PUDGDC - if subunit type is CONTR.
PUDGDC99 - if subunit type is IPUB.
PUDGDU - if subunit type is DIU.

Practice 234-180-020, *Diagnostic Language - DIAL*
Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Message
EX:DIF

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:DIF-NOT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:DIF a,b c:d e NOT STARTED - f

2. REASON FOR OUTPUT

To report that the diagnostic request cannot be started for the digital interface frame (DIF). This usually occurs when the unit for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | Member number of the DIF being diagnosed. |
| b | Subunit type being diagnosed. |
| c | Submember number of the subunit being diagnosed. |
| d | Helper unit type. |
| e | Helper member number. |
| f | Reason the diagnostic was not started. |

4. ACTION TO BE TAKEN

If the specified DIF cannot be removed from service because there is no spare, restore a spare unit to service.

5. REFERENCES

PIDENT
MCFWPEMO

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:DIF-SUSP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] EX:DIF a,b c:de SUSPENDED
- [2] EX:DIF a,b c:de SUSPENDED AT PH f ADR g [i]
- [3] EX:DIF a,b c:de suspended at PH f ADR g AFTER TEST h[i]
- [4] EX:DIF a,b c:de SUSPENDED ILLEGAL INPUT

2. REASON FOR OUTPUT

In general, this message will be printed whenever an interactive diagnostic execution has been suspended for the digital interface frame (DIF). Each of the four formats identifies a specific type of suspension.

Format [1] will be printed if there is no phase active.

Format [2] will be printed if the suspension occurred at an address specified by the input message.

Format [3] will be printed if the suspension occurred at a point immediately following a test.

Format [4] will be printed if the diagnostic was suspended because the input was illegal.

3. VARIABLE FIELD DEFINITIONS

- a Member number of the unit being diagnosed.
- b Subunit type being diagnosed.
- c Submember number of the subunit being diagnosed.
- d Helper unit type if specified.
- e Helper member number if specified.
- f Diagnostic phase in which the diagnostic suspended. If no phase was active, then this phase does not occur.
- g Address in the diagnostic phase at which the suspension occurred.
- h The last test executed before the suspension occurred.

SEE PROPRIETARY NOTICE ON COVER PAGE

- i The reason the suspension occurred:
- | | |
|---------------|--|
| ADVANCE | — The diagnostic has been executed up to the specified address. |
| FIRST FAILURE | — The diagnostic has been suspended because the first failure was encountered. |
| PAUSE | — The diagnostic has been paused at the specified address. |
| STEP | — The requested number of steps have been completed. |

4. ACTION TO BE TAKEN

Specify another EX:DIF input message. If no further interactive diagnostic execution is desired, specify a STOP:MACLI input message.

5. REFERENCES

PIDENTs
PUDGDC - if subunit type is CONTR.
PUDGDC99 - if subunit type is IPUB.
PUDGDU - if subunit type is DIU

Practice 234-180-020, *Diagnostic Language - DIAL*
Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Messages
EX:DIF
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:DIF-TERM
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:DIF a,b c:d e TERMINATED AT PH f ADR g AFTER TEST h [FORCED]

2. REASON FOR OUTPUT

To report that the interactive diagnostic terminates early for a digital interface frame (DIF). This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

a	Member number of the DIF being diagnosed.
b	Subunit type being diagnosed.
c	Submember number of the subunit being diagnosed.
d	Helper unit type, if specified.
e	Helper member number, if specified.
f	Diagnostic phase in which the termination occurred.
g	Address in the diagnostic phase (or subroutine) at which the termination occurred.
h	Last test executed before the termination occurred.
FORCED	This indicates that the termination was unconditional. The type of termination is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

Repair the faulty frame.

5. REFERENCES

PIDENTs

PUDGDC - if subunit type is CONTR.

PUDGDU - if subunit type is DIU

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:DIF-TEST
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

```
EX:DIF a,b c:d e PH f g [h]
[TEST MISMATCH SUPPLEMENTARY DATA
i jjjjjjjj kkkkkkkk llllllll mmmmmmmm nnnnnnnn oooooooooo
pppppppp qqqqqqqq rrrrrrrr]
```

2. REASON FOR OUTPUT

To report that the diagnostic results are printed on a phase basis for the digital interface frame (DIF). This occurs in the case of a partial diagnosis, a test failure, or whenever RAW was requested on the input message.

3. VARIABLE FIELD DEFINITIONS

- | | | | | | | | | | | | |
|---------|--|-----|---------------------|------|---|-----|---------------------------|-----|----------------------|---------|---|
| a | Member number of the DIF being diagnosed. | | | | | | | | | | |
| b | Subunit type being diagnosed. | | | | | | | | | | |
| c | Submember number of the subunit being diagnosed. | | | | | | | | | | |
| d | Helper unit type, if specified. | | | | | | | | | | |
| e | Helper member number, if specified. | | | | | | | | | | |
| f | Diagnostic phase number for which the results are reported. | | | | | | | | | | |
| g | Results of the diagnostic: <table border="0" style="margin-left: 20px;"> <tr> <td>ATP</td> <td>— All tests passed.</td> </tr> <tr> <td>CATP</td> <td>— All tests passed; however, some tests were skipped because of the unavailability of a system resource which was needed to perform the test.</td> </tr> <tr> <td>NTR</td> <td>— No tests were executed.</td> </tr> <tr> <td>STF</td> <td>— Some tests failed.</td> </tr> <tr> <td>STF-BOF</td> <td>— Some tests failed and the raw data buffer overflowed. Phase has not been completed.</td> </tr> </table> | ATP | — All tests passed. | CATP | — All tests passed; however, some tests were skipped because of the unavailability of a system resource which was needed to perform the test. | NTR | — No tests were executed. | STF | — Some tests failed. | STF-BOF | — Some tests failed and the raw data buffer overflowed. Phase has not been completed. |
| ATP | — All tests passed. | | | | | | | | | | |
| CATP | — All tests passed; however, some tests were skipped because of the unavailability of a system resource which was needed to perform the test. | | | | | | | | | | |
| NTR | — No tests were executed. | | | | | | | | | | |
| STF | — Some tests failed. | | | | | | | | | | |
| STF-BOF | — Some tests failed and the raw data buffer overflowed. Phase has not been completed. | | | | | | | | | | |
| h | An optional field that will appear only if the results were not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if h is (40000000 00001000), then For the reasons, see the EX:DIF output message. | | | | | | | | | | |

If subunit type is BUS, see DGN:PUB message for CATP reasons.

SEE PROPRIETARY NOTICE ON COVER PAGE

If STF, this field gives the number of test failures, in addition to the reasons that tests were skipped. For example, if h is (7,40000000 00001000), seven tests failed, plus tests were skipped for reasons 9 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

The following appear only if the diagnostic was STF.

i	Test number of the failing test.
j	Bits which were in error, that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.
k	RAW response from the unit or firmware RAW response.
l, m	Information concerning the test being executed. Details for l and m are specified in the diagnostic listing.
n	Address in the phase (or subroutine) of the test that failed.
o	Bits 14-0 contain information for the TLP programs. Bits 23-21 contain the count of the number of words of supplementary data that follows. Bits 20-18 contain the count of the number of words of DOLOOP data that follows. Bits 17-15 contain the count of the number of words of subroutine data that follows.
p	Supplementary data words. p is repeated x times, where x is bits 23-21 of o. This data supplies information about the test being executed. The last supplementary data word specified is printed first.
q	DOLOOP data words. q is repeated y times, where y is bits 20-18 of o. This data is the value of the DOLOOP variables at the time of the test failure. The value of the innermost DOLOOP is printed first.
r	Subroutine data words. r is repeated z times, where z is bits 17-15 of o. This data is the address of the callsubs which led up to this point in the diagnostic. The address of the last callsub is printed first.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

5. REFERENCES

PIDENTs	
PUDGDC	- if subunit type is CONTR
PUDGDC99	- if subunit type is IPUB
PUDGDU	- if subunit type is DIU

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Message
EX:DIF

Output Messages
DGN:PUB
EX:DIF

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:DT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:DT a,b c d e f

2. REASON FOR OUTPUT

To specify that both the diagnostic results and the termination mode at the conclusion of the interactive diagnostic execution on a digroup terminal (DT).

3. VARIABLE FIELD DEFINITIONS

- a The member number of the DT under diagnosis.
- b The type of subunit for which the diagnostic was requested. If defaulted, the diagnostic was executed on the entire DT.
- c If subunit was specified, this field identifies which subunit the diagnostic is to be executed on.
- d The termination mode for the diagnostic:
- ABORTED — The diagnostic was abnormally stopped because of an interrupt, error in execution, or because of a STOP:MACLI input request.
- COMPLETED — The diagnostic completed normally.
- STOPPED — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution.
- e The results of the diagnostic:
- ATP — All tests passed.
- CATP — All tests passed; however, some tests were skipped because of the unavailability of a system resource which was needed to perform the test.
- NTR — No tests were executed.
- STF — Some tests failed.
- STF-BOF — The number of failed tests has filled the buffer. Before any more tests are run, the system prints out the contents of the buffer and then clears it.

SEE PROPRIETARY NOTICE ON COVER PAGE

f An optional field that will appear only if the results are not ATP. If CATP or NTR this field identifies the reason that the tests were skipped. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if f is (40000000 00001000), then tests were skipped for reasons 9 and 47.

The reasons are as follows:

Bit	Reasons for Tests Skipped
0	Peripheral unit bus (PUB) 0 out-of-service
1	PUB 1 out-of-service
2	Primary signaling processor (SP) pulse points out-of-service
3	Secondary SP pulse points out-of-service
4	Mate unit out-of-service
5	Power control switch in request out-of-service (ROS) position
6	Central controller (CC) 0 out-of-service
7	CC 1 out-of-service
8	CI has other units responding
9	MI has other units responding
10	GI has other units responding
11	PUB not duplex
12	DTSP2 link not in normal configuration
13	Test (TST) controller out-of-service
14	DTU protection switched
24	SP scan / distribute points out-of-service

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

5. REFERENCES

PIDENT
PUDGDT

Practice 234-180-020, *Diagnostic Language - DIAL*
Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Message
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:DT-ADDR
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:DT a ILLEGAL ADDRESS b

2. REASON FOR OUTPUT

To indicate that an illegal address was used for an interactive diagnostic function on a digroup terminal (DT).

3. VARIABLE FIELD DEFINITIONS

- a The member number of the DT being diagnosed.
- b The type of illegal address:
- ADVANCE — The address advanced to contains an illegal address.
- DOLLOOPS — The loop of code contains an illegal address.
- INVALID MUST COMPLETE PHASE IN PROGRESS — A pause was inserted in one phase and an attempt was made to start another phase before the pause was removed from the first phase.
- LOOP END — The second address specified is illegal.
- LOOP START — The first address specified is illegal.
- SUBROUTINES — The subroutine contains an illegal address.

4. ACTION TO BE TAKEN

If INVALID . . . PROGRESS, remove the pause from the first phase and retry diagnostic.

In all other cases, correct the address and retry the diagnostic.

5. REFERENCES

PIDENT
DCONTABL

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM User's Manual

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Message
EX:DT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:DT-ILL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:DT a,b c:d e ILLEGAL PHASE

2. REASON FOR OUTPUT

To report that one or more illegal interactive diagnostic phases have been requested on a partial diagnostic request for a digroup terminal (DT). The illegal phase will not be executed; however, all valid phases will be run.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | The member number of the DT being diagnosed. |
| b | The subunit type being diagnosed. |
| c | The submember number of the subunit being diagnosed. |
| d | The helper unit type, if specified. |
| e | The helper member number, if specified. |

4. ACTION TO BE TAKEN

Check the *Input Message Document* for the list of valid phase numbers.

5. REFERENCES

PIDENT
DCONTOLL

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:DT-LOOP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:DT a,b c d e f

2. REASON FOR OUTPUT

To indicate that the interactive diagnostic on the digroup terminal (DT) is either repeatedly executing one or more consecutive segments of code or has just completed executing.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the DT being diagnosed.
b	The subunit type being diagnosed.
c	The submember number of the subunit being diagnosed.
d	The helper unit number, if specified.
e	The helper member number, if specified.
f	COMPLETE — Looping has terminated. STARTED — Looping has begun.

4. ACTION TO BE TAKEN

If desired, stop an infinite loop using the EX:DT a! input message.

5. REFERENCES

PIDENT
PUDGDT

Practice 234-180-020, *Diagnostic Language - DIAL*
Practice 234-180-200, *4ESSTM Peripheral Diagnostic Program - Description*

Input Message
EX:DT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:DT-NOT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:DT a,b c:d e NOT STARTED - f

2. REASON FOR OUTPUT

To report that the diagnostic request cannot be started for the digroup terminal (DT). This is usually when the unit for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | The member number of the DT being diagnosed. |
| b | The subunit type being diagnosed. |
| c | The submember of the subunit being diagnosed. |
| d | The helper unit type. |
| e | The helper member number. |
| f | The reason the diagnostic was not started. |

4. ACTION TO BE TAKEN

If the specified unit cannot be removed from service because there is no spare, restore a spare unit to service.

5. REFERENCES

PIDENT
MCFWPEMO

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:DT-SUSP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] EX:DT a,b c:d e, SUSPENDED
- [2] EX:DT a,b c:d e, SUSPENDED AT PH f ADR g [h]
- [3] EX:DT a,b c:d e, SUSPENDED AT PH f ADR g AFTER TEST i [h]
- [4] EX:DT a,b c:d e, SUSPENDED ILLEGAL INPUT

2. REASON FOR OUTPUT

In general, this message will be printed whenever an interactive diagnostic execution has been suspended for a digroup terminal (DT). Each of the four formats identifies a specific type of suspension.

Format [1] will be printed if there is no phase active.

Format [2] will be printed if the suspension occurred at an address specified by the input message.

Format [3] will be printed if the suspension occurred at a point immediately following a test.

Format [4] will be printed if the diagnostic was suspended because the input was illegal.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the DT being diagnosed.
- b The subunit type being diagnosed.
- c The submember number of the subunit being diagnosed.
- d The helper unit type, if specified.
- e The helper member number, if specified.
- f The diagnostic phase in which the diagnostic suspended. If no phase was active, then this phase does not occur.
- g The address in the diagnostic phase at which the suspension occurred.

SEE PROPRIETARY NOTICE ON COVER PAGE

- h The reason the suspension occurred:
- | | |
|---------------|--|
| ADVANCE | — The diagnostic has been executed up to the specified address. |
| FIRST FAILURE | — The diagnostic has been suspended because the first failure was encountered. |
| PAUSE | — The diagnostic has been paused at the specified address. |
| STEP | — The requested number of steps have been completed. |
- i The last test executed before the suspension occurred.

4. ACTION TO BE TAKEN

Specify another EX:DT input message. If no further interactive diagnostic execution is desired, specify a STOP:MACLI input message.

5. REFERENCES

PIDENT
PUDGDT

Practice 254-180-020, *Diagnostic Language - DIAL*
Practice 254-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Messages
EX:DT
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:DT-TERM
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:DT a,b c:d e TERMINATED AT PH f ADR g AFTER TEST h [FORCED]

2. REASON FOR OUTPUT

To report that the diagnostic terminates early for the digroup terminal (DT). This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the DT being diagnosed.
b	The subunit type being diagnosed.
c	The submember number of the subunit being diagnosed.
d	The helper unit type, if specified.
e	The helper member number, if specified.
f	The diagnostic phase in which the termination occurred.
g	The address in the diagnostic phase or subroutine at which the termination occurred.
h	The last test executed before the termination occurred.
FORCED	This indicates that the termination was unconditional. This type of termination is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

Repair the faulty frame. If further diagnostic execution is desired, specify UCL on the input message. This will inhibit all early terminations except that which is forced.

5. REFERENCES

PIDENT
PUDGDT

Practice 254-180-020, *Diagnostic Language - DIAL*
Practice 254-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Message
EX:DT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:DT-TEST
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:DT a,b c:d e PH f g [h]
[TEST MISMATCH SUPPLEMENTARY DATA
i jjjjjjjj kkkkkkkk llllllll mmmmmmm nnnnnnnn ooooooooo
pppppppp qqqqqqqq rrrrrrrr]

2. REASON FOR OUTPUT

To report that the diagnostic results are printed on a phase basis for the digroup terminal (DT). This occurs in the case of a partial diagnosis, a test failure, or whenever RAW was requested on the input message.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | The member number of the DT being diagnosed. |
| b | The type of subunit for which the diagnostic was requested. If defaulted, the diagnostic was executed on the entire DT. |
| c | If the subunit was specified, this field identifies which subunit the diagnostic is to be executed on. |
| d | The helper unit type, if specified. |
| e | The helper member number, if specified. |
| f | The diagnostic phase number for which the results are reported. |
| g | <p>The results of the diagnostic:</p> <p>ATP — All tests passed.</p> <p>CATP — All tests passed; however, some tests were skipped because of the unavailability of a system resource needed to perform the test.</p> <p>NTR — No tests were executed.</p> <p>STF — Some tests failed.</p> <p>STF-BOF — Some tests failed and the raw data buffer overflowed; the phase has not been completed.</p> |
| h | An optional field that will appear only if the results were not ATP. If CATP or NTR, this field identifies the reasons that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if h is (40000000 00001000), tests were skipped for reasons 9 and 47. |

SEE PROPRIETARY NOTICE ON COVER PAGE

Bit	Reasons for Tests Skipped
0	Peripheral unit bus (PUB) 0 out-of-service
1	PUB 1 out-of-service
2	Primary signaling processor (SP) pulse points out-of-service
3	Secondary SP pulse points out-of-service
4	Mate unit out-of-service
5	Power control switch in request out-of-service (ROS) position or diagnostic requested from power control switch
6	Central controller (CC) 0 out-of-service
7	CC 1 out-of-service
8	CI has other units responding
9	MI has other units responding
10	GI has other units responding
11	PUB not duplex
12	DTSP2 link not in normal configuration
13	Test (TST) controller out-of-service
14	DTU protection switched
24	SP scan / distribute points out-of-service
27	DT returned failed from ignore request

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, if h is (7,40000000 00001000), seven tests failed, plus tests were skipped for reason 9 and 47. If STF-BOF, this number of test failures is the number of test failures up to the point of buffer overflow.

The following appears only if the diagnostic was STF. The data must be analyzed in pairs of tests failed.

i, i+1 The test numbers of the failing tests to be analyzed together.

j Identifier for message received:

- 0 — Expected message.
- 1 — Message half not received.
- 2 — Unexpected message half.
- 3 — Start word mismatch.
- 4 — Link configuration denied.
- 5 — Configuration failure.
- 6 — Unused.
- 7 — Test sequence number.

SEE PROPRIETARY NOTICE ON COVER PAGE

k	If j=7 — Sequence number
	If j=0, 1, or 2 — Time of unit and function number
	If j=3 — Null
	If j=4 or 5 — SP2 CONT 0 ESR3 results
l	Data to be ignored.
m	Received message half 1.
n	Expected message half 1.
o	Offset into task table DT4DTkTBLXX in diagnostic program.
p	If j=0, 1, 2, or 3 — Mismatch data for message half 1.
	If j=4 or 5 — SP2 CONT1 ESR3 results.
	If j=7 — Null

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

5. REFERENCES

PIDENT
PUDGDT

Practice 234-180-020, *Diagnostic Language - DIAL*
Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Message
EX:DT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:EST-ADDR
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:EST a ILLEGAL ADDRESS b

2. REASON FOR OUTPUT

To indicate that an illegal address was used for an interactive diagnostic function on a echo suppressor terminal (EST).

3. VARIABLE FIELD DEFINITIONS

- a The member number of the EST being diagnosed.
- b The type of illegal address:
- ADVANCE — The address advanced to contains an illegal address.
- DOLLOOPS — The loop of code contains an illegal address.
- INVALID MUST COMPLETE PHASE IN PROGRESS — A pause was inserted in one phase and an attempt was made to start another phase before the pause was removed from the first phase.
- LOOP END — The second address specified is illegal.
- LOOP START — The first address specified is illegal
- SUBROUTINES — The subroutine contains an illegal address.

4. ACTION TO BE TAKEN

If INVALID . . . PROGRESS, remove the pause from the first phase and retry the diagnostic.

In all other cases, correct the address and retry the diagnostic.

5. REFERENCES

PIDENT
DCONTABL

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM User's Manual

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Input Message
EX:EST

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:EST-ILL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:EST a,b c:d e ILLEGAL PHASE

2. REASON FOR OUTPUT

To report that one or more illegal interactive diagnostic phases have been requested on a partial interactive diagnostic request for the echo suppressor terminal (EST). The illegal phase will not be executed; however, all valid phases will be run.

3. VARIABLE FIELD DEFINITIONS

a	Member of the EST being diagnosed.
b	Subunit number of the subunit being diagnosed.
c	Submember number of the subunit being diagnosed.
d	Helper unit type.
e	Helper member number.

4. ACTION TO BE TAKEN

Check the *Input Message Document* for the list of valid phase numbers.

5. REFERENCES

PIDENT
DCONTOLL

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:EST-LOOP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:EST a,b c:d e LOOPING f

2. REASON FOR OUTPUT

To indicate that the interactive diagnostic on the echo suppressor terminal (EST) is repeatedly executing one or more consecutive segments of code.

3. VARIABLE FIELD DEFINITIONS

a	Member number of the EST being diagnosed.
b	Subunit type being diagnosed.
c	Submember number of the subunit being diagnosed.
d	Helper unit type if specified.
e	Helper member number if specified.
f	COMPLETE — Looping has terminated. STARTED — Looping has begun.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
PUDGECEC - if subunit type is CONTR.
PUDGECEC99 - if subunit type is IPUB.
PUDGECEU - if subunit type is ESU.

Practice 254-180-020, *Diagnostic Language - DIAL*
Practice 254-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Message
EX:EST

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:EST-NOT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:EST a,b c:d e NOT STARTED - f

2. REASON FOR OUTPUT

To report that the diagnostic request cannot be started for the echo suppressor terminal (EST). This usually occurs when the unit for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | Member number of the EST being diagnosed. |
| b | Subunit type being diagnosed. |
| c | Submember number of the subunit being diagnosed. |
| d | Helper unit type. |
| e | Helper member number. |
| f | Reason the diagnostic was not started. |

4. ACTION TO BE TAKEN

If the specified EST cannot be removed from service because there is no spare, restore a spare unit to service.

5. REFERENCES

PIDENT
MCFWPOMO

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:EST-PUB
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:EST a b c:PUB d e f [g]

2. REASON FOR OUTPUT

To specify both the diagnostic results and the termination mode at the conclusion of the diagnostic execution on an echo suppressor terminal (EST).

3. VARIABLE FIELD DEFINITIONS

- | | | | | | | | | | | | |
|-----------|---|---------|---|-----------|---|---------|--|-----|----------------------|---------|---|
| a | Member number of the EST under diagnosis. | | | | | | | | | | |
| b | Type of subunit for which the diagnostic was requested. | | | | | | | | | | |
| c | Number of the subunit under diagnosis. | | | | | | | | | | |
| d | Helper peripheral unit bus (PUB) that was requested. | | | | | | | | | | |
| e | Termination mode for the diagnostic: <table border="0" style="margin-left: 20px;"><tr><td>ABORTED</td><td>— Diagnostic abnormally stopped because of an interrupt, error in execution, or a STOP:MACLI input request.</td></tr><tr><td>COMPLETED</td><td>— Diagnostic completed normally.</td></tr><tr><td>STOPPED</td><td>— Diagnostic terminated under program control since further testing would not improve diagnostic resolution.</td></tr></table> | ABORTED | — Diagnostic abnormally stopped because of an interrupt, error in execution, or a STOP:MACLI input request. | COMPLETED | — Diagnostic completed normally. | STOPPED | — Diagnostic terminated under program control since further testing would not improve diagnostic resolution. | | | | |
| ABORTED | — Diagnostic abnormally stopped because of an interrupt, error in execution, or a STOP:MACLI input request. | | | | | | | | | | |
| COMPLETED | — Diagnostic completed normally. | | | | | | | | | | |
| STOPPED | — Diagnostic terminated under program control since further testing would not improve diagnostic resolution. | | | | | | | | | | |
| f | The results of the diagnostic: <table border="0" style="margin-left: 20px;"><tr><td>ATP</td><td>— All tests passed.</td></tr><tr><td>CATP</td><td>— All tests passed; however, some tests were skipped because of the unavailability of a system resource which was needed to perform the test.</td></tr><tr><td>NTR</td><td>— No tests were executed.</td></tr><tr><td>STF</td><td>— Some tests failed.</td></tr><tr><td>STF-BOF</td><td>— The number of failed tests has filled the buffer. Before any more tests are run, the system prints out the contents of the buffer and then clears it.</td></tr></table> | ATP | — All tests passed. | CATP | — All tests passed; however, some tests were skipped because of the unavailability of a system resource which was needed to perform the test. | NTR | — No tests were executed. | STF | — Some tests failed. | STF-BOF | — The number of failed tests has filled the buffer. Before any more tests are run, the system prints out the contents of the buffer and then clears it. |
| ATP | — All tests passed. | | | | | | | | | | |
| CATP | — All tests passed; however, some tests were skipped because of the unavailability of a system resource which was needed to perform the test. | | | | | | | | | | |
| NTR | — No tests were executed. | | | | | | | | | | |
| STF | — Some tests failed. | | | | | | | | | | |
| STF-BOF | — The number of failed tests has filled the buffer. Before any more tests are run, the system prints out the contents of the buffer and then clears it. | | | | | | | | | | |

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- g An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if g is (40000000 00001000), then tests were skipped for reasons 9 and 47.

The reasons are as follows:

Bit	Reason for Tests Skipped
0	Peripheral unit bus (PUB) 0 out-of-service
1	PUB 1 out-of-service
2	Primary signaling processor (SP) pulse points out-of-service
3	Secondary SP pulse points out-of-service
5	Power control switch in request out-of-service (ROS) position or diagnostic requested from power control switch
9	MI has other units responding
10	GI has other units responding
11	PUB not duplex
12	Autonomous peripheral unit failure (APUF) tests skipped
13	Autonomous peripheral unit trouble (APUT) tests skipped
14	Mate ESC out-of-service
15	UESR saved by EUFR not zero
16	Protection switch (PSW) occurred
17	Time slot interchange (TSI) out-of-service
26	Interface peripheral unit bus (IPUB) out-of-service

If STF, this field gives the number of failing phases, number of failing tests, trouble number. For example, (2,9, 00101545) indicates two phases failed, nine tests failed, and a trouble number of 0010545.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

5. REFERENCES

PIDENTs

PUDGECEC - If subunit type is CONTR

PUDGECEC99 - If subunit type is IPUB

PUDGECEU - If subunit type is ESU

Practice 234-180-020, *Diagnostic Language - DIAL*

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Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Messages

EX:EST

STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:EST-SUSP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] EX:EST a,b c:de SUSPENDED
- [2] EX:EST a,b c:de SUSPENDED AT PH f ADR g [h]
- [3] EX:EST a,b c:de SUSPENDED AT PH f ADR g AFTER TEST i[h]
- [4] EX:EST a,b c:de SUSPENDED ILLEGAL INPUT

2. REASON FOR OUTPUT

In general, this message will be printed whenever an interactive diagnostic execution has been suspended for an echo suppressor terminal (EST). Each of the four formats identifies a specific type of suspension.

Format [1] will be printed if there is no phase active.

Format [2] will be printed if the suspension occurred at an address specified by the input message.

Format [3] will be printed if the suspension occurred at a point immediately following a test.

Format [4] will be printed if the diagnostic was suspended because the input was illegal.

3. VARIABLE FIELD DEFINITIONS

- a Member number of the unit being diagnosed.
- b Subunit type being diagnosed.
- c Submember number of the subunit being diagnosed.
- d Helper unit type, if specified.
- e Helper member number, if specified.
- f Diagnostic phase in which the diagnostic suspended. If no phase was active, then this phase does not occur.
- g Address in the diagnostic phase at which the suspension occurred.

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- h The reason the suspension occurred:
- | | |
|---------------|--|
| ADVANCE | — The diagnostic has been executed up to the specified address. |
| FIRST FAILURE | — The diagnostic has been suspended because the first failure was encountered. |
| PAUSE | — The diagnostic has been paused at the specified address. |
| STEP | — The requested number of steps have been completed. |
- i The last test executed before the suspension occurred.

4. ACTION TO BE TAKEN

Specify another EX:EST input message. If no further interactive diagnostic execution is desired, specify a STOP:MACLI input message.

5. REFERENCES

PIDENTs

- | | |
|---------|----------------------------|
| PUDGE | - if subunit type is CONTR |
| PUDGE99 | - if subunit type is IPUB |
| PUDGEU | - if subunit type is ESU |

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Messages

EX:EST
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:EST-TERM
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:EST a,b c:d e TERMINATED AT PH f ADR g AFTER TEST h [FORCED]

2. REASON FOR OUTPUT

To report that the interactive diagnostic terminates early for an echo suppressor terminal (EST). This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

a	Member number of the EST being diagnosed.
b	Subunit type being diagnosed.
c	Submember number of the subunit being diagnosed.
d	Helper unit type, if specified.
e	Helper member number, if specified.
f	Diagnostic phase in which the termination occurred.
g	Address in the diagnostic phase (or subroutine) at which the termination occurred.
h	Last test executed before the termination occurred.
FORCED	This indicates that the termination was unconditional. The type of termination is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

Repair the faulty frame.

5. REFERENCES

PIDENTs

PUDGEK - if subunit type is CONTR.

PUDGEU - if subunit type is ESU.

Practice 254-180-020, *Diagnostic Language - DIAL*

Practice 254-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:EST-TEST
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

```
EX:EST a,b c:d e PH f g [h]
[TEST MISMATCH SUPPLEMENTARY DATA
 i jjjjjjjj kkkkkkkk llllllll mmmmmmmm nnnnnnnn oooooooooo
 pppppppp qqqqqqqq rrrrrrrr]
```

2. REASON FOR OUTPUT

To report that the diagnostic results are printed on a phase basis for the echo suppressor terminal (EST). This occurs in the case of a partial diagnosis, a test failure, or whenever RAW was requested on the input message.

3. VARIABLE FIELD DEFINITIONS

- | | | | | | | | | | | | |
|---------|--|-----|---------------------|------|---|-----|---------------------------|-----|----------------------|---------|---|
| a | Member number of the EST being diagnosed. | | | | | | | | | | |
| b | Subunit type being diagnosed. | | | | | | | | | | |
| c | Submember number of the subunit being diagnosed. | | | | | | | | | | |
| d | Helper unit type, if specified. | | | | | | | | | | |
| e | Helper member number, if specified. | | | | | | | | | | |
| f | Diagnostic phase number for which the results are reported. | | | | | | | | | | |
| g | Results of the diagnostic: <table border="0" style="margin-left: 20px;"> <tr> <td>ATP</td> <td>— All tests passed.</td> </tr> <tr> <td>CATP</td> <td>— All tests passed; however, some tests were skipped because of the unavailability of a system resource which was needed to perform the test.</td> </tr> <tr> <td>NTR</td> <td>— No tests were executed.</td> </tr> <tr> <td>STF</td> <td>— Some tests failed.</td> </tr> <tr> <td>STF-BOF</td> <td>— Some tests failed and the raw data buffer overflowed. Phase has not been completed.</td> </tr> </table> | ATP | — All tests passed. | CATP | — All tests passed; however, some tests were skipped because of the unavailability of a system resource which was needed to perform the test. | NTR | — No tests were executed. | STF | — Some tests failed. | STF-BOF | — Some tests failed and the raw data buffer overflowed. Phase has not been completed. |
| ATP | — All tests passed. | | | | | | | | | | |
| CATP | — All tests passed; however, some tests were skipped because of the unavailability of a system resource which was needed to perform the test. | | | | | | | | | | |
| NTR | — No tests were executed. | | | | | | | | | | |
| STF | — Some tests failed. | | | | | | | | | | |
| STF-BOF | — Some tests failed and the raw data buffer overflowed. Phase has not been completed. | | | | | | | | | | |
| h | An optional field that will appear only if the results were not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if h is (40000000 00001000), then tests were skipped for reasons 9 and 47. | | | | | | | | | | |

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The reasons are as follows:

Bit	Reason for Test Skipped
0	Peripheral unit bus (PUB) 0 out-of-service
1	PUB 1 out-of-service
2	Primary signaling processor (SP) pulse points out-of-service
3	Secondary SP pulse points out-of-service
5	Power control switch in request out-of-service (ROS) position or diagnostic requested from power control switch
9	MI has other units responding
10	GI has other units responding
11	PUB not duplex
12	Autonomous peripheral unit failure (APUF) tests skipped
13	Autonomous peripheral unit trouble (APUT) tests skipped
14	Mate ESC out-of-service
15	UESR saved by EUFR not zero
16	Protection switch (PSW) occurred
17	Time slot interchange (TSI) out-of-service
26	Interface peripheral unit bus (IPUB) out-of-service

If subunit type is BUS, see DGN : PUB message for CATP reasons.

If STF, this field gives the number of test failures, in addition to the reasons that tests were skipped. For example, if h is (7,40000000 00001000), seven tests failed, plus tests were skipped for reasons 9 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

The following appear only if the diagnostic was STF.

i	Test number of the failing test.
j	Bits which were in error, that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.
k	RAW response from the unit.
l, m	Information concerning the test being executed. Details of l and m are are specified in the diagnostic listing.
n	Address in the phase (or subroutine) of the test that failed.

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- o Bits 14-0 contain information for the TLP programs. Bits 23-21 contain the count of the number of words of supplementary data that follows. Bits 20-18 contain the count of the number of words of DOLOOP data that follows. Bits 17-15 contain the count of the number of words of subroutine data that follows.
- p Supplementary data words. p is repeated x times, where x is bits 23-21 of o. This data supplies information about the test being executed. The last supplementary data word specified is printed first.
- q DOLOOP data words. q is repeated y times, where y is bits 20-18 of o. This data is the value of the DOLOOP variables at the time of the test failure. The value of the innermost DOLOOP is printed first.
- r Subroutine data words. r is repeated z times, where z is bits 17-15 of o. This data is the address of the callsubs which led up to this point in the diagnostic. The address of the last callsub is printed first.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

5. REFERENCES

PIDENTs

PUDGEc - if subunit type is CONTR.

PUDGEc99 - if subunit type is IPUB.

PUDGEu - if subunit type is ESU.

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Message

EX:EST

Output Message

DGN:PUB

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:IFB
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:IFB a b c [d]

2. REASON FOR OUTPUT

To report both the diagnostic results and the termination mode at the conclusion of the interactive diagnostic execution on an interface bus (IFB).

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit under diagnosis (0 or 1).
- b The termination mode for the diagnostic:
- ABORTED — The diagnostic was abnormally stopped because of an interrupt, error in execution, or because of a STOP:MACLI input request.
- COMPLETED — The diagnostic completed normally.
- STOPPED — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution.
- c The results of the diagnostic:
- ATP — All tests passed.
- CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.
- NTR — No tests were executed.
- STF — Some tests failed.
- STF-BOF — The number of failed tests has filled the buffer. Before any more tests are run the system prints out the contents of the buffer and then clears it.
- d An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (40000000 00010000), then tests were skipped for reasons 12 and 47.

SEE PROPRIETARY NOTICE ON COVER PAGE

The reasons are as follows:

Bit	Meaning
12	Scan and signal distributor (SSD) out of service (OOS).
43	Power monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).
46	Frame request for PWRMON active (try again).
47	Unit not in normal state.

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, if d is (7,40000000 00010000), seven tests failed, plus tests were skipped for reasons 12 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service if possible, so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

If a diagnostic request is made from the unit power switch, power monitor tests are NOT run. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs

IFFRTEST

DCONTABL

IFDG--, where -- represents all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=IFDG, UTYPE=1XLUIFB

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Messages
CLR:MACLI
EX:IFB
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:IFB-ADDR
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:IFB a ILLEGAL ADDRESS b

2. REASON FOR OUTPUT

To report that an illegal address was used for an interactive diagnostic function on an interface bus (IFB) unit.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The type of illegal address:
- ADVANCE — The address advanced to contains an illegal address.
- DOLLOOPS — The loop of code contains an illegal address.
- INVALID MUST COMPLETE PHASE IN PROGRESS — A pause was inserted in one phase and an attempt was made to start another phase before the pause was removed from the first phase.
- LOOP END — The second address specified is illegal.
- LOOP START — The first address specified is illegal.
- SUBROUTINES — The subroutine contains an illegal address.

4. ACTION TO BE TAKEN

If INVALID MUST COMPLETE PHASE IN PROGRESS , remove the pause from the first phase and retry the diagnostic.

In all other cases, correct the address and retry the diagnostic.

5. REFERENCES

PIDENTs
IFFRTEST
DCONTABL
IFDG--, where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=IFDG, UTYPE=1XLUIFB

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

PA-4A002-01, *4ESSTM User's Manual*

Input Messages

CLR:MACLI

EX:IFB

STOP:EX

STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:IFB-ILL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:IFB a ILLEGAL PHASE

2. REASON FOR OUTPUT

To report when only illegal diagnostic phases have been requested on a partial interactive diagnostic request for an interface bus (IFB).

3. VARIABLE FIELD DEFINITIONS

a The member number of the unit being diagnosed (0 or 1).

4. ACTION TO BE TAKEN

Check PIDENT DCONTABL for PREFIX=IFDG, UTYPE=1XLUIFB to obtain the list of valid phase numbers.

5. REFERENCES

PIDENTs
IFFRTEST
DCONTABL
IFDG--, where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=IFDG, UTYPE=1XLUIFB

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages
CLR:MACLI
EX:IFB
STOP:EX
STOP:MACLI

Output Message
DGN:IFB

SEE PROPRIETARY NOTICE ON COVER PAGE

1. FORMAT

2. REASON FOR OUTPUT

3. VARIABLE FIELD DEFINITIONS

4. ACTION TO BE TAKEN

5. REFERENCES

Input Messages
CLR:MACLI
EX:IFB
STOP:EX
STOP:MACLI

EX:IFB-LOOP-1

ID EX:IFB-NOT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:IFB a NOT STARTED - b

2. REASON FOR OUTPUT

To report when the interactive diagnostic request cannot be started for the interface bus (IFB). This usually occurs when the unit for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The reason the diagnostic was not started.

4. ACTION TO BE TAKEN

If the specified unit cannot be removed from service because there is no spare, restore a spare unit to service.

5. REFERENCES

PIDENTs
IFFRTEST
DCONTABL
IFDG--, where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=IFDG, UTYPE=1XLUIFB

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM User's Manual

Input Messages
CLR:MACLI
EX:IFB
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:IFB-SUSP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

- [1] EX:IFB a SUSPENDED
- [2] EX:IFB a SUSPENDED AT PH b ADR c [e]
- [3] EX:IFB a SUSPENDED AT PH b ADR c AFTER TEST d [e]
- [4] EX:IFB a SUSPENDED ILLEGAL INPUT

2. REASON FOR OUTPUT

To report when interactive diagnostic execution has been suspended for an interface bus (IFB). Each of the four formats identifies a specific type of suspension:

Format [1] if there was no phase active.

Format [2] at the address specified by the input message.

Format [3] the point immediately following a test.

Format [4] if the input is illegal.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The diagnostic phase in which the diagnostic suspended.
- c The address in the diagnostic phase at which the suspension occurred.
- d The last test executed before the suspension occurred.
- e The reason the suspension occurred:
 - ADVANCE — The diagnostic has been executed up to the specified address.
 - FIRST FAILURE — The diagnostic has been suspended because the first failure has been encountered.
 - PAUSE — The diagnostic has been paused at the specified address.
 - STEP — The requested number of steps have been completed.

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

Specify another EX: input. If no further interactive diagnostic execution is desired, specify a STOP:MACLI input message for the appropriate subclass.

5. REFERENCES

PIDENTs

IFFRTEST

DCONTABL

IFDG--, where -- represents all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=IFDG, UTYPE=1XLUIFB

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages

CLR:MACLI

EX:IFB

STOP:EX

STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:IFB-TERM
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:IFB a TERMINATED AT PH b ADR c AFTER TEST d [FORCED]

2. REASON FOR OUTPUT

To report when the interactive diagnostic terminates early for an interface bus (IFB). This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the unit being diagnosed (0 or 1).
b	The diagnostic phase in which the termination occurred.
c	The address in the diagnostic phase at which the termination occurred.
d	The last test executed before the termination occurred.
FORCED	The termination is unconditional. Termination in this way is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

Repair the faulty frame. If further diagnostic execution is desired, specify UCL on the DGN: input message. This will inhibit all early terminations except those that are forced.

5. REFERENCES

PIDENTs
IFFRTEST
DCONTABL
IFDG--, where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=IFDG, UTYPE=1XLUIFB

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

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Input Messages

CLR:MACLI
DGN:IFB
EX:IFB
STOP:EX
STOP:MACLI

Output Message

DGN:IFB

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:IFB-TEST
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:IFB a PH b c [d]
[TEST MISMATCH SUPPLEMENTARY DATA
ee ffffffff gggggggg]

2. REASON FOR OUTPUT

To report when the diagnostic results are printed on a phase basis for an Interface Bus (IFB). This occurs in the case of a partial diagnosis, a test failure, or when RAW was requested on the input message.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The diagnostic phase number for which the results are reported.
- c The results of the diagnostic:
 - ATP — All tests passed.
 - CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.
 - NTR — No tests were executed.
 - STF — Some tests failed.
 - STF-BOF — Some tests failed and the test failure buffer overflowed.
- d An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (40000000 00010000), then tests were skipped for reasons 12 and 47.

The reasons are as follows:

Bit	Meaning
12	Scan and Signal Distributor (SSD) Out Of Service (OOS).
43	Power Monitor (PWRMON) test timed out (try again).

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Bit	Meaning
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).
46	Frame request for PWRMON active (try again).
47	Unit not in normal state.

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, if d is (7,40000000 00010000), seven tests failed, plus tests were skipped for reasons 12 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

The following appear only if the diagnostic was STF.

- e Test number of the failing test.
- f The bits that were in error; that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.
- g An optional field containing supplementary data concerning the failing test if available. This field may contain up to seven words. See diagnostic Pident for an explanation of the data.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

5. REFERENCES

PIDENTs
IFFRTEST
DCONTABL
IFDG--, where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=IFDG, UTYPE=1XLUIFB

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

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Input Messages
CLR:MACLI
EX:IFB
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:IOUS
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:IOUS a [, {IOUC b | IPUB c | IOMP d}] e f [g]

2. REASON FOR OUTPUT

To report both the diagnostics results and the termination mode of the input/output (I/O) unit selector (IOUS). This message is printed at the conclusion of the interactive diagnostic execution.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the I/O selector under diagnosis (0-7).
- b I/O channel under diagnosis (0-15) if specified in input message.
- c I/O peripheral unit number (0 or 1).
- d I/O microprocessor number (0 or 1).
- e The termination mode for the diagnostic:
- ABORTED — The diagnostic was abnormally stopped due to an interrupt, error in execution, or due to a STOP:MACLI or STOP:EX input request.
- COMPLETED — The diagnostic completed normally.
- STOPPED — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution.
- f The results of the diagnostic:
- ATP — All tests passed.
- CATP — All tests passed, but some tests were skipped due to the unavailability of a system resource which was needed to perform the test.
- NTR — No tests were executed.
- STF — Some tests failed.
- STF-BOF — The number of failed tests has filled the buffer. Before any more tests are run the system prints out the contents of the buffer and then clears it.
- g An optional field that will appear only if the results are not ATP.

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CATP or NTR — This field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (40000000 00001000), then tests were skipped for reasons 9 and 47.

The reasons are as follows:

Bit	Meaning
5	Invalid peripheral controller circuit pack.
7	TN82 processor configuration (PC) port equipage is incorrect - on board DGN not run.
9	Peripheral unit bus (PUB) 0 out of service.
10	PUB 1 out of service.
11	Peripheral unit all seems well error summary (ASWEPU) inhibit set.
12	Master control complex (MCC) / peripheral processor interface (PPI) configured out of service (OOS).
13	Central pulse distributor (CPD) control pulse order caused F-SRC (expanded input/output processor [IOP]).
15	Standby central control (CC) out of service.
33	Both input/output unit controller (IOUC) helpers out of service.
34	IOUC port is in trouble.
35	Requires duplex PUB's.
41	Helper PUB not out of service.
42	Cannot configure all in service input/output unit selectors (IOUS) to same PUB.
43	Power monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).
46	Frame request for PWRMON active.
47	Unit not in normal state.

STF — The number of failing phases, failing test at, and trouble number. For example (3,4,00101141) shows 3 phases failed, 4 tests failed, with trouble number 00101141.

STF-BOF — The number of test failures up to the point of buffer overflow (BOF).

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4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service, so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed. Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. The omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

5. REFERENCES

PIDENTs

DCONMAIN

MIRA

PFLRDGNH

IODG--; where -- represents all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=IODG,UTYPE=1XLUFS - for IOF

I2DG--; where -- represents all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=I2DG,UTYPE=1XLUFS - for IOP

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages

CLR:MACLI

EX:IOUS

STOP:EX

STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:IOUS-ADDR
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:IOUS a [, {IOUC b|IPUB c|IOMP d}] ILLEGAL ADDRESS e

2. REASON FOR OUTPUT

To report that an illegal address was used for an interactive diagnostic function on an input/output (I/O) unit selector (IOUS).

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0-7).
- b I/O channel under diagnosis (0-15) if specified in input message.
- c I/O peripheral unit number (0 or 1).
- d I/O microprocessor number (0 or 1).
- e The type of illegal address:
- ADVANCE — The address advanced to contains an illegal address.
- DOLLOOPS — The loop of code contains an illegal address.
- INVALID MUST COMPLETE PHASE IN PROGRESS — A pause was inserted in one phase and an attempt was made to start another phase before the pause was removed from the
- LOOP END — The second address specified is illegal.
- LOOP START — The first address specified is illegal.
- SUBROUTINES — The subroutine contains an illegal address. first phase.

4. ACTION TO BE TAKEN

If INVALID MUST COMPLETE PHASE IN PROGRESS , remove the pause from the first phase and retry the diagnostic.

In all other cases, correct the address and retry the diagnostic.

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5. REFERENCES

PIDENTs

DCONMAIN

MIRA

PFLRDGNH

IODG--; where -- represents all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=IODG,UTYPE=1XLUFS - for IOF

I2DG--; where -- represents all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=I2DG,UTYPE=1XLUFS - for IOP

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

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Input Messages

CLR:MACLI

EX:IOUS

STOP:EX

STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:IOUS-ILL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:IOUS a [, {IOUC b | IPUB c | IOMP d}] ILLEGAL PHASE

2. REASON FOR OUTPUT

To report when one or more illegal diagnostic phases have been requested on a partial diagnostic request input/output (I/O) unit selector (IOUS). The illegal phase will not be executed; however, all valid phases will be run.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0-7).
- b I/O channel under diagnosis (0-15) if specified in the input message.
- c I/O peripheral unit number (0 or 1).
- d I/O microprocessor number (0 or 1).

4. ACTION TO BE TAKEN

Check PIDENT DCONTABL to obtain the list of valid phase numbers.

5. REFERENCES

PIDENTs
 DCONMAIN
 MIRA
 PFLRDGNH
 IODG--; where -- represents all valid phase numbers
 listed in PIDENT DCONTABL for PREFIX=IODG,UTYPE=1XLUFS - for IOF
 I2DG--; where -- represents all valid phase numbers
 listed in PIDENT DCONTABL for PREFIX=I2DG,UTYPE=1XLUFS - for IOP

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

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Input Messages
CLR:MACLI
EX:IOUS
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:IOUS-LOOP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:IOUS a [, {IOUS b|IPUB c|IOMP d}] LOOPING e

2. REASON FOR OUTPUT

To report that the interactive diagnostic on an input/output (I/O) unit selector (IOUS) has either started looping through the specified code or has completed the looping function.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | The member number of the unit being diagnosed (0-7). |
| b | I/O channel under diagnosis (0-12) if specified in the input message. |
| c | I/O peripheral number (0 or 1). |
| d | I/O microprocessor number (0 or 1). |
| e | COMPLETE — Looping has terminated.
STARTED — Looping has begun. |

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
DCONMAIN
MIRA
PFLRDGNH
IODG--; where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=IODG,UTYPE=1XLUFS - for IOF
I2DG--; where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=I2DG,UTYPE=1XLUFS - for IOP

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SEE PROPRIETARY NOTICE ON COVER PAGE

Input Messages
CLR:MACLI
EX:IOUS
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:IOUS-NOT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:IOUS a [{IOUC b|IPUB c|IOMP d}] NOT STARTED - e

2. REASON FOR OUTPUT

To report when the interactive diagnostic request cannot be started for the input/output (I/O) unit selector (IOUS). This is usually when the unit for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0-7).
- b I/O unit channel (IOUC) under diagnosis (0-15) is specified in input message.
- c I/O peripheral unit (IPUB) number (0 or 1).
- d I/O microprocessor (IOMP) number.
- e The reason the diagnostic was not started.

4. ACTION TO BE TAKEN

If the specified unit cannot be removed from service because there is no spare, restore a spare unit to service.

5. REFERENCES

PIDENTs
DCONMAIN
MIRA
PFLRDGNH
IODG--; where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=IODG,UTYPE=1XLUFS - for IOF
I2DG--; where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=I2DG,UTYPE=1XLUFS - for IOP

Practice 254-280-040, *Diagnostic Language - DL-1*
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Input Messages
CLR:MACLI
EX:IOUS
RST:IOUS
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:IOUS-SUSP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

- [1] EX:IOUS a[, {IOUC b|IPUB c|IOMP}] SUSPENDED
- [2] EX:IOUS a[, {IOUC b|IPUB c|IOMP}] SUSPENDED AT PH e ADR f [g]
- [3] EX:IOUS a[, {IOUC b|IPUB c|IOMP}] SUSPENDED AT PH e ADR f AFTER TEST g [h]
- [4] EX:IOUS a[, {IOUC b|IPUB c|IOMP}] SUSPENDED ILLEGAL INPUT

2. REASON FOR OUTPUT

To report when interactive diagnostic execution is suspended on an input/output (I/O) unit selector (IOUS).

Each of the four formats identifies a specific type of suspension:

Format [1] if no phase active.

Format [2] at the address specified by the input message.

Format [3] at the point immediately following a test.

Format [4] if the input is illegal.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0-7).
- b I/O channel under diagnosis (0-15) if specified in input message.
- c I/O peripheral unit number (0 or 1).
- d I/O microprocessor number (0 or 1).
- e The diagnostic phase in which the diagnostic suspended. If no phase was active, then this phase does not occur.
- f The address in the diagnostic phase at which the suspension occurred.
- g The last test executed before the suspension occurred.
- h The reason the suspension occurred:
 - ADVANCE — The diagnostic has been executed up to the specified address.
 - FIRST FAILURE — The diagnostic has been suspended because the first failure has been encountered.
 - PAUSE — The diagnostic has been paused at the specified address.

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STEP — The requested number of steps have been completed.

4. ACTION TO BE TAKEN

Specify another EX:IOUS input message. If no further interactive diagnostic execution is desired, specify a STOP:MACLI or STOP:EX input message for the appropriate subclass.

5. REFERENCES

PIDENTs

DCONMAIN

MIRA

PFLRDGNH

IODG--; where -- represents all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=IODG,UTYPE=1XLUFS - for IOF

I2DG--; where -- represents all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=I2DG,UTYPE=1XLUFS - for IOP

Practice 254-280-040, *Diagnostic Language - DL-1*

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Input Messages

CLR:MACLI

EX:IOUS

STOP:EX

STOP:MACLI

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ID EX:IOUS-TERM
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:IOUS a [, {IOUC b|IPUB c|IOMP d}] TERMINATED at PH e ADR f ...
AFTER TEST g [FORCED]

2. REASON FOR OUTPUT

To report when the interactive diagnostic terminates early for an input/output (I/O) unit selector (IOUS). This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the unit being diagnosed (0-7).
b	I/O channel under diagnosis (0-15) if specified in the input message.
c	I/O peripheral unit number (0 or 1).
d	I/O microprocessor number (0 or 1).
e	The diagnostic phase in which the termination occurred.
f	The address in the diagnostic phase at which the termination occurred.
g	The last test executed before the termination occurred.
FORCED	The termination is unconditional. Termination in this way is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

Repair the faulty frame.

5. REFERENCES

PIDENTs
DCONMAIN
MIRA
PFLRDGNH
IODG--; where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=IODG,UTYPE=1XLUFS - for IOF
I2DG--; where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=I2DG,UTYPE=1XLUFS - for IOP

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Input Messages

CLR:MACLI

EX:IOUS

STOP:EX

STOP:MACLI

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ID EX:IOUS-TEST
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:IOUS a [, {IOUC b IPUB c | IOMP d}] PH e f [g]
[TEST MISMATCH SUPPLEMENTARY DATA
hh iiiiiiiii jjjjjjjjj]

2. REASON FOR OUTPUT

To report when the interactive diagnostic results are printed on a phase basis for an input/output (I/O) unit selector (IOUS). This occurs in the case of a partial diagnosis, or a test failure.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0-7).
- b I/O channel under diagnosis (0-15) if specified in input message
- c I/O peripheral unit number (0 or 1).
- d I/O microprocessor number (0 or 1).
- e The diagnostic phase number for which the results are reported.
- f The results of the diagnostic:
 - ATP — All tests passed.
 - CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.
 - NTR — No tests were executed.
 - STF — Some tests failed.
 - STF-BOF — Some tests failed and the test failure buffer overflowed.
- g An optional field that will appear only if the results are not ATP.

CATP or NTR This field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (40000000 00001000), then tests were skipped for reasons 9 and 47.

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The reasons are as follows:

Bit	Meaning
5	Invalid peripheral controller circuit pack.
7	TN82 processor configuration (PC) port equipage is incorrect - on board DGN not run.
9	Peripheral unit bus (PUB) 0 out of service.
10	PUB 1 out of service.
11	Peripheral unit all seems well error summary (ASWEP) inhibit set.
12	Master control complex (MCC) / peripheral processor interface (PPI) configured out of service (OOS).
13	Central pulse distributor (CPD) control pulse order caused F-SRC (expanded input/output processor [IOP]).
15	Standby central control (CC) out of service.
33	Both input/output unit controller (IOUC) helpers out of service.
34	IOUC port is in trouble.
35	Requires duplex PUB's.
41	Helper PUB not out of service.
42	Cannot configure all in service input/output unit selectors (IOUS) to same PUB.
43	Power monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).
46	Frame request for PWRMON active.
47	Unit not in normal state.

STF This field gives the number of test failures in addition to the reasons that tests were skipped. For example, if e is (7,40000000 000001000), seven tests failed, plus tests were skipped for reasons 9 and 47.

STF-B0F The number of tests failures is the number of test failures up to the point of buffer overflow.

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The following appear only if the diagnostic was STF.

- h Test number of the failing test.
- i The bits that were in error; that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.
- j An optional field containing supplementary data concerning the failing test if available. This field may contain up to seven words. See diagnostic PIDENT for an explanation of the data.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed. Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

5. REFERENCES

PIDENTs
DCONMAIN
MIRA
PFLRDGNH

IODG--; where -- represents all valid phase numbers
 listed in PIDENT DCONTABL for PREFIX=IODG,UTYPE=1XLUFS - for IOF
I2DG--; where -- represents all valid phase numbers
 listed in PIDENT DCONTABL for PREFIX=I2DG,UTYPE=1XLUFS - for IOP

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Input Messages
CLR:MACLI
EX:IOUS
STOP:EX
STOP:MACLI

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ID EX:LIBSYS
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:LIBSYS: PKG aaaaaaaa, PGM bbbb, TASK c, CLIENT d
e

2. REASON FOR OUTPUT

To report the disposition of the requested action of an EX:LIBSYS input message.

3. VARIABLE FIELD DEFINITIONS

- a Library package name.
- b Program name of the program in package a.
- c Task number within program b.
- d Client number (0-7) assigned to program b.
- e Disposition of the requested action:

STARTED

NOT STARTED	LIB KC	FAC BUSY RETRY LATER
NOT STARTED	INVALID	PGM
NOT STARTED	INVALID	TASK
NOT STARTED	INVALID	PKG
NOT STARTED	LIBSYS	FAC BUSY RETRY LATER
NOT STARTED	MACLI	FAC BUSY RETRY LATER

NOT STARTED OFFICE STATE CONFLICT / NOT STARTED
COMPATIBILITY CONFLICT

ABORTED SOFT ERROR

ABORTED INT OCCURRED IN ACT. SYSTEM / ABORTED
INT
OCCURRED IN ACT. SYSTEM HAS FAILED/ABORTED LIB KCODE
FAIL

4. ACTION TO BE TAKEN

If output message indicates NOT STARTED, correct the reason indicated and re-enter the EX:LIBSYS input message.

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5. REFERENCES

PIDENT
LIBREXER

Input Message
EX:LIBSYS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:MUP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:MUP a b c [d]

2. REASON FOR OUTPUT

To report both the diagnostic results and the termination mode at the conclusion of the interactive diagnostic execution on a master control complex (MCC) and utility processor (MUP).

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit under diagnosis (0 or 1).
- b The termination mode for the diagnostic:
- ABORTED — The diagnostic was abnormally stopped because of an interrupt, error in execution, or because of a STOP:MACLI input request.
- COMPLETED — The diagnostic completed normally.
- STOPPED — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution.
- c The results of the diagnostic:
- ATP — All tests passed.
- CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.
- NTR — No tests were executed.
- STF — Some tests failed.
- STF-BOF — The number of failed tests has filled the buffer. Before any more tests are run the system prints out the contents of the buffer and then clears it.
- d An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (40000000 00010000), then tests were skipped for reasons 12 and 47.

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The reasons are as follows:

Bit	Meaning
6	Auxiliary unit interface (AUI) 0 helper out of service (OOS).
7	AUI 1 helper out of service.
8	Direct memory access (DMA) failure on active MUP.
12	Scan and signal distributor (SSD) out of service.
13	SSD 0 helper out of service.
14	SSD 1 helper out of service.
22	MUP forces in effect.
43	Power monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).
46	Frame request for PWRMON active (try again).
47	Unit not in normal state.

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, if d is (7,40000000 00010000), seven tests failed, plus tests were skipped for reasons 12 and 47. If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service if possible, so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

If a diagnostic request is made from the unit power switch, power monitor tests are NOT run. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs

DCONTABL

MCFRTEST

MCDG--, where -- represents all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=MCDG, UTYPE=1XLUMUP

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Input Messages

CLR:MACLI
EX:MUP
STOP:EX
STOP:MACLI

Output Message

DGN:MUP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:MUP-ADDR
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:MUP a ILLEGAL ADDRESS b

2. REASON FOR OUTPUT

To report that an illegal address was used for an interactive diagnostic function on a master control complex (MCC) and utility processor (MUP) unit.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The type of illegal address:
- ADVANCE — The address advanced to contains an illegal address.
- DOLLOOPS — The loop of code contains an illegal address.
- INVALID MUST COMPLETE PHASE IN PROGRESS — A pause was inserted in one phase and an attempt was made to start another phase before the pause was removed from the first phase.
- LOOP END — The second address specified is illegal.
- LOOP START — The first address specified is illegal.
- SUBROUTINES — The subroutine contains an illegal address.

4. ACTION TO BE TAKEN

If INVALID MUST COMPLETE PHASE IN PROGRESS , remove the pause from the first phase and retry the diagnostic.

In all other cases, correct the address and retry the diagnostic.

5. REFERENCES

PIDENTs
DCONTABL
MCFRTEST
MCDG--, where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=MCDG, UTYPE=1XLUMUP

Practice 254-280-040, *Diagnostic Language - DL-1*
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Input Messages

CLR:MACLI

EX:MUP

STOP:EX

STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:MUP-ILL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:MUP a ILLEGAL PHASE

2. REASON FOR OUTPUT

To report when only illegal diagnostic phases have been requested on a partial interactive diagnostic request for a master control complex (MCC) and utility processor (MUP).

3. VARIABLE FIELD DEFINITIONS

a The member number of the unit being diagnosed (0 or 1).

4. ACTION TO BE TAKEN

Check PIDENT DCONTABL for PREFIX=MCDG,UTYPE=1XLUMUP to obtain the list of valid phase numbers.

5. REFERENCES

PIDENTs
DCONTABL
MCFRTEST
MCDG--, where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=MCDG, UTYPE=1XLUMUP

Practice 254-280-040, *Diagnostic Language - DL-1*
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Input Messages
CLR:MACLI
EX:MUP
STOP:EX
STOP:MACLI

Output Message
DGN:MUP

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ID EX:MUP-LOOP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:MUP a LOOPING b

2. REASON FOR OUTPUT

To report that the interactive diagnostic on a master control complex (MCC) and utility processor (MUP) unit has either started looping through the specified code, or has completed the looping function.

3. VARIABLE FIELD DEFINITIONS

a The member number of the unit being diagnosed (0 or 1).
b COMPLETE — Looping has terminated.
 STARTED — Looping has begun.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
DCONTABL
MCFRTEST
MCDG--, where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=MCDG, UTYPE=1XLUMUP

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

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Input Messages
CLR:MACLI
EX:MUP
STOP:EX
STOP:MACLI

Output Message
DGN:MUP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:MUP-NOT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:MUP a NOT STARTED - b

2. REASON FOR OUTPUT

To report when the interactive diagnostic request cannot be started for the master control complex (MCC) and utility processor (MUP). This usually occurs when the unit for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
b The reason the diagnostic was not started.

4. ACTION TO BE TAKEN

If the specified unit cannot be removed from service because there is no spare, restore a spare unit to service.

5. REFERENCES

PIDENTs
DCONTABL
MCFRTEST
MCDG--, where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=MCDG, UTYPE=1XLUMUP

Practice 254-280-040, *Diagnostic Language - DL-1*
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Input Messages
CLR:MACLI
EX:MUP
STOP:EX
STOP:MACLI

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ID EX:MUP-SUSP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

- [1] EX:MUP a SUSPENDED
- [2] EX:MUP a SUSPENDED AT PH b ADR c [e]
- [3] EX:MUP a SUSPENDED AT PH b ADR c AFTER TEST d [e]
- [4] EX:MUP a SUSPENDED ILLEGAL INPUT

2. REASON FOR OUTPUT

To report when interactive diagnostic execution has been suspended for a master control complex (MCC) and utility processor (MUP). Each of the four formats identifies a specific type of suspension:

Format [1] if there was no phase active.

Format [2] at the address specified by the input message.

Format [3] the point immediately following a test.

Format [4] if the input is illegal.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The diagnostic phase in which the diagnostic suspended.
- c The address in the diagnostic phase at which the suspension occurred.
- d The last test executed before the suspension occurred.
- e The reason the suspension occurred:
 - ADVANCE — The diagnostic has been executed up to the specified address.
 - FIRST FAILURE — The diagnostic has been suspended because the first failure has been encountered.
 - PAUSE — The diagnostic has been paused at the specified address.
 - STEP — The requested number of steps have been completed.

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4. ACTION TO BE TAKEN

Specify another EX: input. If no further interactive diagnostic execution is desired, specify a STOP:MACLI input message for the appropriate subclass.

5. REFERENCES

PIDENTs

DCONTABL

MCFRTEST

MCDG--, where -- represents all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=MCDG, UTYPE=1XLUMUP

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

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Input Messages

CLR:MACLI

EX:MUP

STOP:EX

STOP:MACLI

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ID EX:MUP-TERM
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:MUP a TERMINATED AT PH b ADR c AFTER TEST d [FORCED]

2. REASON FOR OUTPUT

To report when the interactive diagnostic terminates early for a master control complex (MCC) and utility processor (MUP). This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the unit being diagnosed (0 or 1).
b	The diagnostic phase in which the termination occurred.
c	The address in the diagnostic phase at which the termination occurred.
d	The last test executed before the termination occurred.
FORCED	The termination is unconditional. Termination in this way is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

Repair the faulty frame. If further diagnostic execution is desired, specify UCL on the DGN: input message. This will inhibit all early terminations except those that are forced.

5. REFERENCES

PIDENTs
DCONTABL
MCFRTEST
MCDG--, where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=MCDG, UTYPE=1XLUMUP

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Input Messages

CLR:MACLI
DGN:MUP
EX:MUP
STOP:EX
STOP:MACLI

Output Message

DGN:MUP

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ID EX:MUP-TEST
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:MUP a PH b c [d]
[TEST MISMATCH SUPPLEMENTARY DATA
ee ffffffff gggggggg]

2. REASON FOR OUTPUT

To report when the diagnostic results are printed on a phase basis for a Master Control Complex (MCC) and Utility Processor (MUP). This occurs in the case of a partial diagnosis, a test failure, or when RAW was requested on the input message.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The diagnostic phase number for which the results are reported.
- c The results of the diagnostic:
- ATP — All tests passed.
- CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.
- NTR — No tests were executed.
- STF — Some tests failed.
- STF-BOF — Some tests failed and the test failure buffer overflowed.
- d An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (40000000 00010000), then tests were skipped for reasons 12 and 47.

The reasons are as follows:

Bit	Meaning
6	Auxiliary Unit Interface (AUI) 0 helper Out Of Service (OOS).
7	AUI 1 helper out of service.

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Bit	Meaning
8	Direct Memory Access (DMA) failure on active MUP.
12	Scan and Signal Distributor (SSD) out of service.
13	SSD 0 helper out of service.
14	SSD 1 helper out of service.
22	MUP forces in effect.
43	Power Monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).
46	Frame request for PWRMON active (try again).
47	Unit not in normal state.

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, if d is (7,40000000 00010000), seven tests failed, plus tests were skipped for reasons 12 and 47. If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

The following appear only if the diagnostic was STF.

- e Test number of the failing test.
- f The bits that were in error; that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.
- g An optional field containing supplementary data concerning the failing test if available. This field may contain up to seven words. See diagnostic Pident for an explanation of the data.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

5. REFERENCES

PIDENTs
DCONTABL
MCFRTEST
MCDG--, where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=MCDG, UTYPE=1XLUMUP

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Input Messages
CLR:MACLI
EX:MUP
STOP:EX
STOP:MACLI

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ID EX:NCLK
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:NCLK 0 CHAIN a b c d

2. REASON FOR OUTPUT

To specify both the diagnostics results and the termination mode. This message is printed at the conclusion of the interactive diagnostic execution.

3. VARIABLE FIELD DEFINITIONS

- a The number of the chain under diagnosis.
- b The termination mode for the diagnostic:
- ABORTED — The diagnostic was abnormally stopped due to an interrupt, error in execution, or due to a STOP:MACLI input request.
- COMPLETED — The diagnostic completed normally.
- STOPPED — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution.
- c The results of the diagnostic:
- ATP — All tests passed.
- CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.
- NTR — No tests were executed.
- STF — Some tests failed.
- STF-BOF — The number of failed tests has filled the buffer. Before any more tests are run, the system prints out the contents of the buffer and then clears it.
- d An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped. The reasons are identified by their bit positions in the 16-digit octal number that is printed. For example, if d is (40000000 00001000), then tests were skipped for reasons 9 and 47.

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The reasons are as follows:

BIT	REASONS FOR TESTS SKIPPED
0	Peripheral unit bus (PUB) 0 out-of-service
1	PUB 1 out-of-service
2	Primary signaling processor (SP) pulse points out-of-service
3	Secondary SP pulse points out-of-service
4	Mate unit out-of-service
5	Power control switch in request out-of-service (ROS) position or diagnostic requested from power control switch
6	Central controller (CC) 0 out-of-service
7	CC 1 out-of-service
8	CI has other units responding
9	MI has other units responding
10	GI has other units responding
11	PUB not duplex
12	Chain 0 not available
13	Chain 1 not available
14	Chain 2 not available
15	Chain 3 not available
16	Chain 3 test skipped, bad osc.
17	Chain 2,3 tests skipped, bad osc.
18	Chain 1,2,3 tests skipped, bad osc.
24	SP scan / distribute points out-of-service
25	SP bus out-of-service

If STF, this field gives the number of phases and number of tests that failed, and a trouble number. For example, (3,5,07312762) indicates 3 phases failed, 5 tests failed, and trouble number of 07312762.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

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Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENT
PUDGNC--

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

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ID EX:NCLK-ADDR
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:NCLK 0, CHAIN a ILLEGAL ADDRESS b

2. REASON FOR OUTPUT

To indicate that an illegal address was used for an interactive diagnostic function on a network clock (NCLK).

3. VARIABLE FIELD DEFINITIONS

- a The number of the network clock chain being diagnosed.
- b The type of illegal address:
- ADVANCE — The address advanced to contains an illegal address.
- DOLLOOPS — The loop of code contains an illegal address.
- INVALID MUST COMPLETE PHASE IN PROGRESS — A pause was inserted in one phase and an attempt was made to start another phase before the pause was removed from the first phase.
- LOOP END — The second address specified is illegal.
- LOOP START — The first address specified is illegal.
- SUBROUTINES — The subroutine contains an illegal address.

4. ACTION TO BE TAKEN

If b=INVALID...PROGRESS, remove the pause from the first phase and retry the diagnostic.

In all other cases, correct the address and retry the diagnostic.

5. REFERENCES

PIDENT
PUDGNC--

Practice 234-180-020, *Diagnostic Language - DIAL*
Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:NCLK-ILL
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:NCLK 0, CHAIN a ILLEGAL PHASE

2. REASON FOR OUTPUT

To print whenever one or more illegal diagnostic phases have been requested. The illegal phase will not be executed; however, all valid phases will be run.

3. VARIABLE FIELD DEFINITIONS

a The network clock chain being diagnosed.

4. ACTION TO BE TAKEN

Check the *Input Message Document* for the list of valid phase numbers.

5. REFERENCES

PIDENTs
DCONTOLL
PUDGNC--

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:NCLK-LOOP
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:NCLK 0 CHAIN a LOOPING b

2. REASON FOR OUTPUT

To indicate that the interactive diagnostic on a network clock (NCLK) has either started looping through the specified code, or has completed the looping function.

3. VARIABLE FIELD DEFINITIONS

a The number of the network clock chain being diagnosed.
b COMPLETE — Looping has terminated.
 STARTED — Looping has begun.

4. ACTION TO BE TAKEN

If desired, stop an infinite loop using the following input message EX:NCLK 0!

5. REFERENCES

PIDENT
PUDGNC--

Practice 234-180-020, *Diagnostic Language - DIAL*
Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Message
EX:NCLK

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:NCLK-NOT
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:NCLK 0, CHAIN a NOT STARTED - b

2. REASON FOR OUTPUT

To print whenever the interactive diagnostic request cannot be started. This is usually when the unit for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

a The network clock chain being diagnosed.
b The reason the diagnostic was not started.

4. ACTION TO BE TAKEN

If the specified unit cannot be removed from service because there is no spare, restore a spare unit to service.

5. REFERENCES

PIDENTs
MCFWPEMO
PUDGNC--

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:NCLK-SUSP
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] EX:NCLK 0, CHAIN a SUSPENDED
- [2] EX:NCLK 0, CHAIN a SUSPENDED AT PH b ADR c [e]
- [3] EX:NCLK 0, CHAIN a SUSPENDED AT PH b ADR c AFTER TEST d [e]
- [4] EX:NCLK 0, CHAIN a SUSPENDED ILLEGAL INPUT

2. REASON FOR OUTPUT

To print whenever interactive diagnostic execution is suspended. Each of the four formats identifies a specific type of suspension:

Format [1] is printed if there was no phase active.

Format [2] is printed if the suspension occurred at the address specified by the input message.

Format [3] is printed if the suspension occurred at the point immediately following a test.

Format [4] is printed if the diagnostic was suspended because the input was illegal.

3. VARIABLE FIELD DEFINITIONS

- a The number of the network clock chain being diagnosed.
- b The diagnostic phase in which the diagnostic suspended. If no phase was active, then this phase does not occur.
- c The address in the diagnostic phase at which the suspension occurred.
- d The last test executed before the suspension occurred.
- e The reason the suspension occurred. If there is no phase active, this field will not be specified.
 - ADVANCE — The diagnostic has been executed up to the specified address.
 - FIRST FAILURE — The diagnostic has been suspended because the first failure has been encountered.
 - PAUSE — The diagnostic has been paused at the specified address.

SEE PROPRIETARY NOTICE ON COVER PAGE

STEP — The requested number of steps has been completed.

4. ACTION TO BE TAKEN

Specify another EX:NCLK input message. If no further interactive diagnostic execution is desired, specify a STOP:MACLI or STOP:EX input message.

5. REFERENCES

PIDENT
PUDGNC--

Practice 234-180-020, *Diagnostic Language - DIAL*
Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Messages
EX:NCLK
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:NCLK-TERM
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:NCLK 0, CHAIN a TERMINATED AT PH b ADR c AFTER TEST d [FORCED]

2. REASON FOR OUTPUT

To print whenever the interactive diagnostic terminates early. This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

a	The network clock chain being diagnosed.
b	The diagnostic phase in which the termination occurred.
c	The address in the diagnostic phase (or subroutine) at which the termination occurred.
d	The last test executed before the termination occurred.
FORCED	The termination is unconditional. Termination in this way is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

Repair the faulty frame.

5. REFERENCES

PIDENT
PUDGNC--

Practice 234-180-020, *Diagnostic Language - DIAL*
Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:NCLK-TEST
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

```
EX:NCLK 0 CHAIN a PH b c [d]
[TEST MISMATCH SUPPLEMENTARY DATA
 e  ffffffff gggggggg hhhhhhhh iiiiiiii jjjjjjjj kkkkkkkk
    llllllll mmmmmmmm nnnnnnnn]
```

2. REASON FOR OUTPUT

To report the interactive diagnostic results on a phase basis. This occurs in the case of a partial diagnosis, or a test failure.

3. VARIABLE FIELD DEFINITIONS

- a The number of the chain under diagnosis.
- b The diagnostic phase number for which the results are reported.
- c The results of the diagnostic:
- ATP — All tests passed.
 - CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.
 - NTR — No tests were executed.
 - STF — Some tests failed.
 - STF-BOF — Some tests failed and the test failure buffer overflowed; the phase has not been completed.
- d An optional field that will only appear if the results were not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit positions in the 16-digit octal number that is printed. For example, if d is (40000000 00001000), then tests were skipped for reasons 9 and 47.

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The reasons are as follows:

BIT	REASONS FOR TESTS SKIPPED
0	Peripheral unit bus (PUB) 0 out-of-service
1	PUB 1 out-of-service
2	Primary signaling processor (SP) pulse points out-of-service
3	Secondary SP pulse points out-of-service
4	Mate unit out-of-service
5	Power control switch in request out-of-service (ROS) position or diagnostic requested from power control switch
6	Central controller (CC) 0 out-of-service
7	CC 1 out-of-service
9	MI has other units responding
10	GI has other units responding
11	PUB not duplex
12	Chain 0 not available
13	Chain 1 not available
14	Chain 2 not available
15	Chain 3 not available
16	Chain 3 test skipped, bad osc.
17	Chain 2,3 tests skipped, bad osc.
18	Chain 1,2,3 tests skipped, bad osc.
24	SP scan / distribute points out-of-service
25	SP bus out-of-service

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, d is (7,40000000 00001000), seven tests failed, plus tests were skipped for reasons 9 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

The following appear only if the diagnostic was STF.

- e The test number of the failing test.
- f The bits which were in error; that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.
- g RAW response from the unit.
- h Bits 23-12 contain the reply bus used in the test. Bits 11-0 contain the 'fault' chain.
- i The address of the CC pulse used to access the network clock.

SEE PROPRIETARY NOTICE ON COVER PAGE

j	The address in the phase (or subroutine) of the test that failed.
k	Bits 14-0 contain information for the TLP programs. Bits 23-21 contain the count of the number of words of supplementary data that follows. Bits 20-18 contain the count of the number of words of DOLOOP data that follows. Bits 17-15 contain the count of the number of words of subroutine data that follows.
l	Supplementary data words. Variable l is repeated x times, where x is bits 20-18 of k. This data supplies information about the test being executed. The last supplementary data word is printed first.
m	DOLOOP data words. Variable m is repeated y times, where y is bits 20-18 of k. This data is the value of the DOLOOP variables at the time of the test failures. The value of the innermost DOLOOP is printed first.
n	Subroutine data words. Variable n is repeated z times, where z is bits 17-15 of k. This data is the address of the callsubs which led up to this point in the diagnostic. The address of the last callsub is printed first.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENT
PUDGNC--

Practice 234-180-020, *Diagnostic Language - DIAL*
Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Message
EX:NCLK

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:PCD
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:PCD a b c d [e]

2. REASON FOR OUTPUT

To report both the diagnostic results and the termination mode at the conclusion of the interactive diagnostic execution on a power control distribution (PCD) frame.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the PCD under diagnosis (0 or 1).
- b Subunit if specified in the EX:PCD input message. The subunits are:
DAMON0
CONVx — Where x is equal to 0, 1, or 2.
- c The termination mode for the diagnostic:
ABORTED — The diagnostic was abnormally stopped because of an interrupt, error in execution, or because of a STOP:MACLI input request.
COMPLETED — The diagnostic completed normally.
STOPPED — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution.
- d The results of the diagnostic:
ATP — All tests passed.
CATP — All tests passed; however, some tests were skipped because of the unavailability of a system resource which was needed to perform the test.
NTR — No tests were executed.
STF — Some tests failed.
STF-BOF — The number of failed tests has filled the buffer. Before any more tests are run, the system prints out the contents of the buffer and then clears it.

SEE PROPRIETARY NOTICE ON COVER PAGE

- e An optional field that will appear only if the results are not ATP.
- CATP or NTR — This field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (40000000 00010000), then tests were skipped for reasons 12 and 47.
- The reasons are as follows:
- | Bit | Meaning |
|-----|--|
| 12 | Master control complex (MCC) / peripheral processor interface (PPI) configured out of service (OOS). |
| 43 | Power monitor (PWRMON) test timed out (try again). |
| 44 | Two PWRMON jobs concurrently active (try again). |
| 45 | PWRMON work table full (try again). |
| 46 | Frame request for PWRMON active. |
| 47 | Unit not in normal state. |
- STF — The number of failing phases, failing test at, and trouble number. For example (3,4,00101141) shows 3 phases failed, 4 tests failed, with trouble number 00101141.
- STF-BOF — The number of test failures up to the point of buffer overflow (BOF).

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service if possible, so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

5. REFERENCES

PIDENTs
DCONMAIN
MIRA
PDFR
PDDG--; where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=PDDG,UTYPE=1XLUPDF

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM User's Manual

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Messages
CLR:MACLI
EX:PCD
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:PCD-ADDR
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:PCD a ILLEGAL ADDRESS b

2. REASON FOR OUTPUT

To report that an illegal address was used for an interactive diagnostic function on a power control distribution (PCD) frame.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The type of illegal address:
- ADVANCE — The address advanced to contains an illegal address.
- DOLLOOPS — The loop of code contains an illegal address.
- INVALID MUST COMPLETE PHASE IN PROGRESS — A pause was inserted in one phase and an attempt was made to start another phase before the pause was removed from the first phase.
- LOOP END — The second address specified is illegal.
- LOOP START — The first address specified is illegal.
- SUBROUTINES — The subroutine contains an illegal address.

4. ACTION TO BE TAKEN

If INVALID MUST COMPLETE PHASE IN PROGRESS , remove the pause from the first phase and retry the diagnostic.

In all other cases, correct the address and retry the diagnostic.

5. REFERENCES

PIDENTs
DCONMAIN
MIRA
PDFR
PDDG--; where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=PDDG,UTYPE=1XLUPDF

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

PA-4A002-01, *4ESSTM User's Manual*

Input Messages

CLR:MACLI

EX:PCD

STOP:EX

STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:PCD-ILL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:PCD a b ILLEGAL PHASE

2. REASON FOR OUTPUT

To report when one or more illegal diagnostic phases have been requested on a partial interactive diagnostic request for a power control distribution (PCD) frame. The illegal phase will not be executed; however, all valid phases will be run.

3. VARIABLE FIELD DEFINITIONS

- a The member number being diagnosed (0 or 1).
- b Subunit if specified in the EX:PCD input message. The subunits are:
- DAMON0
- CONVx — Where x is equal to 0, 1, or 2.

4. ACTION TO BE TAKEN

Check PIDENT DCONTABL for PREFIX=PDDG,UTYPE=1XLUPDF to obtain the list of valid phase numbers.

5. REFERENCES

PIDENTs
 DCONMAIN
 MIRA
 PDFR
 PDDG--; where -- represents all valid phase numbers
 listed in PIDENT DCONTABL for PREFIX=PDDG,UTYPE=1XLUPDF

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages
 CLR:MACLI
 EX:PCD
 STOP:EX
 STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:PCD-LOOP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:PCD a LOOPING b

2. REASON FOR OUTPUT

To report that the interactive diagnostic on a power control distribution (PCD) frame has either started looping through the specified code or has completed the looping function.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b COMPLETE — Looping has terminated.
- STARTED — Looping has begun.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
DCONMAIN
MIRA
PDFR
PDDG--; where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=PDDG,UTYPE=1XLUPDF

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM User's Manual

Input Messages
CLR:MACLI
EX:PCD
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:PCD-NOT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:PCD a b NOT STARTED - c

2. REASON FOR OUTPUT

To report when the interactive diagnostic request cannot be started for a power control distribution (PCD) frame. This usually occurs when the unit for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the PCD being diagnosed (0 or 1).
- b Subunit if specified in the EX:PCD input message. The subunits are:
 DAMON0
 CONVx — Where x is equal to 0, 1, or 2.
- c The reason the diagnostic was not started.

4. ACTION TO BE TAKEN

If the specified PCD cannot be removed from service because there is no spare, restore a spare unit to service.

5. REFERENCES

PIDENTs
PDFR
DCONMAIN
MIRA
PDDG--; where -- represents all valid phase numbers
 listed in PIDENT DCONTABL for PREFIX=PDDG,UTYPE=1XLUPDF

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages
CLR:MACLI
EX:PCD
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:PCD-SUSP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

- [1] EX:PCD a SUSPENDED
- [2] EX:PCD a SUSPENDED AT PH b ADR c [d]
- [3] EX:PCD a SUSPENDED AT PH b ADR c AFTER TEST e[d]
- [4] EX:PCD a SUSPENDED ILLEGAL INPUT

2. REASON FOR OUTPUT

To report when an interactive diagnostic execution has been suspended for the power control distribution (PCD) frame. Each of the four formats identifies a specific type of suspension.

Format [1] if no phase active.

Format [2] at an address specified by the input message.

Format [3] at a point immediately following a test.

Format [4] if the input is illegal.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The diagnostic phase in which the diagnostic suspended.
- c The address in the diagnostic phase at which the suspension occurred.
- d The reason the suspension occurred:
 - ADVANCE — The diagnostic has been executed up to the specified address.
 - FIRST FAILURE — The diagnostic has been suspended because the first failure was encountered.
 - PAUSE — The diagnostic has been paused at the specified address.
 - STEP — The requested number of steps have been completed.
- e The last test executed before the suspension occurred.

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

Specify another EX:PCD input message. If no further interactive diagnostic execution is desired, specify a STOP:MACLI input message for the appropriate subclass.

5. REFERENCES

PIDENTs

DCONMAIN

MIRA

PDFR

PDDG--; where -- represents all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=PDDG,UTYPE=1XLUPDF

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, *4ESSTM User's Manual*

Input Messages

CLR:MACLI

EX:PCD

STOP:EX

STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:PCD-TERM
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:PCD a b TERMINATED AT PH c ADR d AFTER TEST e [FORCED]

2. REASON FOR OUTPUT

To report that the diagnostic terminates for the power control distribution (PCD) frame early. This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

- | | |
|--------|---|
| a | The member number of the unit being diagnosed (0 or 1). |
| b | Subunit if specified in the EX:PCD input message. The subunits are:

DAMON0

CONVx — Where x is equal to 0, 1, or 2. |
| c | The diagnostic phase in which the termination occurred. |
| d | The address in the diagnostic phase at which the termination occurred. |
| e | The last test executed before the termination occurred. |
| FORCED | Indicates that the termination was unconditional. Terminating in this way is restricted to cases where further diagnostic execution will cause system problems. |

4. ACTION TO BE TAKEN

Repair the faulty frame.

5. REFERENCES

PIDENTs
DCONMAIN
MIRA
PDFR
PDDG--; where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=PDDG,UTYPE=1XLUPDF

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM User's Manual

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Messages
CLR:MACLI
EX:PCD
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:PCD-TEST
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

```
EX:PCD  a b PH c d [h]
        [TEST  MISMATCH  SUPPLEMENTARY DATA
          ee  ffffffff  gggggggg]
```

2. REASON FOR OUTPUT

To report when the interactive diagnostic results are printed on a phase basis. This occurs in the case of a partial diagnosis or a test failure on a power control distribution (PCD) frame.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the PCD being diagnosed (0 or 1).
- b Subunit if specified in the EX:PCD input message. The subunits are:
 DAMON0
 CONVx — Where x is equal to 0, 1, or 2.
- c The diagnostic phase number for which the results are reported.
- d The results of the diagnostic:
 ATP — All tests passed.
 CATP — All tests passed; however, some tests were skipped
 because of the unavailability of a system resource which
 was needed to perform the test.
 NTR — No tests were executed.
 STF — Some tests failed.
 STF-BOF — Some tests failed and the test failure buffer overflowed.
- h An optional field that will appear only if the results are not ATP.
 CATP or NTR — This field identifies the reason that the tests were
 skipped in this phase. The reasons are identified by
 their bit position in the 16-digit octal number that is
 printed. For example, if d is (40000000 00010000),
 then tests were skipped for reasons 12 and 47.

SEE PROPRIETARY NOTICE ON COVER PAGE

The reasons are as follows:

Bit	Meaning
12	Master control complex (MCC) / peripheral processor interface (PPI) configured out of service (OOS).
43	Power monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).
46	Frame request for PWRMON active.
47	Unit not in normal state.

STF	— The number of failing phases, failing test at, and trouble number. For example (3,4,00101141) shows 3 phases failed, 4 tests failed, with trouble number 00101141.
STF-BOF	— The number of test failures up to the point of buffer overflow (BOF).

The following appears only if the diagnostic was STF.

e	Test number of the failing test.
f	The bits that were in error; that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.
g	An optional field containing supplementary data concerning the failing test if available. This field may contain up to seven words. See diagnostic PIDENT for an explanation of the data.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

5. REFERENCES

PIDENTs
 DCONMAIN
 MIRA
 PDFR
 PDDG--; where -- represents all valid phase numbers
 listed in PIDENT DCONTABL for PREFIX=PDDG,UTYPE=1XLUPDF

Practice 254-280-040, *Diagnostic Language - DL-1*
 Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM User's Manual

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Messages
CLR:MACLI
EX:PCD
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:PS
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:PS a b c [d]

2. REASON FOR OUTPUT

To report both the diagnostic results and the termination mode at the conclusion of the interactive diagnostic execution on a program store (PS).

3. VARIABLE FIELD DEFINITIONS

- a The member number of the program store under diagnosis (0-13).
- b The termination mode for the diagnostic:
- ABORTED — The diagnostic was abnormally stopped because of an interrupt, error in execution, or because of a STOP:MACLI input request.
- COMPLETED — The diagnostic completed normally.
- STOPPED — The diagnostic was terminated under program control because further testing would not improve diagnostic resolution.
- c The results of the diagnostic:
- ATP — All tests passed.
- CATP — All tests passed; however, some tests were skipped because of the unavailability of a system resource which was needed to perform the test.
- NTR — No tests were executed.
- STF — Some tests failed.
- STF-BOF — The number of failed tests has filled the buffer. Before any more tests are run, the system prints out the contents of the buffer and then clears it.
- d An optional field that will appear only if the results are not ATP.
- If CATP or NTR, this field identifies the reasons that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (40000000 00010000), tests were skipped for reasons 12 and 47.

SEE PROPRIETARY NOTICE ON COVER PAGE

The reasons are as follows:

Bit	Meaning
12	Scan and signal distributor (SSD) out of service (OOS).
15	Standby central control (CC) out of service.
21	Master control complex (MCC) override in effect (ON).
43	Power monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).
46	Frame request for PWRMON active (try again).
47	Unit not in normal state.

If STF, this field gives the number of test failures in addition to the reasons that the tests were skipped. For example, if d is (7,40000000 00010000), seven tests failed, plus tests were skipped for reasons 12 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service if possible, so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs

DCONTABL

PSFRBSLV

MUDG--; where -- represents all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=MUDG,UTYPE=1XLUPS - core store

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM User's Manual

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Messages
CLR:MACLI
EX:PS
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:PS-ADDR
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:PS a ILLEGAL ADDRESS b

2. REASON FOR OUTPUT

To report that an illegal address was used for an interactive diagnostic function on a program store (PS).

3. VARIABLE FIELD DEFINITIONS

- a The member number of the program store being diagnosed (0-13).
- b The type of illegal address:
- ADVANCE — The address advanced to contains an illegal address.
- DOLLOOPS — The loop of code contains an illegal address.
- INVALID MUST COMPLETE PHASE IN PROGRESS — A pause was inserted in one phase and an attempt was made to start another phase before the pause was removed
- LOOP END — The second address specified is illegal.
- LOOP START — The first address specified is illegal.
- SUBROUTINES — The subroutine contains an illegal address. from the first phase.

4. ACTION TO BE TAKEN

If INVALID MUST COMPLETE PHASE IN PROGRESS , remove the pause from the first phase and retry the diagnostic.

In all other cases, correct the address and retry the diagnostic.

5. REFERENCES

PIDENTs
DCONTABL
PSFRBSLV
MUDG--; where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=MUDG,UTYPE=1XLUPS - core store

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

PA-4A002-01, *4ESSTM User's Manual*

Input Messages

CLR:MACLI

EX:PS

STOP:EX

STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:PS-ILL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:PS a ILLEGAL PHASE

2. REASON FOR OUTPUT

To report when only illegal diagnostic phases have been requested on a partial interactive diagnostic request for a program store (PS).

3. VARIABLE FIELD DEFINITIONS

a The member number of the program store being diagnosed (0-13).

4. ACTION TO BE TAKEN

Check PIDENT DCONTABL for PREFIX=MUDG,UTYPE=1XLUPS to obtain the list of valid phase numbers for core store.

5. REFERENCES

PIDENTs
DCONTABL
PSFRBSLV
MUDG--; where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=MUDG,UTYPE=1XLUPS - core store

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages
CLR:MACLI
EX:PS
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:PS-LOOP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:PS a LOOPING b

2. REASON FOR OUTPUT

To report that the interactive diagnostic on a program store (PS) has either started looping through the specified code, or has completed the looping function.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0-13).
- b COMPLETE — Looping has terminated.
- STARTED — Looping has begun.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
DCONTABL
PSFRBSLV
MUDG--; where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=MUDG,UTYPE=1XLUPS - core store

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages
CLR:MACLI
EX:PS
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:PS-NOT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:PS a NOT STARTED - b

2. REASON FOR OUTPUT

To report when the interactive diagnostic request cannot be started for a program store (PS). This usually occurs when the unit for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0-13).
- b The reason the diagnostic was not started.

4. ACTION TO BE TAKEN

If the specified unit cannot be removed from service because there is no spare, restore a spare unit to service.

5. REFERENCES

PIDENTs
DCONTABL
PSFRBSLV
MUDG--; where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=MUDG,UTYPE=1XLUPS - core store

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM User's Manual

Input Messages
CLR:MACLI
EX:PS
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:PS-SUSP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

- [1] EX:PS a SUSPENDED
- [2] EX:PS a SUSPENDED AT PH b ADR c [d]
- [3] EX:PS a SUSPENDED AT PH b ADR c AFTER TEST e [d]
- [4] EX:PS a SUSPENDED ILLEGAL INPUT

2. REASON FOR OUTPUT

To report when an interactive diagnostic execution has been suspended for a program store (PS). Each of the four formats identifies a specific type of suspension.

Format [1] if there is no phase active.

Format [2] occurred at an address specified by the input message.

Format [3] at a point immediately following a test.

Format [4] if the input is illegal.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0-13).
- b The diagnostic phase in which the diagnostic suspended.
- c The address in the diagnostic phase at which the suspension occurred.
- d The reason the suspension occurred:
 - ADVANCE — The diagnostic has been executed up to the specified address.
 - FIRST FAILURE — The diagnostic has been suspended because the first failure was encountered.
 - PAUSE — The diagnostic has been paused at the specified address.
 - STEP — The requested number of steps have been completed.
- e The last test executed before the suspension occurred.

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

Specify another EX:PS input. If no further interactive diagnostic execution is desired, specify a STOP:MACLI input message for the appropriate subclass.

5. REFERENCES

PIDENTs

DCONTABL

PSFRBSLV

MUDG--; where -- represents all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=MUDG,UTYPE=1XLUPS - core store

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages

CLR:MACLI

EX:PS

STOP:EX

STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:PS-TERM
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:PS a TERMINATED AT PH b ADR c AFTER TEST d [FORCED]

2. REASON FOR OUTPUT

To report when the interactive diagnostic for a program store (PS) terminates early. This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the program store being diagnosed (0-13).
b	The diagnostic phase in which the termination occurred.
c	The address in the diagnostic phase at which the termination occurred.
d	The last test executed before the termination occurred.
FORCED	Indicates that the termination was unconditional. Termination in this way is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

Repair the faulty frame.

5. REFERENCES

PIDENTs
DCONTABL
PSFRBSLV
MUDG--; where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=MUDG,UTYPE=1XLUPS - core store

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM User's Manual

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Messages
CLR:MACLI
EX:PS
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:PS-TEST
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:PS a PH b c [d]
[TEST MISMATCH SUPPLEMENTARY DATA
ee ffffffff gggggggg]

2. REASON FOR OUTPUT

To report when the interactive diagnostic results are printed on a phase basis for a Program Store (PS). This occurs in the case of a partial diagnosis or a test failure.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the program store being diagnosed (0-13).
- b The diagnostic phase number for which the results are reported.
- c The results of the diagnostic:
- ATP — All tests passed.
 - CATP — All tests passed; however, some tests were skipped because of the unavailability of a system resource which was needed to perform the test.
 - NTR — No tests were executed.
 - STF — Some tests failed.
 - STF-BOF — Some tests failed and the test failure buffer overflowed.
- d An optional field that will appear only if the results are not ATP.

If CATP or NTR, this field identifies the reasons that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (40000000 00010000), tests were skipped for reasons 12 and 47.

The reasons are as follows:

Bit	Meaning
12	Scan and Signal Distributor (SSD) Out Of Service (OOS).
15	Standby Central Control (CC) out of service.
21	Master Control Complex (MCC) override in effect (ON).

SEE PROPRIETARY NOTICE ON COVER PAGE

Bit	Meaning
43	Power Monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).
46	Frame request for PWRMON active (try again).
47	Unit not in normal state.

If STF, this field gives the number of test failures in addition to the reasons that the tests were skipped. For example, if d is (7,40000000 00010000), seven tests failed, plus tests were skipped for reasons 12 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

The following appear only if the diagnostic was STF.

- e Test number of the failing test.
- f The bits that were in error; that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.
- g An optional field containing supplementary data concerning the failing test if available. This field may contain up to seven words. See diagnostic Pident for an explanation of the data.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service if possible, so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the Teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs

DCONTABL

PSFRBSLV

MUDG--; where -- represents all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=MUDG,UTYPE=1XLUPS - core store

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM User's Manual

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Messages
CLR:MACLI
EX:PS
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:PSB
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:PSB a b c [d]

2. REASON FOR OUTPUT

To report both the diagnostic results and the termination mode at the conclusion of the interactive diagnostic execution on a program store bus (PSB).

3. VARIABLE FIELD DEFINITIONS

- a The member number of the program store bus under diagnosis (0 or 1).
- b The termination mode for the diagnostic:
- ABORTED — The diagnostic was abnormally stopped because of an interrupt, error in execution, or because of a STOP:MACLI input request.
- COMPLETED — The diagnostic completed normally.
- STOPPED — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution.
- c The results of the diagnostic:
- ATP — All tests passed.
- CATP — All tests passed; however, some tests were skipped because of the unavailability of a system resource which was needed to perform the test.
- NTR — No tests were executed.
- STF — Some tests failed.
- STF-BOF — The number of failed lists has filled the buffer. Before any more tests are run, the system prints out the contents of the buffer and then clears it.
- d An optional field that will appear only if the results are not ATP.
- If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (40000000 00010000), then tests were skipped for reasons 12 and 47.

SEE PROPRIETARY NOTICE ON COVER PAGE

The reasons are as follows:

Bit	Meaning
12	Scan and signal distributor (SSD) out of service (OOS).
15	Standby central control (CC) out of service.
23	Disable auto peripheral controller (PC) in effect.
36	Store helper not available.
43	Power monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).
46	Frame request for PWRMON active (try again).
47	Unit not in normal state.

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, d is (7,40000000 00010000), seven tests failed, plus tests were skipped for reasons 12 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service if possible, so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs
DCONTABL
MBDG01
PSFRBSLV

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM User's Manual

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Messages
CLR:MACLI
EX:PSB
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:PSB-ADDR
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:PSB a ILLEGAL ADDRESS b

2. REASON FOR OUTPUT

To report that an illegal address was used for an interactive diagnostic function on a program store bus (PSB).

3. VARIABLE FIELD DEFINITIONS

- a The member number of the PSB being diagnosed (0 or 1).
- b The type of illegal address:
- ADVANCE — The address advanced to contains an illegal address.
- DOLLOOPS — The loop of code contains an illegal address.
- INVALID MUST COMPLETE PHASE IN PROGRESS — A pause was inserted in one phase and an attempt was made to start another phase before the phase was removed from the first phase.
- LOOP END — The second address specified is illegal.
- LOOP START — The first address specified is illegal.
- SUBROUTINES — The subroutine contains an illegal address.

4. ACTION TO BE TAKEN

If INVALID MUST COMPLETE PHASE IN PROGRESS , remove the pause from the first phase and retry the diagnostic.

In all other cases, correct the address and retry the diagnostic.

5. REFERENCES

PIDENTs
DCONTABL
MBDG01
PSFRBSLV

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM User's Manual

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Messages
CLR:MACLI
EX:PSB
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:PSB-ILL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:PSB a ILLEGAL PHASE

2. REASON FOR OUTPUT

To report when only illegal diagnostic phases have been requested on a partial interactive diagnostic request for a program store bus (PSB).

3. VARIABLE FIELD DEFINITIONS

a The member number of the PSB being diagnosed (0 or 1).

4. ACTION TO BE TAKEN

Check PIDENT DCONTABL for PREFIX=MBDG,UTYPE=1XLUPSB to obtain the list of valid phase numbers.

5. REFERENCES

PIDENTs
DCONTABL
MBDG01
PSFRBSLV

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages
CLR:MACLI
EX:PSB
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:PSB-LOOP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:PSB a LOOPING b

2. REASON FOR OUTPUT

To report that the interactive diagnostic on a program store bus (PSB) has either started looping through the specified code or has completed the looping function.

3. VARIABLE FIELD DEFINITIONS

a The member number of the PSB being diagnosed (0 or 1).
b COMPLETE — Looping has terminated.
 STARTED — Looping has begun.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
DCONTABL
MBDG01
PSFRBSLV

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages
CLR:MACLI
EX:PSB
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:PSB-NOT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:PSB a NOT STARTED - b

2. REASON FOR OUTPUT

To report when the interactive diagnostic request cannot be started for a program store bus (PSB). This usually occurs when the unit for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the PSB being diagnosed (0 or 1).
b The reason the diagnostic was not started.

4. ACTION TO BE TAKEN

If the specified program store bus cannot be removed from service because there is no spare, restore a spare unit to service.

5. REFERENCES

PIDENTs
DCONTABL
MBDG01
PSFRBSLV

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages
CLR:MACLI
EX:PSB
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:PSB-SUSP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

- [1] EX:PSB a SUSPENDED
- [2] EX:PSB a SUSPENDED AT PH b ADR c [d]
- [3] EX:PSB a SUSPENDED AT PH b ADR c AFTER TEST e [d]
- [4] EX:PSB a SUSPENDED ILLEGAL INPUT

2. REASON FOR OUTPUT

To report when an interactive diagnostic execution has been suspended for a program store bus (PSB). Each of the four formats identifies a specific type of suspension.

Format [1] if there is no phase active.

Format [2] at an address specified by the input message.

Format [3] at a point immediately following a test.

Format [4] if input is illegal.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The diagnostic phase in which the diagnostic suspended.
- c The address in the diagnostic phase at which the suspension occurred.
- d The reason the suspension occurred:
 - ADVANCE — The diagnostic has been executed up to the specified address.
 - FIRST FAILURE — The diagnostic has been suspended because the first failure was encountered.
 - PAUSE — The diagnostic has been paused at the specified address.
 - STEP — The requested number of steps have been completed.
- e The last test executed before the suspension occurred.

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

Specify another EX:PSB input. If no further interactive diagnostic execution is desired, specify a STOP:MACLI input message for the appropriate subclass.

5. REFERENCES

PIDENTs
DCONTABL
MBDG01
PSFRBSLV

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages
CLR:MACLI
EX:PSB
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:PSB-TERM
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:PSB a TERMINATED AT PH b ADR c AFTER TEST d [FORCED]

2. REASON FOR OUTPUT

To report when the interactive diagnostic terminates early. This early termination will only occur if further execution will cause system problems.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the program store bus (PSB) being diagnosed (0 or 1).
b	The diagnostic phase in which the termination occurred.
c	The address in the diagnostic phase at which the termination occurred.
d	The last test executed before the termination occurred.
FORCED	This indicates that the termination was unconditional. The use of terminating in this way is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

Repair the faulty frame.

5. REFERENCES

PIDENTs
DCONTABL
MBDG01
PSFRBSLV

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM User's Manual

Input Messages
CLR:MACLI
EX:PSB
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:PSB-TEST
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:PSB a PH b c [d]
[TEST MISMATCH SUPPLEMENTARY DATA
ee ffffffff gggggggg]

2. REASON FOR OUTPUT

To report the interactive diagnostic results on a phase basis for a program store bus (PSB).
This will occur in the case of a partial diagnosis or a test failure.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the program store bus being diagnosed (0 or 1).
- b The diagnostic phase number for which the results are reported.
- c The results of the diagnostic:
- ATP — All tests passed.
- CATP — All tests passed; however, some tests were skipped
 because of the unavailability of a system resource
 which was needed to perform the test.
- NTR — No tests were executed.
- STF — Some tests failed.
- STF-BOF — Some tests failed and the test failure buffer overflowed.
- d An optional field that will appear only if the results are not ATP.
- If CATP or NTR, this field identifies the reason that the tests were
 skipped in this phase. The reasons are identified by their bit position in
 the 16-digit octal number that is printed. For example, if d is (40000000
 00010000), then tests were skipped for reasons 12 and 47.

The reasons are as follows:

Bit	Meaning
12	Scan and signal distributor (SSD) out of service (OOS).
15	Standby central control (CC) out of service.
23	Disable auto peripheral controller (PC) in effect.

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Bit	Meaning
36	Store helper not available.
43	Power monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).
46	Frame request for PWRMON active (try again).
47	Unit not in normal state.

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, d is (7,40000000 00010000), seven tests failed, plus tests were skipped for reasons 12 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

The following appear only if the diagnostic was STF.

- e Test number of the failing test.
- f The bits that were in error; that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.
- g An optional field containing supplementary data concerning the failing test if available. This field may contain up to seven words. See diagnostic pident for an explanation of the data.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

5. REFERENCES

PIDENTs
DCONTABL
MBDG01
PSFRBSLV

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages
CLR:MACLI
EX:PSB
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:PUB
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:PUB a:b c d e [f]

2. REASON FOR OUTPUT

To specify both the diagnostics results and the termination mode. This message is printed at the conclusion of the interactive diagnostic execution.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the peripheral unit bus (PUB) under diagnosis.
- b The helper unit type.
- c The helper member number.
- d The termination mode for the diagnostic:
- ABORTED — The diagnostic was abnormally stopped due to an interrupt, error in execution, or due to a STOP:MACLI or STOP:EX input request
- COMPLETED — The diagnostic completed normally
- STOPPED — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution
- e The results of the diagnostic:
- ATP — All tests passed.
- CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test
- NTR — No tests were executed
- STF — Some tests failed
- STF-BOF — The number of failed tests has filled the buffer. Before any more tests are run the system prints out the contents of the buffer and then clears it.
- f An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if f is (40000000 00001000), then tests were skipped for reasons 9 and 47.

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The reasons are as follows:

BIT	REASONS FOR TESTS SKIPPED
0	Peripheral unit bus (PUB) 0 out-of-service
1	PUB 1 out-of-service
2	Primary signaling processor (SP) pulse points out-of-service
3	Secondary SP pulse points out-of-service
4	Mate unit out-of-service
5	Power control switch in request out-of-service (ROS) position or diagnostic requested from power control switch
6	Central controller (CC) 0 out-of-service
7	CC 1 out-of-service
12	Helper controller 0 out-of-service
13	Helper controller 1 out-of-service
24	SP scan / distribute points out-of-service
25	SP bus out-of-service
26	Interface peripheral unit bus (IPUB) out-of-service
27	DTRIFAL return failed

If STF, this field gives the number of failing phases, number of failing tests, and trouble number. For example, (2,9,00101545) indicates 2 phases failed, 9 tests failed, and a trouble number of 00101545.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed. Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

5. REFERENCES

PIDENT
PUDGPB--

Practice 234-180-020, *Diagnostic Language - DIAL*
Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Messages
EX:PUB
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:PUB-ADDR
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:PUB a:b c ILLEGAL ADDRESS d

2. REASON FOR OUTPUT

To indicate that an illegal address was used for an interactive diagnostic function on a peripheral unit bus (PUB).

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | The member number of the PUB under diagnosis (0 or 1). |
| b | The helper unit type |
| c | The helper member number. |
| d | The type of illegal address: |
| ADVANCE | — The address advanced to contains an illegal address. |
| DOLLOOPS | — The loop of code contains an illegal address. |
| INVALID MUST COMPLETE PHASE IN PROGRESS | — A pause was inserted in one phase and an attempt was made to start another phase before the pause was removed from the first phase. |
| LOOP END | — The second address specified is illegal. |
| LOOP START | — The first address specified is illegal. |
| SUBROUTINES | — The subroutine contains an illegal address. |

4. ACTION TO BE TAKEN

If d = INVALID...PROGRESS, remove the pause from the first phase and retry the diagnostic.

In all other cases, correct the address and retry the diagnostic.

5. REFERENCES

PIDENT
PUDGPB--

Practice 234-180-020, *Diagnostic Language - DIAL*
Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:PUB-ILL
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:PUB a:b c ILLEGAL PHASE

2. REASON FOR OUTPUT

To print whenever one or more illegal diagnostic phases have been requested. The illegal phase will not be executed; however, all valid phases will be run.

3. VARIABLE FIELD DEFINITIONS

a The member number of the unit being diagnosed (0 or 1).
b The helper unit type.
c The helper member number.

4. ACTION TO BE TAKEN

Check the *Input Message Document* for the list of valid phase numbers.

5. REFERENCES

PIDENTs
DCONTOLL
PUDGPB--

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:PUB-LOOP
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:PUB a:b c LOOPING d

2. REASON FOR OUTPUT

To indicate that the interactive diagnostic on a peripheral unit bus (PUB) has either started looping through the specified code, or has completed the looping function.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | The member number of the unit being diagnosed (0 or 1). |
| b | The helper unit type. |
| c | The helper member number. |
| d | COMPLETE — Looping has terminated.
STARTED — Looping has begun. |

4. ACTION TO BE TAKEN

If desired, stop an infinite loop using the following input message:

EX:PUB a!

5. REFERENCES

PIDENT
PUDGPB--

Practice 234-180-020, *Diagnostic Language - DIAL*
Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Message
EX:PUB

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:PUB-NOT
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:PUB a:b c NOT STARTED - d

2. REASON FOR OUTPUT

To print whenever the interactive diagnostic request cannot be started. This is usually when the unit for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | The member number of the unit being diagnosed. |
| b | The helper unit type. |
| c | The helper member number. |
| d | The reason the diagnostic was not started. |

4. ACTION TO BE TAKEN

If the specified unit cannot be removed from service because there is no spare, restore a spare unit to service.

5. REFERENCES

PIDENTs
MCFWPEMO
PUDGPB--

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:PUB-SUSP
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] EX:PUB a:b c SUSPENDED
- [2] EX:PUB a:b c SUSPENDED AT PH d ADR e [g]
- [3] EX:PUB a:b c SUSPENDED AT PH d ADR e AFTER TEST f [g]
- [4] EX:PUB a:b c SUSPENDED ILLEGAL INPUT

2. REASON FOR OUTPUT

To print whenever interactive diagnostic execution is suspended. Each of the four formats identifies a specific type of suspension:

Format [1] is printed if there was no phase active.

Format [2] is printed if the suspension occurred at the address specified by the input message.

Format [3] is printed if the suspension occurred at the point immediately following a test.

Format [4] is printed if the diagnostic was suspended because the input was illegal.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The helper unit type, if specified.
- c The helper member number, if specified.
- d The diagnostic phase in which the diagnostic suspended. If no phase was active, then this phase does not occur.
- e The address in the diagnostic phase at which the suspension occurred.
- f The last test executed before the suspension occurred.
- g The reason the suspension occurred:
 - ADVANCE — The diagnostic has been executed up to the specified address
 - FIRST FAILURE — The diagnostic has been suspended because the first failure has been encountered
 - PAUSE — The diagnostic has been paused at the specified address

SEE PROPRIETARY NOTICE ON COVER PAGE

STEP — The requested number of steps have been completed

NOTE: If there is no phase active this field will not be specified.

4. ACTION TO BE TAKEN

Specify another EX:PUB input message. If no further interactive diagnostic execution is desired, specify a STOP:MACLI or STOP:EX input message .

5. REFERENCES

PIDENTs
PUDGCONT
PUDGPB--

Practice 234-180-020, *Diagnostic Language - DIAL*
Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Messages
EX:PUB
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:PUB-TERM
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:PUB a:b c TERMINATED AT PH d ADR e AFTER TEST f [FORCED]

2. REASON FOR OUTPUT

To print whenever the interactive diagnostic terminates early. This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the unit being diagnosed.
b	The helper unit type, if specified.
c	The helper member number, if specified.
d	The diagnostic phase in which the termination occurred.
e	The address in the diagnostic phase (or subroutine) at which the termination occurred.
f	The last test executed before the termination occurred.
FORCED	The termination is unconditional. Termination in this way is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

Repair the faulty frame.

5. REFERENCES

PIDENT
PUDGPB--

Practice 234-180-020, *Diagnostic Language - DIAL*
Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:PUB-TEST
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

```
EX:PUB a:b c PH d e [f]
[TEST MISMATCH SUPPLEMENTARY DATA
  g hhhhhhhh iiiiiiii jjjjjjjj kkkkkkkk llllllll mmmmmmmm
    nnnnnnnn ooooooooo pppppppp]
```

2. REASON FOR OUTPUT

To report the interactive diagnostic results on a phase basis. This occurs in the case of a partial diagnosis or a test failure.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The helper unit type, if specified.
- c The helper member number, if specified.
- d The diagnostic phase number for which the results are reported.
- e The results of the diagnostic:
 - ATP — All tests passed
 - CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test
 - NTR — No tests were executed
 - STF — Some tests failed
 - STF-BOF — Some tests failed and the raw data buffer overflowed. The phase has not been completed.
- f An optional field that will appear only if the results were not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if f is (40000000 00001000), then tests were skipped for reasons 9 and 47.

SEE PROPRIETARY NOTICE ON COVER PAGE

The reasons are as follows:

BIT	REASONS FOR TESTS SKIPPED
0	Peripheral unit bus (PUB) 0 out-of-service
1	PUB 1 out-of-service
2	Primary signaling processor (SP) pulse points out-of-service
3	Secondary SP pulse points out-of-service
4	Mate unit out-of-service
5	Power control switch in request out-of-service (ROS) position or diagnostic requested from power control switch
6	Central controller (CC) 0 out-of-service
7	CC 1 out-of-service
11	PUB not duplex
12	Helper controller 0 out-of-service
13	Helper controller 1 out-of-service
24	SP scan / distribute points out-of-service
25	SP bus out-of-service
26	Interface peripheral unit bus (IPUB) out-of-service
27	DTFRIGAL return failed

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, c is (7,40000000 00001000), seven tests failed, plus tests were skipped for reasons 9 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

The following appear only if the diagnostic was STF.

g	The test number of the failing test.
h	The bits which were in error; that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.
i	RAW response from the unit.
j, k	Information concerning the test being executed. Details of j and k are specified in the diagnostic listing.
l	The address in the phase (or subroutine) of the test that failed.

SEE PROPRIETARY NOTICE ON COVER PAGE

m	Bits 14-0 contain information for the TLP programs. Bits 23-21 contain the count of the number of words of supplementary data that follows. Bits 20-18 contain the count of the number of words of DOLOOP data that follows. Bits 17-15 contain the count of the number of words of subroutine data that follows.
n	Supplementary data words. Variable n is repeated x times, where x is bits 23-21 of m. This data supplies information about the test being executed. The last supplementary data word specified is printed first.
o	DOLOOP data words. Variable o is repeated y times, where y is bits 20-18 of m. This data is the value of the DOLOOP variables at the time of the test failure. The value of the innermost DOLOOP is printed first.
p	Subroutine data words. Variable p is repeated z times, where z is bits 17-15 of m. This data is the address of the callsubs which led up to this point in the diagnostic. The address of the last callsub is printed first.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

5. REFERENCES

PIDENT
PUDGPB--

Practice 234-180-020, *Diagnostic Language - DIAL*
Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Message
EX:PUB

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4ESS™ 1B Processor Input/Output Message Error Reporting Form

Use this form to report errors and make suggestions for improving the contents of the manual or quarterly release. If an error relates to a specific message, please write your comments on a TTY output or a photocopy of the message documentation and attach it to this form.

Manual: Input ☐ Output ☐

Generic: _____ Issue: _____

Quarterly Release (If applicable) : _____

Message ID(s): _____

Comments: _____

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Generic: 4E27

Issue: 1.8.1

	Excellent	Good	Fair	Poor
Ease of Use				
Accuracy				
Completeness				
Organization				
Appearance				
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Clarity				
Front Matter				

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To learn procedures, To get background information, As a quick reference,
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Lucent Technologies
Bell Labs Innovations



4ESSTM Switch
1B Processor
Output Messages
Volume 3
EX(R-Z) - REPEAT

OM-4B000-01
Issue 1.8.1
July 2002

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VOLUME 3 ALPHABETICAL INDEX

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EX:SCLK	EX:SCLK-SUSP	4E19	1
EX:SCLK	EX:SCLK-TERM	4E19	1.1
EX:SCLK	EX:SCLK-TEST	4E19	1.1
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EX:SCS	EX:SCS-SUSP	4E19	1
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Volume 3 Alphabetical Index (Continued)

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INH:SP	INH:SP	4E19	1
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Volume 3 Alphabetical Index (Continued)

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OP:ANNSTAT	OP:ANNSTAT	4E19	1
OP:APS 0	OP:APS-0	4E19	1
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OP:CGALIST	OP:CGALIST	4E19	1
OP:CHAN	OP:CHAN	4E19	1
OP:CSSTATUS	OP:CSSTATUS	4E21	1.2
OP:DCONN	OP:DCONN	4E19	1
OP:DGSTAT	OP:DGSTAT	4E21	1.3
OP:DTAC	OP:DTAC	4E21	1.2
OP:DUSTATUS	OP:DUSTATUS	4E19	1
OP:ERAP ABORTED	OP:ERAP-ABORT	4E19	1

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MESSAGE NAME	MESSAGE ID	START	GENERIC ISSUE
OP:ERAPCOND	OP:ERAPCOND	4E19	1
OP:ERAPCOND;SUM	OP:ERAPCOND-SM	4E19	1
OP:ERAPDATA	OP:ERAPDATA	4E19	1
OP:ERAPDATA ABORTED	OP:ERAPDATA-AB	4E19	1
OP:ERAPSRES	OP:ERAPSRES	4E19	1
OP:ERAPSRES;COND	OP:ERAPSRES-CO	4E19	1
OP:ERAPSRES;SUM	OP:ERAPSRES-SM	4E19	1
OP:ERAPSUM	OP:ERAPSUM	4E19	1
OP:ERAPSUM;DETL	OP:ERAPSUM-DETL	4E19	1
OP:FERAHIST	OP:FERAHIST	4E19	1
OP:FHCSTAT	OP:FHCSTAT	4E19	1
OP:IFBSTAT	OP:IFBSTAT	4E19	1
OP:INHINT	OP:INHINT	4E19	1
OP:IODSC	OP:IODSC	4E19	1
OP:LCHAN	OP:LCHAN	4E19	1
OP:LIBSTAT	OP:LIBSTAT	4E22	1.4
OP:MACLI	OP:MACLI	4E20	1.1
OP:MEASREPT	OP:MEASREPT	4E19	1
OP:MEASREPT	OP:MEASREPT-MS	4E19	1
OP:MEASREPT	OP:MEASREPT-SP	4E19	1
OP:MEASREPT	OP:MEASREPT-TS	4E19	1
OP:MEASTSI	OP:MEASTSI	4E19	1
OP:MANUAL NETWORK	OP:MNMC	4E19	1
OP:MONTAB	OP:MONTAB	4E19	1
OP:MONTAB	OP:MONTAB-EMPT	4E19	1
OP:MSGRCD,FS	OP:MSGRCD	4E19	1
OP:MSGRCD,FS	OP:MSGRCD-FS	4E19	1
OP:MUPAUD	OP:MUPAUD	4E19	1.3
OP:MUPSTAT	OP:MUPSTAT	4E20	1.1
OP:NCATANOM	OP:NCATANOM	4E19	1
OP:NCSU	OP:NCSU-AARSBO	4E19	1
OP:NCSU	OP:NCSU-AIA	4E19	1
OP:NCSU	OP:NCSU-ALTOUT	4E19	1
OP:NCSU	OP:NCSU-NRE	4E19	1
OP:NCSU	OP:NCSU-RAASBO	4E19	1
OP:NCSU	OP:NCSU-REGOUT	4E19	1
OP:NCSU	OP:NCSU-ROASBY	4E19	1
OP:NCSU	OP:NCSU-RSOAAO	4E19	1
OP:NCSU	OP:NCSU-STNORM	4E19	1
OP:NCSU	OP:NCSU-UNEQPT	4E19	1

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MESSAGE NAME	MESSAGE ID	START GENERIC ISSUE	
OP:NTWKTAB	OP:NTWKTAB	4E19	1
OP:OA	OP:OA	4E19	1
OP:OOSUNITS	OP:OOSUNITS	4E19	1.1
OP:ORNU COMPLETED	OP:ORNU-COMPLET	4E19	1
OP:OVERLOAD	OP:OVERLOAD	4E19	1.3
OP:PERIFINH	OP:PERIFINH	4E22	1.3
OP:PHSEHST	OP:PHSEHST	4E19	1
OP:PMOS	OP:PMOS	4E24R2	1.6
OP:PMSTAT	OP:PMSTAT	4E22	1.3
OP:PSSTATUS	OP:PSSTATUS	4E21	1.2
OP:RASTAT	OP:RASTAT	4E19	1
OP:RCBORNU	OP:RCBORNU	4E19	1
OP:RCBSPACE	OP:RCBSPACE	4E19	1
OP:RCRORNU MSG STOPPED	OP:RCRORNU	4E19	1
OP:RCRORNU	OP:RCRORNU-ROL	4E19	1
OP:RINGMNTR	OP:RINGMNTR	4E19	1
OP:RTSTAT	OP:RTSTAT	4E19	1
OP:SHAN	OP:SHAN	4E19	1.8
OP:SCRN	OP:SCRN	4E19	1.4
OP:SDC	OP:SDC	4E24R2	1.6
OP:SDC (APS SERVICE DEGRADING CONDITIONS)	OP:SDC-APS	4E19	1
OP:SDEXMLST	OP:SDEXMLST	4E19	1
OP:SDLST	OP:SDLST	4E19	1.8
OP:SDYGRP	OP:SDYGRP	4E19	1
OP:SECTORS	OP:SECTORS	4E19	1
OP:SFISTAT	OP:SFISTAT	4E23 only	1.5
OP:SLCSTAT	OP:SLCSTAT	4E19	1
OP:SLKSTAT	OP:SLKSTAT-1	4E19	1
OP:SLKSTAT	OP:SLKSTAT-2	4E19	1
OP:SOAK	OP:SOAK	4E19	1
OP:SSN	OP:SSN-CBO	4E19	1
OP:SSN	OP:SSN-DTI	4E19	1
OP:SSN	OP:SSN-ESM	4E19	1
OP:SSN	OP:SSN-HCE	4E19	1
OP:SSN	OP:SSN-IPC	4E19	1
OP:SSN	OP:SSN-ISN	4E19	1
OP:SSN	OP:SSN-LCE	4E19	1
OP:SSN	OP:SSN-LINKSTAT	4E19	1
OP:SSN	OP:SSN-RT	4E19	1

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MESSAGE NAME	MESSAGE ID	START GENERIC ISSUE	
OP:SSN	OP:SSN-RVT	4E19	1
OP:SSN	OP:SSN-SAL	4E19	1
OP:SSN	OP:SSN-SAU	4E19	1
OP:SSN	OP:SSN-SLKSTAT	4E19	1
OP:SSN	OP:SSN-STAT	4E19	1
OP:SSN	OP:SSN-TST	4E19	1
OP:SVCSTAT	OP:SVCSTAT	4E19	1.1
OP:SYNCLIST	OP:SYNCLIST	4E20	1.3
OP:TANTOTAN	OP:TANTOTAN	4E19	1
OP:TERAWTSG	OP:TERAWTSG	4E19	1
OP:TLPQUEUE	OP:TLPQUEUE	4E22	1.4
OP:TONESTAT	OP:TONESTAT	4E19	1
OP:TRAPSTAT	OP:TRAPSTAT	4E19	1
OP:TRKHOLD	OP:TRKHOLD	4E19	1
OP:TRKSTAT	OP:TRKSTAT	4E19	1.7
OP:TSGHC	OP:TSGHC	4E24	1.5
OP:TSGHC,CIN a;LINK	OP:TSGHC-LINK	4E19	1
OP:TSGSTAT;DETL	OP:TSGSTAT-DTL	4E19	1
OP:TSGSTAT;SUM	OP:TSGSTAT-SUM	4E19	1
OP:TSIBP	OP:TSIBP	4E24R2	1.6
OP:UTILDS	OP:UTILDS-1	4E19	1
OP:UTILDS	OP:UTILDS-2	4E19	1
OP:UTILMTCH	OP:UTILMTCH	4E21	1.2
OP:UTLDSTAB	OP:UTLDSTAB	4E19	1
OP:VCNT	OP:VCNT-THRESH	4E19	1
OP:VCNT	OP:VCNT-WORST	4E19	1
OP:XALM	OP:XALM	4E21	1.3
OP:XPWRSTAT	OP:XPWRSTAT	4E19	1
ORD:	ORD:0	4E19	1
ORD:DS1LOOP	ORD:DS1LOOP	4E22	1.3
ORD:DS3LOOP	ORD:DS3LOOP	4E22	1.6
ORD:ES	ORD:ES	4E19	1
ORD:{SCAN SD TBITS}	ORD:F	4E19	1
ORD:RF	ORD:RF	4E19	1
ORD:TANTOTAN	ORD:TANTOTAN	4E19	1
ORD:TL	ORD:TL	4E19	1
ORD:VSS	ORD:VSS-RETRY	4E19	1
PCRV:	PCRV:0	4E21	1.2
RC:COMMENT	RC:COMMENT	4E19	1
RC:IN PROGRESS	RC:IN-PROGRESS	4E19	1

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MESSAGE NAME	MESSAGE ID	START GENERIC ISSUE	
RC:MESSAGE REJECTED	RC:MESSAGE-REJ	4E19	1
RC:MISC	RC:MISC	4E19	1
RC:ORNU	RC:ORNU	4E19	1
RC:ORNU a SUCCESSFULLY	RC:ORNU-ACCEPT	4E19	1
RC:ORNU a STOPPED:INTERNAL	RC:ORNU-INTERN	4E19	1
RC:ORNU a STOPPED:MESSAGE	RC:ORNU-MESSAG	4E19	1
RC:ORNU a REJECTED	RC:ORNU-REJ-AL	4E19	1
RC:ORNU a REJECTED FOR	RC:ORNU-REJ-FOR	4E19	1
RC:ORNU	RC:ORNU-REJ-INC	4E19	1
RC:ORNU a REJECTED	RC:ORNU-REJ-NO	4E19	1
RC:STOPPE	RC:STOPPED	4E19	1
RCCNL:RCBORNU	RCCNL:RCBORN-A	4E19	1
RCCNL:RCBORNU	RCCNL:RCBORN-S	4E19	1
RCCNL:ROLLBACK	RCCNL:RLBK-EMPT	4E19	1
RCCNL:ROLLBACK	RCCNL:RLBK-LKO	4E19	1
RCCNL:ROLLBACK	RCCNL:RLBK-MKEY	4E19	1
RCCNL:ROLLBACK	RCCNL:RLBK-REST	4E19	1
RCCNL:ROLLBACK	RCCNL:ROLLBACK	4E19	1
RECOVERY:SR	RECOVERY:SR	4E21	1.2
REPEAT LATER	REPEAT:LATER	4E19	1

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ID EX:SCLK
WORK CENTER.. MAC, MOC, NMOC, TEC,
TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] EX:SCLK 0,a b:SCLK 0,{NCSU 0|CONTR g|IPUB h}
[2] EX:SCLK 0,a b:NCLK 0,CHAIN f c d [e]

2. REASON FOR OUTPUT

To specify both the diagnostic results and the termination mode.

Format [1] prints if the network clock synchronization unit (NCSU) is specified in the EX:SCLK input message.

Format [2] prints as a result of an EX:SCLK input message that does not specify the NCSU. This message is printed at the conclusion of the interactive diagnostic execution.

3. VARIABLE FIELD DEFINITIONS

- a The type of subunit for which the diagnostic was requested.
- b The number of the subunit under diagnosis.
- c The termination mode for the diagnostic:
- ABORTED — The diagnostic was abnormally stopped due to an interrupt, error in execution, or due to a STOP:MACLI input request.
 - COMPLETED — The diagnostic completed normally.
 - STOPPED — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution.
- d The results of the diagnostic:
- ATP — All tests passed.
 - CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.
 - NTR — No tests were executed.
 - STF — Some tests failed.
 - STF-BOF — The number of failed tests has filled the buffer. Before any more tests are run the system prints out the contents of the buffer and then clears it.

SEE PROPRIETARY NOTICE ON COVER PAGE

e An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if e is (40000000 00001000), then tests were skipped for reasons 9 and 47.

The reasons are as follows:

BIT	REASONS FOR TESTS SKIPPED
0	Peripheral unit bus (PUB) 0 out-of-service
1	PUB 1 out-of-service
2	Primary signaling processor (SP) pulse points out-of-service
3	Secondary SP pulse points out-of-service
4	Mate unit out-of-service
5	Power control switch in request out-of-service (ROS) position or diagnostic requested from power control switch
11	PUB not duplex
12	System clock (SCLK) controller (CONTR) 0 out-of-service
13	SCLK CONTR 1 out-of-service
14	NCLK CHAIN 0 out-of-service
15	CHAIN 1 out-of-service
16	CHAIN 2 out-of-service
17	CHAIN 3 out-of-service
18	NCLK MATE CHAIN 0-1 out-of-service
19	Network clock (NCLK) mate CHAIN 2-3 out-of-service
20	DS1A T1 line unequipped
23	Network clock synchronization unit (NCSU) out-of-service
24	SP scan / distribute points out-of-service
25	SP bus out-of-service
26	Interface peripheral unit bus (IPUB) out-of-service

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If subunit is BUS:

BIT REASONS FOR TESTS SKIPPED

6	Central controller (CC) 0 out-of-service
7	CC 1 out-of-service
12	Helper controller 0 out-of-service
13	Helper controller 1 out-of-service

If STF, this field gives the number of failing phases, number of failing tests, trouble number. For example, (2,9,00101545) indicates 2 phases failed, 9 tests failed, and a trouble number of 00101545.

f	Chain submember number (0-3).
g	Controller number (0 or 1).
h	Interface peripheral unit bus (IPUB) number (0 or 1).

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs

PUDGSC	- if subunit type is CONTR
PUDGSC99	- if subunit type is IPUB

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Messages

EX:SCLK
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:SCLK-ADDR
WORK CENTER.. MAC, MOC, NMOC, TEC,
TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:SCLK 0, a b ILLEGAL ADDRESS c

2. REASON FOR OUTPUT

To indicate than an illegal address was used for an interactive diagnostic function on a system clock (SCLK).

3. VARIABLE FIELD DEFINITIONS

- a The subunit being diagnosed.
- b The submember number of the subunit.
- c The type of illegal address:
- ADVANCE — The address advanced to contains an illegal address.
- DOLLOOPS — The loop of code contains an illegal address.
- INVALID MUST COMPLETE PHASE IN PROGRESS — A pause was inserted in one phase and an attempt was made to start another phase before the pause was removed from the first phase.
- LOOP END — The second address specified is illegal.
- LOOP START — The first address specified is illegal.
- SUBROUTINES — The subroutine contains an illegal address.

4. ACTION TO BE TAKEN

If c= INVALID...PROGRESS, remove the pause from the first phase and retry the diagnostic.

In all other cases correct the address and retry the diagnostic.

5. REFERENCES

PIDENTs
PUDGSC
PUDGSC99 - if subunit specified is IPUB

SEE PROPRIETARY NOTICE ON COVER PAGE

Practice 234-180-020, *Diagnostic Language - DIAL*
Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:SCLK-ILL
WORK CENTER.. MAC, MOC, NMOC, TEC,
 TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:SCLK 0, a b ILLEGAL PHASE

2. REASON FOR OUTPUT

To print whenever one or more illegal diagnostic phases have been requested on a partial diagnostic request. The illegal phase will not be executed; however, all valid phases will be run.

3. VARIABLE FIELD DEFINITIONS

a The subunit type being diagnosed.
b The submember number of the subunit being diagnosed.

4. ACTION TO BE TAKEN

Check the *Input Message Document* for the list of valid phase numbers.

5. REFERENCES

PIDENT
DCONTOLL

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:SCLK-LOOP
WORK CENTER.. MAC, MOC, NMOC, TEC,
 TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:SCLK 0, a b LOOPING c

2. REASON FOR OUTPUT

To indicate that the interactive diagnostic on the system clock (SCLK) has either started looping through the specified code, or has completed the looping function.

3. VARIABLE FIELD DEFINITIONS

a The subunit type being diagnosed.
b The submember number of the subunit being diagnosed.
c COMPLETE — Looping has terminated.
 STARTED — Looping has begun.

4. ACTION TO BE TAKEN

If desired, stop an infinite loop using the following input message:

EX:SCLK 0!

5. REFERENCES

PIDENTs
PUDGSC
PUDGSC99 - if subunit specified is IPUB

Practice 234-180-020, *Diagnostic Language - DIAL*
Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Message
EX:SCLK

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:SCLK-NOT
WORK CENTER.. MAC, MOC, NMOC, TEC,
TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:SCLK 0, a b NOT STARTED - c

2. REASON FOR OUTPUT

To print whenever the interactive diagnostic request cannot be started. This is usually when the unit for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

- a The subunit type being diagnosed.
- b The submember number of the subunit being diagnosed.
- c The reason the diagnostic was not started.

4. ACTION TO BE TAKEN

If the specified unit cannot be removed from service because there is no spare, restore a spare unit to service.

5. REFERENCES

PIDENT
MCFWPEDO

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ID EX:SCLK-SUSP
WORK CENTER.. MAC, MOC, NMOC, TEC,
TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] EX:SCLK 0,a b SUSPENDED
- [2] EX:SCLK 0,a b SUSPENDED AT PH c ADR d [f]
- [3] EX:SCLK 0,a b SUSPENDED AT PH c ADR d AFTER TEST e [f]
- [4] EX:SCLK 0,a b SUSPENDED ILLEGAL INPUT

2. REASON FOR OUTPUT

To print whenever interactive diagnostic execution is suspended. Each of the four formats identifies a specific type of suspension:

Format [1] is printed if there was no phase active.

Format [2] is printed if the suspension occurred at the address specified by the input message.

Format [3] is printed if the suspension occurred at the point immediately following a test.

Format [4] is printed if the diagnostic was suspended because the input was illegal.

3. VARIABLE FIELD DEFINITIONS

- a The subunit type being diagnosed.
- b The submember number of the subunit being diagnosed.
- c The diagnostic phase in which the diagnostic suspended. If no phase was active, then this phase does not occur.
- d The address in the diagnostic phase at which the suspension occurred.
- e The last test executed before the suspension occurred.
- f The reason the suspension occurred:
 - ADVANCE — The diagnostic has been executed up to the specified address.
 - FIRST FAILURE — The diagnostic has been suspended because the first failure has been encountered.
 - PAUSE — The diagnostic has been paused at the specified address.

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STEP — The requested number of steps have been completed.

NOTE: If there is no phase active, this field will not be specified.

4. ACTION TO BE TAKEN

Specify another EX:SCLK input. If no further interactive diagnostic execution is desired, specify a STOP:MACLI or STOP:EX input message.

5. REFERENCES

PIDENTs
PUDGSC
PUDGSC99 - if subunit specified is IPUB

Practice 234-180-020, *Diagnostic Language - DIAL*
Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Messages
EX:SCLK
STOP:EX
STOP:MACLI

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ID EX:SCLK-TERM
WORK CENTER.. MAC, MOC, NMOC, TEC,
TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:SCLK 0, a b TERMINATED AT PH c ADR d AFTER TEST e [FORCED]

2. REASON FOR OUTPUT

To print whenever the interactive diagnostic terminates early. This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

a	The subunit type being diagnosed.
b	The submember number of the subunit being diagnosed.
c	The diagnostic phase in which the termination occurred.
d	The address in the diagnostic phase (or subroutine) at which the termination occurred.
e	The last test executed before the termination occurred.
FORCED	The termination is unconditional. Termination in this way is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

Repair the faulty frame.

5. REFERENCES

PIDENTs

PUDGSC-- if subunit type is CONTR

PUDGSC99 if subunit type is IPUB

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

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ID EX:SCLK-TEST
WORK CENTER.. MAC, MOC, NMOC, TEC,
TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:SCLK 0, a b PH c d [e]
[TEST MISMATCH SUPPLEMENTARY DATA
f gggggggg hhhhhhhh iiiiiiiii jjjjjjjj kkkkkkkk llllllll
mmmmmmmm nnnnnnnn ooooooooo]

2. REASON FOR OUTPUT

To print whenever the interactive diagnostic results are printed on a phase basis. This occurs in the case of a partial diagnosis or a test failure.

3. VARIABLE FIELD DEFINITIONS

- a The subunit type being diagnosed.
- b The submember number of subunit being diagnosed.
- c The diagnostic phase number for which the results are reported.
- d The results of the diagnostic:
 - ATP — All tests passed.
 - CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.
 - NTR — No tests were executed.
 - STF — Some tests failed.
 - STF-BOF — Some tests failed and the raw data buffer overflowed. The phase has not been completed.
- e An optional field that will appear only if the results were not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if e is (40000000 00001000), then tests were skipped for reasons 9 and 47.

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The reasons are as follows:

BIT	REASONS FOR TESTS SKIPPED
0	Peripheral unit bus (PUB) 0 out-of-service
1	PUB 1 out-of-service
2	Primary signaling processor (SP) pulse points out-of-service
3	Secondary SP pulse points out-of-service
4	Mate unit out-of-service
5	Power control switch in request out-of-service (ROS) position or diagnostic requested from power control switch
11	PUB not duplex
12	System clock (SCLK) CONTR 0 out-of-service
13	SCLK CONTR 1 out-of-service
14	Network clock (NCLK) CHAIN 0 out-of-service
15	CHAIN 1 out-of-service
16	CHAIN 2 out-of-service
17	CHAIN 3 out-of-service
18	NCLK MATE CHAIN 0-1 out-of-service
19	NCLK mate CHAIN 2-3 out-of-service
20	DS1A T1 line unequipped
21	DS1B T1 line unequipped
22	BSRF unequipped
23	Network clock synchronization unit (NCSU) out-of-service
24	SP scan / distribute points out-of-service
25	SP bus out-of-service
26	Interface peripheral unit bus (IPUB) out-of-service

If subunit is BUS:

BIT	REASONS FOR TESTS SKIPPED
6	Central controller (CC) 0 out-of-service
7	CC 1 out-of-service
12	Helper controller 0 out-of-service
13	Helper controller 1 out-of-service

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If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, e is (7,40000000 00001000), seven tests failed, plus tests were skipped for reasons 9 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

The following appear only if the diagnostic was STF:

- | | |
|------|--|
| f | The test number of the failing test. |
| g | The bits which were in error; that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit. |
| h | RAW response from the unit. |
| i, j | Information concerning the test being executed. Details of i and j are specified in the diagnostic listing. |
| k | The address in the phase (or subroutine) of the test that failed. |
| l | Bits 14-0 contain information for the TLP programs. Bits 23-21 contain the count of the number of words of supplementary data that follows. Bits 20-18 contain the count of the number of words of DOLLOOP data that follows. Bits 17-15 contain the count of the number of words of subroutine data that follows. |
| m | Supplementary data words. Variable m is repeated x times, where x is bits 23-21 of l. This data supplies information about the test being executed. The last supplementary data word specified is printed first. |
| n | DOLLOOP data words. Variable n is repeated y times, where y is bits 20-18 of l. This data is the value of the DOLLOOP variables at the time of the test failure. The value of the innermost DOLLOOP is printed first. |
| o | Subroutine data words. Variable o is repeated z times, where z is bits 17-15 of l. This data is the address of the callsubs which led up to this point in the diagnostic. The address of the last callsub is printed first. |

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, the unit should be repaired as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

5. REFERENCES

- PIDENTs
PUDGSC - if subunit type is CONTR (MT=1)
PUDGSC99 - if subunit type is IPUB

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Practice 234-180-020, *Diagnostic Language - DIAL*
Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Message
EX:SCLK

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ID EX:SCS
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:SCS a b c:PUB d e f [g]

2. REASON FOR OUTPUT

To specify both the diagnostic results and the termination mode at the conclusion of the diagnostic execution on a service circuit system (SCS).

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | Member number of the SCS under diagnosis. |
| b | Type of subunit for which the diagnostic was requested. |
| c | Number of the subunit under diagnosis. |
| d | Helper peripheral unit bus (PUB) that was requested. |
| e | Termination mode for the diagnostic:

ABORTED — Diagnostic abnormally stopped because of an interrupt, error in execution, or a STOP:MACLI input request.

COMPLETED — Diagnostic completed normally.

STOPPED — Diagnostic terminated under program control since further testing would not improve diagnostic resolution. |
| f | The results of the diagnostic:

ATP — All tests passed.

CATP — All tests passed; however, some tests were skipped because of the unavailability of a system resource which was needed to perform the test.

NTR — No tests were executed.

STF — Some tests failed.

STF-BOF — The number of failed tests has filled the buffer. Before any more tests are run, the system prints out the contents of the buffer and then clears it. |

SEE PROPRIETARY NOTICE ON COVER PAGE

g An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if g is (00000001 00001000), then tests were skipped for reasons 9 and 24. The reasons are contained in Table 1.

If STF, this field gives the number of failing phases, number of failing tests, trouble number. For example, (2,9, 00101545) indicates two phases failed, nine tests failed, and a trouble number of 0010545.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

5. REFERENCES

PIDENTs

PUDGSS - if subunit type is CONTR

PUDGSS99 - if subunit type is IPUB

PUDGSV - if subunit type is SCU

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Message

STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

TABLE 1
SCS DIAGNOSTIC CATP CODES

Memory Word: DG1CATP

BIT	SYMBOL	FUNCTION
0	DG4CATPPUB0	Peripheral unit bus (PUB) 0 out-of-service
1	DG4CATPPUB1	PUB 1 out-of-service
2	DG4CATPSP0	Base signaling processor (SP) frame out-of-service
3	DG4CATPSP1	Duplicated SP frame out-of-service
4	DG4CATPMATE	Mate out-of-service
5	DG4CATPROS	Power converter in request out-of-service (ROS) state
6	SSNCATPNOPMONTST	Power monitor tests skipped on manual ROS test
9	DG4CATPMI	Other frame responding to this frame's member interrogation
10	DG4CATPGI	Other frame responding to this frame's group interrogation
11	DG4CATPPUBD	PUB not duplex
12	SS4CATPAPUF	Other frame responding to autonomous peripheral unit failure (APUF) clock interrogation
13	SS4CATPAPUT	Other frame responding to autonomous peripheral unit trouble (APUT) clock interrogation
15	SS4CATPAPUB	Other frame responding to autonomous peripheral unit bus (APUB) clock interrogation
16	SS4CATPPHP	Some other frame responding to PHP polling
17	SS4CATPPLP	Some other frame responding to PLP polling
18	SS4CATPHDUNEQ	HDU is not equipped
19	SS4CATPEBLNKNTST	Unused EBI link tests skipped
20	SS4CATPPDG	Some other frame responding to PDG polling
21	SS4CATPPSZ	Some other frame responding to PSZ polling
22	SS4CATPC0OS	Controller 0 out-of-service
23	SS4CATPC1OS	Controller 1 out-of-service
26		Interface peripheral unit bus (IPUB) out-of-service

SEE PROPRIETARY NOTICE ON COVER PAGE

Memory Word: DG1CATP2

BIT	SYMBOL	FUNCTION
0	DG4CATPSPS	Signaling processor (SP) scan / distribute points out of service
1	DG4CATPSPB	SP bus out of service
2	SS4CATPSCUNOPWR	SCU powered down

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:SCS-ADDR
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:SCS a ILLEGAL ADDRESS b

2. REASON FOR OUTPUT

To indicate that an illegal address was used for an interactive diagnostic function on a service circuit system (SCS).

3. VARIABLE FIELD DEFINITIONS

- a The member number of the SCS being diagnosed.
- b The type of illegal address:
- ADVANCE — The address advanced to contains an illegal address.
- DOLLOOPS — The loop of code contains an illegal address.
- INVALID MUST COMPLETE PHASE IN PROGRESS — A pause was inserted in one phase and an attempt was made to start another phase before the pause was removed from the first phase.
- LOOP END — The second address specified is illegal.
- LOOP START — The first address specified is illegal.
- SUBROUTINES — The subroutine contains an illegal address.

4. ACTION TO BE TAKEN

If INVALID MUST COMPLETE PHASE IN PROGRESS , remove the pause from the first phase and retry the diagnostic.

In all other cases, correct the address and retry the diagnostic.

5. REFERENCES

PIDENT
DCONTABL

Practice 234-280-040, *Diagnostic Language - DL-1*
Practice 234-280-220, *Diagnostic Programs Description*

PA-4A002-01, 4ESSTM User's Manual

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Message
EX:SCS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:SCS-ILL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:SCS a,b c:d e ILLEGAL PHASE

2. REASON FOR OUTPUT

To report that one or more illegal interactive diagnostic phases have been requested on a partial interactive diagnostic request for the service circuit system (SCS). The illegal phase will not be executed; however, all valid phases will be run.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | Member of the SCS being diagnosed. |
| b | Subunit number of the subunit being diagnosed. |
| c | Submember number of the subunit being diagnosed. |
| d | Helper unit type. |
| e | Helper member number. |

4. ACTION TO BE TAKEN

Check the *Input Message Document* for the list of valid phase numbers.

5. REFERENCES

PIDENT
DCONTOLL

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:SCS-LOOP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:SCS a,b c:d e LOOPING f

2. REASON FOR OUTPUT

To indicate that the interactive diagnostic on the service circuit system (SCS) is repeatedly executing one or more consecutive segments of code.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | Member number of the SCS being diagnosed. |
| b | Subunit type being diagnosed. |
| c | Submember number of the subunit being diagnosed. |
| d | Helper unit type, if specified. |
| e | Helper member number, if specified. |
| f | COMPLETE — Looping has terminated.
STARTED — Looping has begun. |

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs

PUDGSS - if subunit type is CONTR.

PUDGSS99 - if subunit type is IPUB.

PUDGSV - if subunit type is SCU.

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Message

EX:SCS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:SCS-NOT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:SCS a,b c:d e NOT STARTED - f

2. REASON FOR OUTPUT

To report that the diagnostic request cannot be started for the service circuit system (SCS). This usually occurs when the unit for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | Member number of the SCS being diagnosed. |
| b | Subunit type being diagnosed. |
| c | Submember number of the subunit being diagnosed. |
| d | Helper unit type. |
| e | Helper member number. |
| f | Reason the diagnostic was not started. |

4. ACTION TO BE TAKEN

If the specified SCS cannot be removed from service because there is no spare, restore a spare unit to service.

5. REFERENCES

PIDENT
MCFWPOMO

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:SCS-SUSP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] EX:SCS a,b c:de SUSPENDED
- [2] EX:SCS a,b c:de SUSPENDED AT PH f ADR g [i]
- [3] EX:SCS a,b c:de SUSPENDED at PH f ADR g AFTER TEST h [i]
- [4] EX:SCS a,b c:de SUSPENDED ILLEGAL INPUT

2. REASON FOR OUTPUT

In general, this message will be printed whenever an interactive diagnostic execution has been suspended for the service circuit system (SCS). Each of the four formats identifies a specific type of suspension.

Format [1] will be printed if there is no phase active.

Format [2] will be printed if the suspension occurred at an address specified by the input message.

Format [3] will be printed if the suspension occurred at a point immediately following a test.

Format [4] will be printed if the diagnostic was suspended because the input was illegal.

3. VARIABLE FIELD DEFINITIONS

- a Member number of the unit being diagnosed.
- b Subunit type being diagnosed.
- c Submember number of the subunit being diagnosed.
- d Helper unit type if specified.
- e Helper member number if specified.
- f Diagnostic phase in which the diagnostic suspended. If no phase was active, then this phase does not occur.
- g Address in the diagnostic phase at which the suspension occurred.
- h The last test executed before the suspension occurred.
- i The reason the suspension occurred:
 - ADVANCE — The diagnostic has been executed up to the specified address.

SEE PROPRIETARY NOTICE ON COVER PAGE

FIRST FAILURE — The diagnostic has been suspended because the first failure was encountered.

PAUSE — The diagnostic has been paused at the specified address.

STEP — The requested number of steps have been completed.

4. ACTION TO BE TAKEN

Specify another EX:SCS input. If no further interactive diagnostic execution is desired, specify a STOP:MACLI input message.

5. REFERENCES

PIDENTs

PUDGSS - if subunit type is CONTR.
PUDGSS99 - if subunit type is IPUB.
PUDGSV - if subunit type is SCU.

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Messages

EX:SCS

STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:SCS-TERM
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:SCS a,b c:d e TERMINATED AT PH f ADR g AFTER TEST h [FORCED]

2. REASON FOR OUTPUT

To report that the interactive diagnostic terminates early for a service circuit system (SCS). This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

a	Member number of the SCS being diagnosed.
b	Subunit type being diagnosed.
c	Submember number of the subunit being diagnosed.
d	Helper unit type, if specified.
e	Helper member number, if specified.
f	Diagnostic phase in which the termination occurred.
g	Address in the diagnostic phase (or subroutine) at which the termination occurred.
h	Last test executed before the termination occurred.
FORCED	This indicates that the termination was unconditional. The type of termination is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

Repair the faulty frame.

5. REFERENCES

PIDENTs

PUDGSS - if subunit type is CONTR

PUDGSV - if subunit type is SCU

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:SCS-TEST
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

```
EX:SCS a,b c:d e PH f g [h]
[TEST MISMATCH SUPPLEMENTARY DATA
i jjjjjjjj kkkkkkkk llllllll mmmmmmmm nnnnnnnn oooooooooo
pppppppp qqqqqqqq rrrrrrrr]
```

2. REASON FOR OUTPUT

To report that the diagnostic results are printed on a phase basis for the service circuit system (SCS). This occurs in the case of a partial diagnosis, a test failure, or whenever RAW was requested on the input message.

3. VARIABLE FIELD DEFINITIONS

- a Member number of the SCS being diagnosed.
- b Subunit type being diagnosed.
- c Submember number of the subunit being diagnosed.
- d Helper unit type, if specified.
- e Helper member number, if specified.
- f Diagnostic phase number for which the results are reported.
- g Results of the diagnostic:
 - ATP — All tests passed.
 - CATP — All tests passed; however, some tests were skipped because of the unavailability of a system resource which was needed to perform the test.
 - NTR — No tests were executed.
 - STF — Some tests failed.
 - STF-BOF — Some tests failed and the raw data buffer overflowed. Phase has not been completed.
- h An optional field that will appear only if the results were not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if h is (00000001 00001000), then for the reasons, see the EX:SCS output message.

If subunit type is BUS, see DGN:PUB message for CATP reasons.

SEE PROPRIETARY NOTICE ON COVER PAGE

If STF, this field gives the number of test failures, in addition to the reasons that tests were skipped. For example, if h is (7,00000001 00001000), seven tests failed, plus tests were skipped for reasons 9 and 24.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

The following appear only if the diagnostic was STF.

i	Test number of the failing test.
j	Bits which were in error, that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.
k	RAW response from the unit or firmware RAW response.
l, m	Information concerning the test being executed. Details for l and m are specified in the diagnostic listing.
n	Address in the phase (or subroutine) of the test that failed.
o	Bits 14-0 contain information for the TLP programs. Bits 23-21 contain the count of the number of words of supplementary data that follows. Bits 20-18 contain the count of the number of words of DOLLOOP data that follows. Bits 17-15 contain the count of the number of words of subroutine data that follows.
p	Supplementary data words. p is repeated x times, where x is bits 23-21 of o. This data supplies information about the test being executed. The last supplementary data word specified is printed first.
q	DOLLOOP data words. q is repeated y times, where y is bits 20-18 of o. This data is the value of the DOLLOOP variables at the time of the test failure. The value of the innermost DOLLOOP is printed first.
r	Subroutine data words. r is repeated z times, where z is bits 17-15 of o. This data is the address of the callsubs which led up to this point in the diagnostic. The address of the last callsub is printed first.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs

- PUDGSS - if subunit type is CONTR
- PUDGSS99 - if subunit type is IPUB
- PUDGSV - if subunit type is SCU

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Message

EX:SCS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:SP-ADDR
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:SP a,b c:d e ILLEGAL ADDRESS f

2. REASON FOR OUTPUT

To indicate that an illegal address was used for an interactive diagnostic function on a signaling processor (SP).

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | The member number of the unit being diagnosed (0-31). |
| b | The subunit type being diagnosed. |
| c | The submember number of the subunit being diagnosed. |
| d | The helper unit type, if specified. |
| e | The helper member number, if specified. |
| f | The type of illegal address: |
| ADVANCE | — The address advanced to contains an illegal address. |
| DOLLOOPS | — The loop of code contains an illegal address. |
| INVALID MUST COMPLETE PHASE IN PROGRESS | — A pause was inserted in one phase and an attempt was made to start another phase before the pause was removed from the first phase. |
| LOOP END | — The second address specified is illegal. |
| LOOP START | — The first address specified is illegal. |
| SUBROUTINES | — The subroutine contains an illegal address. |

4. ACTION TO BE TAKEN

If c= INVALID...PROGRESS, remove the pause from the first phase and retry the diagnostic.

In all other cases, correct the address and retry the diagnostic.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs

PUDGPB05 if IPUB is specified as the subunit

PUDGSP--

PUDGSP99 if IPUB is specified as the subunit

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:SP-ILL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:SP a,b c:d e ILLEGAL PHASE

2. REASON FOR OUTPUT

To print whenever one or more illegal diagnostic phases have been requested. The illegal phase will not be executed; however, all valid phases will be run.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the unit being diagnosed (0-31).
b	The subunit type being diagnosed.
c	The submember number of the subunit being diagnosed.
d	The helper unit type.
e	The helper member number.

4. ACTION TO BE TAKEN

Check the *Input Message Document* for the list of valid phase numbers.

5. REFERENCES

PIDENT
DCONTOLL

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:SP-LOOP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:SP a,b c:d e LOOPING f

2. REASON FOR OUTPUT

To indicate that the interactive diagnostic on an SP has either started looping through the specified code or has completed the looping function.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | The member number of the unit being diagnosed (0-31). |
| b | The subunit type being diagnosed. |
| c | The submember number of the subunit being diagnosed. |
| d | The helper unit type if specified. |
| e | The helper member number if specified. |
| f | COMPLETE — Looping has terminated.
STARTED — Looping has begun. |

4. ACTION TO BE TAKEN

If desired, stop an infinite loop using the following input message:

EX:SP a!

5. REFERENCES

PIDENTs
PUDGDP - if subunit type is CONTR and unit is an spZ (MT=2)
PUDGSP - if subunit type is CONTR (MT=1)
PUDGSP - if subunit type is CONTR and unit is an CRMTX (MT=4)
PUDGSP99 - if subunit type is IPUB

Practice 234-180-020, *Diagnostic Language - DIAL*
Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Message
EX:SP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:SP-NOT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:SP a,b c:d e NOT STARTED - f

2. REASON FOR OUTPUT

To print whenever the interactive diagnostic request cannot be started. This is usually when the unit for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the unit being diagnosed (0-31).
b	The subunit type being diagnosed.
c	The submember number of the subunit being diagnosed.
d	The helper unit type.
e	The helper member number.
f	The reason the diagnostic was not started.

4. ACTION TO BE TAKEN

If the specified unit cannot be removed from service because there is no spare, restore a spare unit to service.

5. REFERENCES

PIDENT
MCFWPEMO

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:SP-PUB
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:SP a b c:PUB d e f [g]

2. REASON FOR OUTPUT

To specify both the diagnostics results and the termination mode. This message is printed at the conclusion of the interactive diagnostic execution.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the SP under diagnosis (0-31).
- b The type of subunit for which the diagnostic was requested.
- c The number of the subunit under diagnosis.
- d The helper peripheral unit bus (PUB) that was requested.
- e The termination mode for the diagnostic:
- ABORTED — The diagnostic was abnormally stopped due to an interrupt, error in execution, or due to a STOP:MACLI or STOP:EX input request.
- COMPLETED — The diagnostic completed normally.
- STOPPED — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution.
- f The results of the diagnostic:
- ATP — All tests passed.
- CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.
- STF-BOF — The number of failed tests has filled the buffer. Before any more tests are run the system prints out the contents of the buffer and then clears it.
- NTR — No tests were executed.
- STF — Some tests failed.

SEE PROPRIETARY NOTICE ON COVER PAGE

g An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if g is (40000000 00001000), then tests were skipped for reasons 9 and 47.

The reasons are as follows:

BIT	REASONS FOR TESTS SKIPPED
0	Peripheral unit bus (PUB) 0 out-of-service
1	PUB 1 out-of-service
2	Primary signaling processor (SP) pulse points out-of-service
3	Secondary SP pulse points out-of-service
4	Mate unit out-of-service
5	Power control switch in request out-of-service (ROS) position or diagnostic requested from power control switch
6	Central controller (CC) 0 out-of-service
7	CC 1 out-of-service
8	CI has other units responding
9	MI has other units responding
10	GI has other units responding
11	PUB not duplex
12	Low buffer poll has other units responding
13	Digit buffer poll has other units responding
14	High buffer poll has other units responding
15	Seizure buffer poll has other units responding
16	GI,CI,MI has other units responding on bus 0
17	GI,CI,MI has other units responding on but 1
18	SP bus circuit out-of-service
19	DT out-of-service
20	DT absolute alarms
21	Patch overwrites in system
24	SP scan / distribute points out-of-service
25	SP bus out-of-service
26	Interface peripheral unit bus (IPUB) out-of-service

SEE PROPRIETARY NOTICE ON COVER PAGE

If subunit type is BUS:

BIT	REASON FOR TESTS SKIPPED
12	Helper controller 0 out-of-service
13	Helper controller 1 out-of-service
27	DTFRIGAL return failed

If STF, this field gives the number of failing phases, number of failing tests, trouble number. For example, (2,9,00101545) indicates 2 phases failed 9 tests failed, and a trouble number of 00101545.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed. Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

5. REFERENCES

PIDENTs

- PUDGDP - if subunit type is CONTR and unit is an spZ (MT=2)
- PUDGSP - if subunit type is CONTR (MT=1)
- PUDGSP - if subunit type is CONTR and unit is an CRMTX (MT=4)
- PUDGSP99 - if subunit type is IPUB

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Messages

EX:SP
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:SP-SUSP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] EX:SP a,b c:d e SUSPENDED
- [2] EX:SP a,b c:d e SUSPENDED AT PH f ADR g [i]
- [3] EX:SP a,b c:d e SUSPENDED AT PH f ADR g AFTER TEST h [i]
- [4] EX:SP a,b c:d e SUSPENDED ILLEGAL INPUT

2. REASON FOR OUTPUT

To print whenever interactive diagnostic execution is suspended. Each of the four formats identifies a specific type of suspension:

Format [1] is printed if there was no phase active.

Format [2] is printed if the suspension occurred at the address specified by the input message.

Format [3] is printed if the suspension occurred at the point immediately following a test.

Format [4] is printed if the diagnostic was suspended because the input was illegal.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0-31).
- b The subunit type being diagnosed.
- c The submember number of the subunit being diagnosed.
- d The helper unit type, if specified.
- e The helper member number, if specified.
- f The diagnostic phase in which the diagnostic suspended. If no phase was active, then this phase does not occur.
- g The address in the diagnostic phase at which the suspension occurred.
- h The last test executed before the suspension occurred.
- i The reason the suspension occurred:
 - ADVANCE — The diagnostic has been executed up to the specified address

SEE PROPRIETARY NOTICE ON COVER PAGE

FIRST FAILURE — The diagnostic has been suspended because the first failure has been encountered

PAUSE — The diagnostic has been paused at the specified address

STEP — The requested number of steps have been completed

NOTE: If there is no phase active, this field will not be specified.

4. ACTION TO BE TAKEN

Specify another EX:SP input message. If no further interactive diagnostic execution is desired, specify a STOP:MACLI or STOP:EX input message.

5. REFERENCES

PIDENTs
PUDGPB05 - if IPUB is specified as the subunit
PUDGSP--
PUDGSP99 - if IPUB is specified as the subunit

Practice 234-180-020, *Diagnostic Language - DIAL*
Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Messages
EX:SP
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:SP-TERM
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:SP a,b c:d e TERMINATED AT PH f ADR g AFTER TEST h [FORCED]

2. REASON FOR OUTPUT

To print whenever the interactive diagnostic terminates early. This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the unit being diagnosed (0-31).
b	The subunit type being diagnosed.
c	The submember number of the subunit being diagnosed.
d	The helper unit type, if specified.
e	The helper member number, if specified.
f	The diagnostic phase in which the termination occurred.
g	The address in the diagnostic phase (or subroutine) at which the termination occurred.
h	The last test executed before the termination occurred.
FORCED	The termination is unconditional. Termination in this way is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

Repair the faulty frame.

5. REFERENCES

PIDENTs

PUDGDP-- if subunit type is CONTR and unit is an spZ (MT=2)

PUDGSP-- if subunit type if CONTR (MT=1)

PUDGSP-- if subunit type is CONTR and unit is an CRMTX (MT=4)

PUDGSP99 if subunit type is IPUB

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:SP-TEST
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

```
EX:SP a,b c:d e f g [h]
      [TEST MISMATCH SUPPLEMENTARY DATA
        i  jjjjjjjj kkkkkkkk llllllll mmmmmmmm nnnnnnnn oooooooooo
          pppppppp qqqqqqqq rrrrrrrr]
```

2. REASON FOR OUTPUT

To report the interactive diagnostic results on a phase basis. This occurs in the case of a partial diagnosis or a test failure.

3. VARIABLE FIELD DEFINITIONS

- | | | | | | | | | | | | |
|---------|---|-----|---------------------|------|---|-----|---------------------------|-----|----------------------|---------|---|
| a | The member number of the unit being diagnosed (0-31). | | | | | | | | | | |
| b | The subunit type being diagnosed. | | | | | | | | | | |
| c | The submember number of the subunit being diagnosed. | | | | | | | | | | |
| d | The helper unit type, if specified. | | | | | | | | | | |
| e | The helper member number, if specified. | | | | | | | | | | |
| f | The diagnostic phase number for which the results are reported. | | | | | | | | | | |
| g | <p>The results of the diagnostic:</p> <table border="0" style="margin-left: 40px;"> <tr> <td>ATP</td> <td>— All tests passed.</td> </tr> <tr> <td>CATP</td> <td>— All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.</td> </tr> <tr> <td>NTR</td> <td>— No tests were executed.</td> </tr> <tr> <td>STF</td> <td>— Some tests failed.</td> </tr> <tr> <td>STF-BOF</td> <td>— Some tests failed and the raw data buffer overflowed. The phase has not been completed.</td> </tr> </table> | ATP | — All tests passed. | CATP | — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test. | NTR | — No tests were executed. | STF | — Some tests failed. | STF-BOF | — Some tests failed and the raw data buffer overflowed. The phase has not been completed. |
| ATP | — All tests passed. | | | | | | | | | | |
| CATP | — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test. | | | | | | | | | | |
| NTR | — No tests were executed. | | | | | | | | | | |
| STF | — Some tests failed. | | | | | | | | | | |
| STF-BOF | — Some tests failed and the raw data buffer overflowed. The phase has not been completed. | | | | | | | | | | |
| h | <p>An optional field that will appear only if the results were not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if f is (40000000 00001000), then tests were skipped for reasons 9 and 47.</p> | | | | | | | | | | |

SEE PROPRIETARY NOTICE ON COVER PAGE

The reasons are as follows:

BIT	REASONS FOR TESTS SKIPPED
0	Peripheral unit bus (PUB) 0 out-of-service
1	PUB 1 out-of-service
2	Primary signaling processor (SP) pulse points out-of-service
3	Secondary SP pulse points out-of-service
4	Mate unit out-of-service
5	Power control switch in request out-of-service (ROS) position or diagnostic requested from power control switch
6	Central controller (CC) 0 out-of-service
7	CC 1 out-of-service
8	CI has other units responding
9	MI has other units responding
10	GI Has other units responding
11	PUB not duplex
12	Low buffer poll has other units responding
13	Digit buffer poll has other units responding
14	High buffer poll has other units responding
16	GI,CI,MI has other units responding
17	GI,CI,MI has other units responding on BUS 1
18	SP bus circuit out-of-service
19	DT out-of-service
20	DT overwrite alarm
21	Patch overwrites in system
24	SP scan / distribute points out-of-service
25	SP bus out-of-service
26	Interface peripheral unit bus (IPUB) out-of-service

If subunit is BUS:

BIT	REASON FOR TESTS SKIPPED
12	Helper controller 0 out-of-service
13	Helper controller 1 out-of-service
27	DTFRIGAL return failed

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, c is (7,40000000 00001000), seven tests failed, plus tests were skipped for reasons 9 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

SEE PROPRIETARY NOTICE ON COVER PAGE

The following appear only if the diagnostic was STF:

i	The test number of the failing test.
j	The bits which were in error; that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.
k	RAW response from the unit.
l, m	Information concerning the test being executed. Details of l and m are specified in the diagnostic listing.
n	The address in the phase (or subroutine) of the test that failed.
o	Bits 14-0 contain information for the TLP programs. Bits 23-21 contain the count of the number of words of supplementary data that follows. Bits 20-18 contain the count of the number of words of DOLLOOP data that follows. Bits 17-15 contain the count of the number of words of subroutine data that follows.
p	Supplementary data words. Variable p is repeated x times, where x is bits 23-21 of o. This data supplies information about the test being executed. The last supplementary data word specified is printed first.
q	DOLLOOP data words. Variable q is repeated y times, where y is bits 20-18 of o. This data is the value of the DOLLOOP variables at the time of the test failure. The value of the innermost DOLLOOP is printed first.
r	Subroutine data words. Variable r is repeated z times, where z is bits 17-15 of o. This data is the address of the callsubs which led up to this point in the diagnostic. The address of the last callsub is printed first.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed. Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

5. REFERENCES

PIDENTs

PUDGDP-- if subunit type is CONTR and unit is an spZ (MT=2)

PUDGSP-- if subunit type is CONTR (MT=1)

PUDGSP-- if subunit type is CONTR and unit is an CRMTX (MT=4)

PUDGSP99 if subunit type is IPUB

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Message

EX:SP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:SSD
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:SSD a b c [d]

2. REASON FOR OUTPUT

To report both the diagnostic results and the termination mode at the conclusion of the interactive diagnostic execution on a scan and signal distributor (SSD).

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit under diagnosis (0 or 1).
- b The termination mode for the diagnostic:
- ABORTED — The diagnostic was abnormally stopped because of an interrupt, error in execution, or because of a STOP:MACLI input request.
- COMPLETED — The diagnostic completed normally.
- STOPPED — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution.
- c The results of the diagnostic:
- ATP — All tests passed.
- CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.
- NTR — No tests were executed.
- STF — Some tests failed.
- STF-BOF — The number of failed tests has filled the buffer. Before any more tests are run the system prints out the contents of the buffer and then clears it.
- d An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (40000000 00010000), then tests were skipped for reasons 12 and 47.

SEE PROPRIETARY NOTICE ON COVER PAGE

The reasons are as follows:

Bit	Meaning
12	SSD out of service (OOS).
43	Power monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).
46	Frame request for PWRMON active (try again).
47	Unit not in normal state.

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, if d is (7,40000000 00010000), seven tests failed, plus tests were skipped for reasons 12 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service if possible, so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

If a diagnostic request is made from the unit power switch, power monitor tests are NOT run. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs

DCONTABL

SDFRTEST

PDDG--, where -- represents all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=PDDG, UTYPE=1XLUSSD

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages

CLR:MACLI

EX:SSD

STOP:EX

STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:SSD-ADDR
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:SSD a ILLEGAL ADDRESS b

2. REASON FOR OUTPUT

To report that an illegal address was used for an interactive diagnostic function on a scan and signal distributor (SSD) unit.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The type of illegal address:
- ADVANCE — The address advanced to contains an illegal address.
- DOLLOOPS — The loop of code contains an illegal address.
- INVALID MUST COMPLETE PHASE IN PROGRESS — A pause was inserted in one phase and an attempt was made to start another phase before the pause was removed from the first phase.
- LOOP END — The second address specified is illegal.
- LOOP START — The first address specified is illegal.
- SUBROUTINES — The subroutine contains an illegal address.

4. ACTION TO BE TAKEN

If INVALID MUST COMPLETE PHASE IN PROGRESS , remove the pause from the first phase and retry the diagnostic.

In all other cases, correct the address and retry the diagnostic.

5. REFERENCES

PIDENTs
DCONTABL
SDFRTEST
PDDG--, where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=PDDG, UTYPE=1XLUSSD

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

PA-4A002-01, *4ESSTM User's Manual*

Input Messages

CLR:MACLI

EX:SSD

STOP:EX

STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:SSD-ILL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:SSD a ILLEGAL PHASE

2. REASON FOR OUTPUT

To report when only illegal diagnostic phases have been requested on a partial interactive diagnostic request for a scan and signal distributor (SSD).

3. VARIABLE FIELD DEFINITIONS

a The member number of the unit being diagnosed (0 or 1).

4. ACTION TO BE TAKEN

Check PIDENT DCONTABL for PREFIX=PDDG, UTYPE=1XLUSSD to obtain the list of valid phase numbers.

5. REFERENCES

PIDENTs
DCONTABL
SDFRTEST
PDDG--, where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=PDDG, UTYPE=1XLUSSD

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages
CLR:MACLI
EX:SSD
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:SSD-LOOP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:SSD a LOOPING b

2. REASON FOR OUTPUT

To report that the interactive diagnostic on a scan and signal distributor (SSD) unit has either started looping through the specified code, or has completed the looping function.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b COMPLETE — Looping has terminated.
 STARTED — Looping has begun.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
DCONTABL
SDFRTEST
PDDG--, where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=PDDG, UTYPE=1XLUSSD

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM User's Manual

Input Messages
CLR:MACLI
EX:SSD
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:SSD-NOT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:SSD a NOT STARTED - b

2. REASON FOR OUTPUT

To report when the interactive diagnostic request cannot be started for the scan and signal distributor (SSD). This usually occurs when the unit for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
b The reason the diagnostic was not started.

4. ACTION TO BE TAKEN

If the specified unit cannot be removed from service because there is no spare, restore a spare unit to service.

5. REFERENCES

PIDENTs
DCONTABL
SDFRTEST
PDDG--, where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=PDDG, UTYPE=1XLUSSD

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM User's Manual

Input Messages
CLR:MACLI
EX:SSD
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:SSD-SUSP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

- [1] EX:SSD a SUSPENDED
- [2] EX:SSD a SUSPENDED AT PH b ADR c [e]
- [3] EX:SSD a SUSPENDED AT PH b ADR c AFTER TEST d [e]
- [4] EX:SSD a SUSPENDED ILLEGAL INPUT

2. REASON FOR OUTPUT

To report when interactive diagnostic execution has been suspended for a scan and signal distributor (SSD). Each of the four formats identifies a specific type of suspension:

Format [1] if there was no phase active.

Format [2] at the address specified by the input message.

Format [3] the point immediately following a test.

Format [4] if the input is illegal.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The diagnostic phase in which the diagnostic suspended.
- c The address in the diagnostic phase at which the suspension occurred.
- d The last test executed before the suspension occurred.
- e The reason the suspension occurred:
 - ADVANCE — The diagnostic has been executed up to the specified address.
 - FIRST FAILURE — The diagnostic has been suspended because the first failure has been encountered.
 - PAUSE — The diagnostic has been paused at the specified address.
 - STEP — The requested number of steps have been completed.

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

Specify another EX: input. If no further interactive diagnostic execution is desired, specify a STOP:MACLI input message for the appropriate subclass.

5. REFERENCES

PIDENTs

DCONTABL

SDFRTEST

PDDG--, where -- represents all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=PDDG, UTYPE=1XLUSSD

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM User's Manual

Input Messages

CLR:MACLI

EX:SSD

STOP:EX

STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:SSD-TERM
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:SSD a TERMINATED AT PH b ADR c AFTER TEST d [FORCED]

2. REASON FOR OUTPUT

To report when the interactive diagnostic terminates early for a scan and signal distributor (SSD). This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the unit being diagnosed (0 or 1).
b	The diagnostic phase in which the termination occurred.
c	The address in the diagnostic phase at which the termination occurred.
d	The last test executed before the termination occurred.
FORCED	The termination is unconditional. Termination in this way is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

Repair the faulty frame. If further diagnostic execution is desired, specify UCL on the DGN: input message. This will inhibit all early terminations except those that are forced.

5. REFERENCES

PIDENTs
DCONTABL
SDFRTEST
PDDG--, where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=PDDG, UTYPE=1XLUSSD

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

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SEE PROPRIETARY NOTICE ON COVER PAGE

Input Messages

CLR:MACLI
DGN:SSD
EX:SSD
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:SSD-TEST
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:SSD a PH b c [d]
[TEST MISMATCH SUPPLEMENTARY DATA
ee ffffffff gggggggg]

2. REASON FOR OUTPUT

To report when the diagnostic results are printed on a phase basis for a Scan and Signal Distributor (SSD). This occurs in the case of a partial diagnosis, a test failure, or when RAW was requested on the input message.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The diagnostic phase number for which the results are reported.
- c The results of the diagnostic:
- ATP — All tests passed.
- CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.
- NTR — No tests were executed.
- STF — Some tests failed.
- STF-BOF — Some tests failed and the test failure buffer overflowed.
- d An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (40000000 00010000), then tests were skipped for reasons 12 and 47.

The reasons are as follows:

Bit	Meaning
12	SSD Out Of Service (OOS).
43	Power Monitor (PWRMON) test timed out (try again).

SEE PROPRIETARY NOTICE ON COVER PAGE

Bit	Meaning
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).
46	Frame request for PWRMON active (try again).
47	Unit not in normal state.

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, if d is (7,40000000 00010000), seven tests failed, plus tests were skipped for reasons 12 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

The following appear only if the diagnostic was STF.

e	Test number of the failing test.
f	The bits that were in error; that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.
g	An optional field containing supplementary data concerning the failing test if available. This field may contain up to seven words. See diagnostic Pident for an explanation of the data.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

5. REFERENCES

PIDENTs
DCONTABL
SDFRTEST
PDDG--, where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=PDDG, UTYPE=1XLUSSD

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM User's Manual

Input Messages
CLR:MACLI
EX:SSD
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:TGR-ADDR
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:TGR a,b c:d e ILLEGAL ADDRESS f

2. REASON FOR OUTPUT

To indicate than an illegal address was used for an interactive diagnostic function on a terminal grouping (TGR).

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | The member number of the unit being diagnosed. |
| b | The subunit type being diagnosed. |
| c | The submember number of the subunit being diagnosed. |
| d | The helper unit type, if specified. |
| e | The helper member number, if specified. |
| f | The type of illegal address: |
| ADVANCE | — The address advanced to contains an illegal address. |
| DOLLOOPS | — The loop of code contains an illegal address. |
| INVALID MUST COMPLETE PHASE IN PROGRESS | — A pause was inserted in one phase and an attempt was made to start another phase before the pause was removed from the first phase. |
| LOOP END | — The second address specified is illegal. |
| LOOP START | — The first address specified is illegal. |
| SUBROUTINES | — The subroutine contains an illegal address. |

4. ACTION TO BE TAKEN

If f= INVALID...PROGRESS, remove the pause from the first phase and retry the diagnostic.

In all other cases, correct the address and retry the diagnostic.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs

PUDGTA-- if subunit type is CONTR

PUDGTA-- if subunit type is IPUB

PUDGTE-- if subunit type is TER

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:TGR-ILL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:TGR a,b c:d e ILLEGAL PHASE

2. REASON FOR OUTPUT

To print whenever one or more illegal diagnostic phases have been requested. The illegal phase will not be executed; however, all valid phases will be run.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | The member number of the unit being diagnosed. |
| b | The subunit type being diagnosed. |
| c | The submember number of the subunit being diagnosed. |
| d | The helper unit type. |
| e | The helper member number. |

4. ACTION TO BE TAKEN

Check the *Input Message Document* for the list of valid phase numbers.

5. REFERENCES

PIDENT
DCONTOLL

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:TGR-LOOP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:TGR a,b c:d e LOOPING f

2. REASON FOR OUTPUT

To indicate that the interactive diagnostic on the terminal grouping (TGR) frame has either started looping through the specified code, or has completed the looping function.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the unit being diagnosed.
b	The subunit type being diagnosed.
c	The submember number of the subunit being diagnosed.
d	The helper unit type, if specified.
e	The helper member number, if specified.
f	COMPLETE — Looping has terminated. STARTED — Looping has begun.

4. ACTION TO BE TAKEN

If desired, stop an infinite loop using the following input message:

EX:TGR a!

5. REFERENCES

PIDENTs

PUDGTA-- if subunit type is CONTR

PUDGTA-- if subunit type is IPUB

PUDGTE-- if subunit type is TER

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Message

EX:TGR

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:TGR-NOT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:TGR a,b c:d e NOT STARTED - f

2. REASON FOR OUTPUT

To print whenever the interactive diagnostic request cannot be started. This is usually when the unit for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the unit being diagnosed.
b	The subunit type being diagnosed.
c	The submember number of the subunit being diagnosed.
d	The helper unit type.
e	The helper member number.
f	The reason the diagnostic was not started.

4. ACTION TO BE TAKEN

If the specified unit cannot be removed from service because there is no spare, restore a spare unit to service.

5. REFERENCES

PIDENT
MCFWPEMO

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:TGR-PUB
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:TGR a b c:PUB d e f [g]

2. REASON FOR OUTPUT

To print at the conclusion of the interactive diagnostic execution. This message specifies both the diagnostics results and the termination mode.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | The member number of the terminal grouping (TGR) under diagnosis. |
| b | The type of subunit for which the diagnostic was requested. |
| c | The number of the subunit under diagnosis. |
| d | The helper peripheral unit bus (PUB) that was requested. |
| e | <p>The termination mode for the diagnostic:</p> <p>ABORTED — The diagnostic was abnormally stopped due to an interrupt, error in execution, or due to a STOP:MACLI or STOP:EX input request.</p> <p>COMPLETED — The diagnostic completed normally.</p> <p>STOPPED — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution.</p> |
| f | <p>The results of the diagnostic:</p> <p>ATP — All tests passed.</p> <p>CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.</p> <p>NTR — No tests were executed.</p> <p>STF — Some tests failed.</p> <p>STF-BOF — The number of failed tests has filled the buffer. Before any more tests are run the system prints out the contents of the buffer and then clears it.</p> |

SEE PROPRIETARY NOTICE ON COVER PAGE

g An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if g is (40000000 00001000), then tests were skipped for reasons 9 and 47.

The reasons are as follows:

BIT	REASONS FOR TESTS SKIPPED
0	Peripheral unit bus (PUB) 0 out-of-service
1	PUB 1 out-of-service
2	Primary signaling processor (SP) pulse points out-of-service
3	Secondary SP pulse points out-of-service
4	Mate unit out-of-service
5	Power control switch in request out-of-service (ROS) position or diagnostic requested from power control switch
8	CI has other units responding
9	MI has other units responding
10	GI has other units responding
11	PUB not duplex
12	Terminal grouping (TGR) a, controller (CONTR) 0 out-of-service
13	TGR a, CONTR 1 out-of-service
24	SP scan / distribute points out-of-service
25	SP bus out-of-service
27	Terminal 00 out-of-service
28	Terminal 01 out-of-service
29	Terminal 02 out-of-service
30	Terminal 03 out-of-service
31	Terminal 04 out-of-service
32	Terminal 05 out-of-service
33	Terminal 06 out-of-service
34	Terminal 07 out-of-service
35	Terminal 08 out-of-service
36	Terminal 09 out-of-service
37	Terminal 10 out-of-service
38	Terminal 11 out-of-service
39	Terminal 12 out-of-service

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BIT REASONS FOR TESTS SKIPPED

40	Terminal 13 out-of-service
41	Terminal 14 out-of-service
42	Terminal 15 out-of-service
43	TGR group in growth

If subunit type is IPUB:

BIT REASONS FOR TESTS SKIPPED

6	Central controller (CC) 0 out-of-service
7	CC 1 out-of-service
12	Helper controller 0 out-of-service
13	Helper controller 1 out-of-service
26	Interface peripheral unit bus (IPUB) out-of-service
27	DTFRIGAL return failed

If STF, this field gives the number of failing phases, number of failing tests, trouble number. For example, (2,9,00101545) indicates 2 phases failed, 9 tests failed, and a trouble number of 00101545.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs

PUDGPB99 if subunit type is IPUB

PUDGTA-- if subunit type is CONTR

PUDGTE-- if subunit type is TER

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-280-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Messages

EX:TGR

STOP:EX

STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:TGR-SUSP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] EX:TGR a,b c:d e SUSPENDED
- [2] EX:TGR a,b c:d e SUSPENDED AT PH f ADR g [i]
- [3] EX:TGR a,b c:d e SUSPENDED AT PH f ADR g AFTER TEST h [i]
- [4] EX:TGR a,b c:d e SUSPENDED ILLEGAL INPUT

2. REASON FOR OUTPUT

To print whenever interactive diagnostic execution is suspended. Each of the four formats identifies a specific type of suspension:

Format [1] is printed if there was no phase active.

Format [2] is printed if the suspension occurred at the address specified by the input message.

Format [3] is printed if the suspension occurred at the point immediately following a test.

Format [4] is printed if the diagnostic was suspended because the input was illegal.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed.
- b The subunit type being diagnosed.
- c The submember number of the subunit being diagnosed.
- d The helper unit type, if specified.
- e The helper member number, if specified.
- f The diagnostic phase in which the diagnostic suspended. If no phase was active, then this phase does not occur.
- g The address in the diagnostic phase at which the suspension occurred.
- h The last test executed before the suspension occurred.
- i The reason the suspension occurred:
 - ADVANCE — The diagnostic has been executed up to the specified address.

SEE PROPRIETARY NOTICE ON COVER PAGE

FIRST FAILURE — The diagnostic has been suspended because the first failure has been encountered.

PAUSE — The diagnostic has been paused at the specified address.

STEP — The requested number of steps have been completed.

NOTE: If there is no phase active, this field will not be specified.

4. ACTION TO BE TAKEN

Specify another EX:TGR input message. If no further interactive diagnostic execution is desired, specify a STOP:MACLI or STOP:EX input message.

5. REFERENCES

PIDENTs

PUDGTA-- if subunit type is CONTR

PUDGTA99 if subunit type is IPUB

PUDGTE-- if subunit type is TER

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Messages

EX:TGR

STOP:EX

STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:TGR-TERM
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:TGR a,b c:d e TERMINATED AT PH f ADR g AFTER TEST h [FORCED]

2. REASON FOR OUTPUT

To print whenever the interactive diagnostic terminates early. This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the unit being diagnosed.
b	The subunit type being diagnosed.
c	The submember number of the subunit being diagnosed.
d	The helper unit type, if specified.
e	The helper member number, if specified.
f	The diagnostic phase in which the termination occurred.
g	The address on the diagnostic phase (or subroutine) at which the termination occurred.
h	The last test executed before the termination occurred.
FORCED	The termination is unconditional. Termination in this way is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

Repair the faulty frame.

5. REFERENCES

PIDENTs
PUDGTA-- if subunit type is CONTR
PUDGTA99 if subunit type is IPUB
PUDGTE-- if subunit type is TER

Practice 234-180-020, *Diagnostic Language - DIAL*
Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:TGR-TEST
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

```
EX:TGR a,b c:d e PH f g [h]
[TEST MISMATCH SUPPLEMENTARY DATA
 i  jjjjjjjj kkkkkkkk llllllll mmmmmmmm nnnnnnnn oooooooooo
    pppppppp qqqqqqqq rrrrrrrr]
```

2. REASON FOR OUTPUT

To report the interactive diagnostic results on a phase basis. This occurs in the case of a partial diagnosis or a test failure.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | The member number of the unit being diagnosed. |
| b | The subunit type being diagnosed. |
| c | The submember number of the subunit being diagnosed. |
| d | The helper unit type, if specified. |
| e | The helper member number, if specified. |
| f | The diagnostic phase number for which the results are reported. |
| g | <p>The results of the diagnostic:</p> <p>ATP — All tests passed.</p> <p>CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.</p> <p>NTR — No tests were executed.</p> <p>STF — Some tests failed.</p> <p>STF-BOF — Some tests failed and the raw data buffer overflowed. The phase has not been completed.</p> |
| h | <p>An optional field that will appear only if the results were not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if h is (40000000 00001000), then tests were skipped for reasons 9 and 47.</p> |

SEE PROPRIETARY NOTICE ON COVER PAGE

The reasons are as follows:

BIT	REASONS FOR TESTS SKIPPED
0	Peripheral unit bus (PUB) 0 out-of-service
1	PUB 1 out-of-service
2	Primary signaling processor (SP) pulse points out-of-service
3	Secondary SP pulse points out-of-service
4	Mate unit out-of-service
5	Power control switch in request out-of-service (ROS) position or diagnostic requested from power control switch
8	CI has other units responding
9	MI has other units responding
10	GI has other units responding
11	PUB not duplex
12	Terminal grouping (TGR) 0 out-of-service
13	TGR 1 out-of-service
24	SP scan / distribute points out-of-service
25	SP bus out-of-service
26	Interface peripheral unit bus (IPUB) out-of-service
27	Terminal 00 out-of-service
28	Terminal 01 out-of-service
29	Terminal 02 out-of-service
30	Terminal 03 out-of-service
31	Terminal 04 out-of-service
32	Terminal 05 out-of-service
33	Terminal 06 out-of-service
34	Terminal 07 out-of-service
35	Terminal 08 out-of-service
36	Terminal 09 out-of-service
37	Terminal 10 out-of-service
38	Terminal 11 out-of-service
39	Terminal 12 out-of-service
40	Terminal 13 out-of-service
41	Terminal 14 out-of-service
42	Terminal 15 out-of-service
43	TGR group in growth

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, if h is (7,40000000 00001000), seven tests failed, plus tests were skipped for reasons 9 and 47.

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If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

The following appears only if the diagnostic was STF.

i	The test number of the failing test.
j	The bits which were in error; that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.
k	RAW response from the unit.
l, m	Information concerning the test being executed. Details of l and m are specified in the diagnostic listing.
n	The address in the phase (or subroutine) of the test that failed.
o	Bits 14-0 contain information for the TLP programs. Bits 23-21 contain the count of the number of words of supplementary data that follows. Bits 20-18 contain the count of the number of words of DOLOOP data that follows. Bits 17-15 contain the count of the number of words of subroutine data that follows.
p	Supplementary data words. Variable p is repeated x times, where x is bits 23-21 of o. This data supplies information about the test being executed. The last supplementary data word is printed first.
q	DOLOOP data words. Variable q is repeated x times where x is bits 23-21 of o. This data supplies information about the test being executed. The last supplementary data word is printed first.
r	Subroutine data words. Variable r is repeated z times, where z is bits 17-15 of o. This data is the address of the callsubs which led up to this point in the diagnostic. The address of the last callsub is printed first.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs
PUDGTA-- if subunit type is CONTR
PUDGTA99 if subunit type is IPUB
PUDGTE-- if subunit type is TER

SEE PROPRIETARY NOTICE ON COVER PAGE

Practice 234-180-020, *Diagnostic Language - DIAL*
Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Message
EX:TGR

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:TMSP-ADDR
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:TMSP a,b c:d e ILLEGAL ADDRESS f

2. REASON FOR OUTPUT

To indicate that an illegal address was used for an interactive diagnostic function on a time multiplexed switch pair (TMSP).

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | The member number of the unit being diagnosed (0-3). |
| b | The subunit type being diagnosed. |
| c | The submember number of the subunit being diagnosed. |
| d | The helper unit type, if specified. |
| e | The helper member number, if specified. |
| f | The type of illegal address: |
| ADVANCE | — The address advanced to contains an illegal address. |
| DOLLOOPS | — The loop of code contains an illegal address. |
| INVALID MUST COMPLETE PHASE IN PROGRESS | — A pause was inserted in one phase and an attempt was made to start another phase before the pause was removed from the first phase. |
| LOOP END | — The second address specified is illegal. |
| LOOP START | — The first address specified is illegal. |
| SUBROUTINES | — The subroutine contains an illegal address. |

4. ACTION TO BE TAKEN

In INVALID...PROGRESS, remove the pause from the first phase and retry the diagnostic.

In all other cases, correct the address and retry the diagnostic.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs

PUDGCONT

PUDGTG-- if subunit type is CONTR

PUDGTG99 if subunit type is IPUB

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:TMSP-CONTR
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:TMSP a, CONTR b:PH 9 IN PROGRESS c d

2. REASON FOR OUTPUT

To print whenever the time multiplexed switch (TMS) diagnostic has completed testing of a specific combination of time slot interchange (TSI) frames (TSIFs) and TMS.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the TMSP under diagnosis (0-3).
- b The number of the subunit under diagnosis.
- c This field identifies the specific combination of TSIFs that was tested, plus the total number of test failures since the start of the diagnostic. An example of c is (00110001 00000004). The format is as follows:

BIT	DESCRIPTION
0-23	Total number of failures since the start of the phase
24-26	Transmit TSI controller just completed testing
27-35	Transmit TSI member number just completed testing
36-38	Receive TSI controller just completed testing
39-47	Receive TSI member number just completed testing

- d The results of the diagnostic.
 - ATP — all tests passed.
 - CATP — all tests passed; however, some tests were skipped due to the unavailability of TSIs to perform the tests.
 - NTR — no tests were executed.
 - STF — some tests failed.
 - STF-BOF — The number of failed tests has filled the buffer. Before any more tests are run the system prints out the contents of the buffer and then clears it.

4. ACTION TO BE TAKEN

If the results are CATP, restore the TSIs to service so that tests may be executed. If STF, repair the unit. Otherwise, no action is needed.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENT
PUDGTG09

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:TMSP-ILL
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:TMSP a,b c:d e ILLEGAL PHASE

2. REASON FOR OUTPUT

To print whenever one or more illegal diagnostic phases have been requested. The illegal phase will not be executed; however, all valid phases will be run.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | The member number of the unit being diagnosed (0-3). |
| b | The subunit type being diagnosed. |
| c | The submember number of the subunit being diagnosed. |
| d | The helper unit type, if specified. |
| e | The helper member number, if specified. |

4. ACTION TO BE TAKEN

Check the *Input Message Document* for the list of valid phase numbers.

5. REFERENCES

PIDENT
DCONTOLL

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:TMSP-LOOP
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:TMSP a,b c:d e LOOPING f

2. REASON FOR OUTPUT

To indicate that the interactive diagnostic on the time multiplexed switch pair (TMSP) has either started looping through the specified code, or has completed the looping function.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the unit being diagnosed (0-3).
b	The subunit type being diagnosed.
c	The submember number of the subunit being diagnosed.
d	The helper unit type if specified.
e	The helper member number if specified.
f	COMPLETE — Looping has terminated. STARTED — Looping has begun.

4. ACTION TO BE TAKEN

If desired, stop an infinite loop using the following input message:

EX:TMSP a!

5. REFERENCES

PIDENTs
PUDGCONT
PUDGTG-- if subunit type is CONTR
PUDGTG99 if subunit type is IPUB

Practice 234-180-020, *Diagnostic Language - DIAL*
Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Message
EX:TMSP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:TMSP-NOT
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:TMSP a,b c:d e NOT STARTED - f

2. REASON FOR OUTPUT

To print whenever the interactive diagnostic request cannot be started. This is usually when the unit for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the unit being diagnosed (0-3).
b	The subunit type being diagnosed.
c	The submember number of the subunit being diagnosed.
d	The helper unit type, if specified.
e	The helper member number, if specified.
f	The reason the diagnostic was not started.

4. ACTION TO BE TAKEN

If the specified unit cannot be removed from service because there is no spare, restore a spare unit to service.

5. REFERENCES

PIDENT
MCFWPEMO

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:TMSP-PUB
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:TMSP a b c:PUB d CONTR e f g [h]

2. REASON FOR OUTPUT

To specify both the diagnostics results and the termination mode. This message is printed at the conclusion of the interactive diagnostic execution.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the time multiplexed switch (TMS) under diagnosis (0-3).
- b The type of subunit for which the diagnostic was requested.
- c The number of the subunit under diagnosis.
- d The helper peripheral unit bus (PUB) that was requested.
- e The helper time slot interchange (TSI) frame (TSIF) controller that was requested.
- f The termination mode for the diagnostic:
- ABORTED — The diagnostic was abnormally stopped due to an interrupt, error in execution, or due to a STOP:MACLI for STOP:EX input request.
- COMPLETED — The diagnostic completed normally.
- STOPPED — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution.
- g The results of the diagnostic:
- ATP — All tests passed.
- CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.
- NTF — No tests were executed.
- STF — Some tests failed.
- STF-BOF — The number of failed tests has filled the buffer. Before any more tests are run the system prints out the contents of the buffer and then clears it.

SEE PROPRIETARY NOTICE ON COVER PAGE

h An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (40000000 00001000), then tests were skipped for reasons 9 and 47.

The reasons are as follows:

BIT	REASONS FOR TESTS SKIPPED
0	Peripheral unit bus (PUB) 0 out-of-service
1	PUB 1 out-of-service
2	Primary signaling processor (SP) pulse points out-of-service
3	Secondary SP pulse points out-of-service
4	Mate unit out-of-service
5	Power control switch in request out-of-service (ROS) position or diagnostic requested from power control switch
8	CI Has other units responding
9	MI Has other units responding
10	GI has other units responding
11	PUB not duplex
12	Some time slot interchanges (TSIs) or associated voiceband interface frames (VIFs) are out-of-service
13	Duplex failure in time multiplexed switch pair (TMSP) - repair other control first
14	Mate and unit under diagnosis cannot be placed on same bus
15	Controller equipage must be in special growth or greater
16	Cannot place TSIs on out-of-service bus
17	Bus 0 power control switch in ROS position
18	Bus 1 power control switch in ROS position
24	SP scan/distribute points out-of-service
25	SP bus out-of-service
36-41	Count of TSIs used given that some TSIs were out-of-service

SEE PROPRIETARY NOTICE ON COVER PAGE

If subunit type is IPUB:

BIT	REASONS FOR TESTS SKIPPED
6	Central controller (CC) 0 out-of-service
7	CC 1 out-of-service
12	Helper controller 0 out-of-service
13	Helper controller 1 out-of-service
26	Interface peripheral unit bus (IPUB) out-of-service
27	DTFRIGAL return failed

If STF, this field gives the number of failing phases, number of failing tests, and trouble number. For example, (2,9,1101545) indicates 2 phases failed, 9 tests failed, and a trouble number of 00101545.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed. Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

5. REFERENCES

PIDENTs

PUDGCONT

PUDGTG-- if subunit type is CONTR

PUDGTG99 if subunit type is IPUB

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Messages

EX: TMSP

STOP: EX

STOP: MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:TMSP-SUSP
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] EX:TMSP a,b c:d e SUSPENDED
- [2] EX:TMSP a,b c:d e SUSPENDED AT PH f ADR g[i]
- [3] EX:TMSP a,b c:d e SUSPENDED AT PH f ADR g AFTER TEST h [i]
- [4] EX:TMSP a,b c:d e SUSPENDED ILLEGAL INPUT

2. REASON FOR OUTPUT

To print whenever interactive diagnostic execution is suspended. Each of the four formats identifies a specific type of suspension:

Format [1] is printed if there was no phase active.

Format [2] is printed if the suspension occurred at the address specified by the input message.

Format [3] is printed if the suspension occurred at the point immediately following a test.

Format [4] is printed if the diagnostic was suspended because the input was illegal.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0-3).
- b The subunit type being diagnosed.
- c The submember number of the subunit being diagnosed.
- d The helper unit type, if specified.
- e The helper member number, if specified.
- f The diagnostic phase in which the diagnostic suspended. If no phase was active, then this phase does not occur.
- g The address in the diagnostic phase at which the suspension occurred.
- h The last test executed before the suspension occurred.
- i The reason the suspension occurred:
 - ADVANCE — The diagnostic has been executed up to the specified address.

SEE PROPRIETARY NOTICE ON COVER PAGE

FIRST FAILURE — The diagnostic has been suspended because the first failure has been encountered.

PAUSE — The diagnostic has been paused at the specified address.

STEP — The requested number of steps have been completed.

NOTE: If there is no phase active, this field will not be specified.

4. ACTION TO BE TAKEN

Specify another EX:TMSP input message. If no further interactive diagnostic execution is desired, specify a STOP:MACLI or STOP:EX input message.

5. REFERENCES

PIDENTs
PUDGCONT
PUDGTG01 if CONTR is specified as the subunit
PUDGTG09 if CONTR is specified as the subunit
PUDGTG99 if C0IPUB or C1IPUB is specified as the subunit

Practice 234-180-020, *Diagnostic Language - DIAL*
Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Messages
EX:TMSP
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:TMSP-TERM
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:TMSP a,b c:d e TERMINATED AT PH f ADR g AFTER TEST h [FORCED]

2. REASON FOR OUTPUT

To print whenever the interactive diagnostic terminates early. This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the unit being diagnosed (0-3).
b	The subunit type being diagnosed.
c	The submember number of the subunit being diagnosed.
d	The helper unit type, if specified.
e	The helper member number, if specified.
f	The diagnostic phase in which the termination occurred.
g	The address in the diagnostic phase (or subroutine) at which the termination occurred.
h	The last test executed before the termination occurred.
FORCED	The termination is unconditional. Termination in this way is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

Repair the faulty frame.

5. REFERENCES

PIDENTs
PUDGCONT
PUDGTG-- if subunit type is CONTR
PUDGTG99 if subunit type is IPUB

Practice 234-180-020, *Diagnostic Language - DIAL*
Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:TMSP-TEST
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

```
EX:TMSP a,b c:d e PH f g [h]
[TEST MISMATCH SUPPLEMENTARY DATA
 i  jjjjjjjj kkkkkkkk llllllll mmmmmmmm nnnnnnnn oooooooooo
    pppppppp qqqqqqqq rrrrrrrr]
```

2. REASON FOR OUTPUT

To report the interactive diagnostic results on a phase basis. This occurs in the case of a partial diagnosis or a test failure.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | The member number of the unit being diagnosed. |
| b | The subunit type being diagnosed. |
| c | The submember number of the subunit being diagnosed. |
| d | The helper unit type, if specified. |
| e | The helper member number, if specified. |
| f | The diagnostic phase number for which the results are reported. |
| g | <p>The results of the diagnostic:</p> <p>ATP — All tests passed.</p> <p>CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.</p> <p>NTR — No tests were executed.</p> <p>STF — Some tests failed.</p> <p>STF-BOF — Some test failed and the raw data buffer overflowed. The phase has not been completed.</p> |
| h | <p>An optional field that will appear only if the results were not ATP. In CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if h is (40000000 00001000), then tests were skipped for reasons 9 and 47.</p> |

SEE PROPRIETARY NOTICE ON COVER PAGE

The reasons are as follows:

BIT	REASONS FOR TESTS SKIPPED
0	Peripheral unit bus (PUB) 0 out-of-service
1	PUB 1 out-of-service
2	Primary signaling processor (SP) pulse points out-of-service
3	Secondary SP pulse points out-of-service
4	Mate unit out-of-service
5	Power control switch in request out-of-service (ROS) position or diagnostic requested from power control switch
8	CI has other units responding
9	MI has other units responding
10	GI has other units responding
11	PUB not duplex
12	Some time slot interchanges (TSIs) or associated voiceband interface frames (VIFs) are out-of-service
13	Duplex failure in time multiplexed switch pair (TMSP) - repair other controller first
14	Mate and unit under diagnosis cannot be placed on same bus
15	Controller equipage must be in special growth or greater
16	Cannot place TSIs on out-of-service bus
17	Bus 0 power control switch in ROS position
18	BUS 1 power control switch in ROS position
24	SP scan/distribute points out-of-service
25	SP bus out-of-service
26	Interface peripheral unit bus (IPUB) out-of-service
36-41	Count of TSIs used given that some TSIs were out-of-service

If subunit type is BUS:

BIT	REASONS FOR TESTS SKIPPED
6	Central controller (CC) 0 out-of-service
7	CC 1 out-of-service
12	Helper controller 0 out-of-service
13	Helper controller 1 out-of-service

SEE PROPRIETARY NOTICE ON COVER PAGE

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, if h is (7,40000000 00001000), seven tests failed, plus tests were skipped for reasons 9 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

The following appear only if the diagnostic was STF.

i	The test number of the failing test.
j	The bits which were in error; that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.
k	RAW response from the unit.
l, m	Information concerning the test being executed. Details of l and m are specified in the diagnostic listing.
n	The address in the phase (or subroutine) of the test that failed.
o	Bits 14-0 contain information for the TLP programs. Bits 23-21 contain the count of the number of words of supplementary data that follows. Bits 20-18 contain the count of the number of words of DOLOOP data that follows. Bits 17-15 contain the count of the number of words of subroutine data that follows.
p	Supplementary data words. Variable p is repeated x times, where x is bits 23-21 of o. This data supplies information about the test being executed. The last supplementary data word specified is printed first.
q	DOLOOP data words. Variable q is repeated y times, where y is bits 20-18 of o. This data is the value of the DOLOOP variables at the time of the test failure. The value of the innermost DOLOOP is printed first.
r	Subroutine data words. Variable r is repeated z times, where z is bits 17-15 of the o. This data is the address of the callsubs which led up to this point in the diagnostic. The last address of callsub is printed first.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed. Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs

PUDGCONT

PUDGTG-- if subunit type is CONTR

PUDGTG99 if subunit type is IPUB

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Message

EX:TMSP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:TSI-ADDR
WORK CENTER.. MOC, TEC
GENERIC 4E21 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:TSI a,b c:d e ILLEGAL ADDRESS f

2. REASON FOR OUTPUT

To indicate that an illegal address was used for an interactive diagnostic function on a Time Slot Interchange (TSI).

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0-63).
- b The subunit type being diagnosed.
- c The submember number of the subunit being diagnosed.
- d The helper unit type, if specified.
- e The helper member number, if specified.
- f The type of illegal address:
- ADVANCE — The address advanced to contains an illegal address.
- DOLLOOPS — The loop of code contains an illegal address.
- INVALID MUST COMPLETE PHASE IN PROGRESS — A pause was inserted in one phase and an attempt was made to start another phase before the pause was removed from the first phase.
- LOOP END — The second address specified is illegal.
- LOOP START — The first address specified is illegal.
- SUBROUTINES — The subroutine contains an illegal address.

4. ACTION TO BE TAKEN

If INVALID . . . PROGRESS, remove the pause from the first phase and retry the diagnostic.

In all other cases correct the address and retry the diagnostic.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs

PUDGTI--, if CONTR is specified as the subunit

PUDGTI99, if IPUB is specified as the subunit

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:TSI-ILL
WORK CENTER.. MOC, TEC
GENERIC 4E21 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:TSI a,b c:d e ILLEGAL PHASE

2. REASON FOR OUTPUT

To print whenever one or more illegal diagnostic phases have been requested. The illegal phase will not be executed; however, all valid phases will be run.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | The member number of the unit being diagnosed (0-63). |
| b | The subunit type being diagnosed. |
| c | The submember number of the subunit being diagnosed. |
| d | The helper unit type, if specified. |
| e | The helper member number, if specified. |

4. ACTION TO BE TAKEN

Check the *Input Message Document* for the list of valid phase numbers.

5. REFERENCES

PIDENTs
DCONTOLL
PUDGTI --

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:TSI-LOOP
WORK CENTER.. MOC, TEC
GENERIC 4E21 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:TSI a,b c:d e LOOPING {COMPLETED|STARTED}

2. REASON FOR OUTPUT

To indicate that the interactive diagnostic on a Time Slot Interchange (TSI) has either started looping through the specified code, or has completed the looping function.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the unit being diagnosed (0-63).
b	The subunit type being diagnosed.
c	The submember number of the subunit being diagnosed.
d	The helper unit type, if specified.
e	The helper member number, if specified.
COMPLETE	Looping has terminated.
STARTED	Looping has begun.

4. ACTION TO BE TAKEN

If desired, stop an infinite loop using the input command: EX:TSI a!

5. REFERENCES

PIDENTs
PUDGTI--, if CONTR is specified as the subunit
PUDGTI99, if IPUB is specified as the subunit

Practice 234-180-020, *Diagnostic Language - DIAL*
Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Message
EX:TSI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:TSI-NOT
WORK CENTER.. MOC, TEC
GENERIC 4E21 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:TSI a,b c:d e NOT STARTED - f

2. REASON FOR OUTPUT

To print whenever the interactive diagnostic request cannot be started. This is usually when the unit for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the unit being diagnosed (0-63).
b	The subunit type being diagnosed.
c	The submember number of the subunit being diagnosed.
d	The helper unit type.
e	The helper member number.
f	The reason the diagnostic was not started.

4. ACTION TO BE TAKEN

If the specified unit cannot be removed from service because there is no spare, restore a spare unit to service.

5. REFERENCES

PIDENTs
MCFWPEMO
PUDGTI--

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:TSI-PUB
WORK CENTER.. MOC, TEC
GENERIC 4E21 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:TSI a b c:PUB d e f [g]

2. REASON FOR OUTPUT

To specify both the diagnostics results and the termination mode. This message is printed at the conclusion of the interactive diagnostic execution.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the Time Slot Interchange (TSI) Frame (TSIF) under diagnosis (0-63).
- b The type of subunit for which the diagnostic was requested.
- c The number of the subunit under diagnosis.
- d The helper Peripheral Unit Bus (PUB) that was requested.
- e The termination mode for the diagnostic:
- ABORTED — The diagnostic was abnormally stopped due to an interrupt, error in execution, or due to a STOP:MACLI or STOP:EX input request.
- COMPLETED — The diagnostic completed normally.
- STOPPED — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution.
- f The results of the diagnostic:
- ATP — All tests passed.
- CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.
- NTR — No tests were executed.
- STF — Some tests failed.
- STF-BOF — The number of failed tests has filled the buffer. Before any more tests are run the system prints out the contents of the buffer and then clears it.

SEE PROPRIETARY NOTICE ON COVER PAGE

g An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if g is (40000000 00001000), then tests were skipped for reasons 9 and 47.

The reasons for TSI controllers are as follows:

BIT	REASONS FOR TESTS SKIPPED
0	Peripheral Unit Bus (PUB) 0 out-of-service
1	PUB 1 out-of-service
2	Primary Signaling Processor (SP) pulse points out-of-service
3	Secondary SP pulse points out-of-service
4	Mate unit out-of-service
5	Power control switch in Request Out-Of-Service (ROS) position or diagnostic requested from power control switch
8	Clock Interrogate (CI) has other units responding
9	Member Interrogate (MI) has other units responding
10	Group Interrogate (GI) has other units responding
11	PUB not duplex
12	Time Multiplexed Switch Pair (TMSP) out-of-service
13	Voiceband Interface Unit (VIU) / DTU out-of-service
14	Network blockage encountered
15	Time Slot Interchange Frame (TSIF) in growth
16	Echo Suppressor Unit (ESU) out-of-service
24	SP scan / distribute points out-of-service
25	SP bus out-of-service

If subunit type is IPUB:

BIT	REASONS FOR TESTS SKIPPED
6	Central Controller (CC) 0 out-of-service
7	CC 1 out-of-service
12	Helper controller 0 out-of-service
13	Helper controller 1 out-of-service
26	Interface Peripheral Unit Bus (IPUB) out-of-service
27	DTFRIGAL return failed

If STF, this field gives the number of failing phases, number of failing tests, and trouble number. For example, (2,9,00101545) indicates 2 phases failed, 9 tests failed, and a trouble number of 00101545.

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4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed. Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the Teletypewriter (TTY).

5. REFERENCES

PIDENTs

PUDGTI--, if subunit type is CONTR

PUDGTI99, if subunit type is IPUB

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Messages

EX:TSI

STOP:EX

STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:TSI-SUSP
WORK CENTER.. MOC, TEC
GENERIC 4E21 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] EX:TSI a,b c:d e SUSPENDED
- [2] EX:TSI a,b c:d e SUSPENDED AT PH f ADR g [i]
- [3] EX:TSI a,b c:d e SUSPENDED AT PH f ADR g AFTER TEST h [i]
- [4] EX:TSI a,b c:d e SUSPENDED ILLEGAL INPUT

2. REASON FOR OUTPUT

To print whenever interactive diagnostic execution is suspended. Each of the formats identifies a specific type of suspension:

Format [1] is printed if there was no phase active.

Format [2] is printed if the suspension occurred at the address specified by the input message.

Format [3] is printed if the suspension occurred at the point immediately following a test.

Format [4] is printed if the diagnostic was suspended because the input was illegal.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0-63).
- b The subunit type being diagnosed.
- c The submember number of the subunit being diagnosed.
- d The helper unit type, if specified.
- e The helper member number, if specified.
- f The diagnostic phase in which the diagnostic suspended. If no phase was active, then this phase does not occur.
- g The address in the diagnostic phase at which the suspension occurred.
- h The last test executed before the suspension occurred.
- i The reason the suspension occurred:
 - ADVANCE — The diagnostic has been executed up to the specified address

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FIRST FAILURE — The diagnostic has been suspended because the first failure has been encountered

PAUSE — The diagnostic has been paused at the specified address

STEP — The requested number of steps have been completed

NOTE: If there is no phase active, this field will not be specified.

4. ACTION TO BE TAKEN

Specify another EX:TSI input message. If no further interactive diagnostic executed is desired, specify a STOP:MACLI or STOP:EX input message.

5. REFERENCES

PIDENTs

PUDGTI--, if CONTR is specified as the subunit

PUDGTI99, if IPUB is specified as the subunit

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Messages

EX:TSI

STOP:EX

STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:TSI-TERM
WORK CENTER.. MOC, TEC
GENERIC 4E21 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:TSI a,b c:d e TERMINATED AT PH f ADR g AFTER TEST h [FORCED]

2. REASON FOR OUTPUT

To print whenever the interactive diagnostic terminates early. This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the unit being diagnosed (0-63).
b	The subunit type being diagnosed.
c	The submember number of the subunit being diagnosed.
d	The helper unit type, if specified.
e	The helper member number, if specified.
f	The diagnostic phase in which the termination occurred.
g	The address in the diagnostic phase (or subroutine) at which the termination occurred.
h	The last test executed before the termination occurred.
FORCED	The termination is unconditional. Termination in this way is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

Repair the faulty frame.

5. REFERENCES

PIDENTs

PUDGTI--, if subunit type is CONTR

PUDGTI99, if subunit type is IPUB

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:TSI-TEST
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

```
EX:TSI a,b c:d e PH f g [h]
[TEST MISMATCH SUPPLEMENTARY DATA
 i  jjjjjjjj kkkkkkkk llllllll mmmmmmmm nnnnnnnn oooooooooo
    pppppppp qqqqqqqq rrrrrrrr]
```

2. REASON FOR OUTPUT

To report the interactive diagnostic results on a phase basis. This occurs in the case of a particular diagnosis, or a test failure.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | The member number of the unit being diagnosed (0-63). |
| b | The subunit type being diagnosed. |
| c | The submember number of the subunit being diagnosed. |
| d | The helper unit type, if specified. |
| e | The helper member number, if specified. |
| f | The diagnostic phase number for which the results are reported. |
| g | <p>The results of the diagnostic:</p> <p>ATP — All tests passed.</p> <p>CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.</p> <p>NTR — No tests were executed.</p> <p>STF — Some tests failed.</p> <p>STF-BOF — Some tests failed and the raw data buffer overflowed. The phase has not been completed.</p> |
| h | <p>An optional field that will appear only if the results were not ATP. If CATP and NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if h is (40000000 00001000), then tests were skipped for reasons 9 and 47.</p> |

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The reasons are as follows:

BIT	REASONS FOR TESTS SKIPPED
0	Peripheral Unit Bus (PUB) 0 out-of-service
1	PUB 1 out-of-service
2	Primary Signaling Processor (SP) pulse points out-of-service
3	Secondary SP pulse points out-of-service
4	Mate unit out-of-service
5	Power control switch in Request Out-Of-Service (ROS) position or diagnostic requested from power control switch
8	Clock Interrogate (CI) has other units responding
9	Member Interrogate (MI) has other units responding
10	Group Interrogate (GI) has other units responding
11	PUB not duplex
12	Time Multiplexed Switch Pair (TMSP) out-of-service
13	Voiceband Interface Unit (VIU) / DTU out-of-service
14	Network blockage encountered
15	Time Slot Interchange Frame (TSIF) in growth
16	ESU out-of-service
24	SP scan / distribute points out-of-service
25	SP bus out-of-service
26	Interface Peripheral Unit Bus (IPUB) out-of-service

If subunit type is BUS:

BIT	REASONS FOR TESTS SKIPPED
6	Central Controller (CC) 0 out-of-service
7	CC 1 out-of-service
12	Helper controller 0 out-of-service
13	Helper controller 1 out-of-service

If STF, this field gives the number of test failures, in addition to the reasons that tests were skipped. For example, if h is (7,40000000 00001000), seven tests failed, plus tests were skipped for reasons 9 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

The following appear only if the diagnostic was STF.

- i The test number of the failing test.
- j The bits which were in error; that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.

SEE PROPRIETARY NOTICE ON COVER PAGE

k	RAW response from the unit.
l, m	Information concerning the test being executed. Details of l and m are specified in the diagnostic listing.
n	The address in the phase (or subroutine) of the test that failed.
o	Bits 14-0 contain information for the TLP programs. Bits 23-21 contain the count of the number of words of supplementary data that follows. Bits 20-18 contain the count of the number of words of DOLLOOP data that follows. Bits 17-15 contain the count of the number of words of subroutine data that follows.
p	Supplementary data words. Variable p is repeated x times, where x is bits 23-21 of o. This data supplies information about the test being executed. The last supplementary data word specified is printed first.
q	DOLLOOP data words. Variable q is repeated y times, where y is bits 20-18 of o. This data is the value of the DOLLOOP variables at the time of the test failure. The value of the innermost DOLLOOP is printed first.
r	Subroutine data words. Variable r is repeated z times, where z is bits 17-15 of o. This data is the address of the callsubs which led up to this point in the diagnostic. The address of the last callsub is printed first.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, the unit should be repaired as quickly as possible. Otherwise, no action is needed. Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the Teletypewriter (TTY).

5. REFERENCES

PIDENTs

PUDGTI-- if subunit type is CONTR

PUDGTI99 if subunit type is IPUB

PUDGTS--

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Message

EX:TSI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:VIF
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:VIF a,b c:d e LOOPING STARTED

2. REASON FOR OUTPUT

To print whenever the looping form of the EX:VIF input message is specified. LOOPING STARTED indicates that the diagnostic is repeatedly executing one or more consecutive segments of code.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the unit being diagnosed (0-127).
b	The subunit type being diagnosed.
c	The submember number of the subunit being diagnosed.
d	The helper unit type.
e	The helper member number.

4. ACTION TO BE TAKEN

If desired, stop an infinite loop using the following input message:

EX:VIF a!.

5. REFERENCES

PIDENT
MCFWPEMO

Input Message
EX:VIF

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:VIF-ILL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:VIF a,b c:d e ILLEGAL PHASE

2. REASON FOR OUTPUT

To print whenever one or more illegal diagnostic phases have been requested on a partial diagnostic request. The illegal phase will not be executed. However, all valid phases will be run.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the unit being diagnosed (0-127).
b	The subunit type being diagnosed.
c	The submember number of the subunit being diagnosed.
d	The helper unit type.
e	The helper member number.

4. ACTION TO BE TAKEN

Check the *Input Message Document* for the list of valid phase numbers.

5. REFERENCES

PIDENT
DCONTOLL

Output Message
DGN:VIF-ILL

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:VIF-NOT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:VIF a,b c:d e NOT STARTED - f

2. REASON FOR OUTPUT

To print whenever the diagnostic request cannot be started. This is usually when the unit for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the unit being diagnosed.
b	The subunit type being diagnosed.
c	The submember number of the subunit being diagnosed.
d	The helper unit type.
e	The helper member number.
f	The reason the diagnostic was not started.

4. ACTION TO BE TAKEN

If the specified unit cannot be removed from service because there is no spare, restore a spare unit to service.

5. REFERENCES

PIDENT
MCFWPEMC

Output Message
DGN:VIF-NOT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:VIF-PUB
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:VIF a b c:PUB d e f [g]

2. REASON FOR OUTPUT

To print at the conclusion of the interactive diagnostic execution. This message specifies both the diagnostics results and the termination mode.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | The member number of the voiceband interface frame (VIF) under diagnosis (0-127). |
| b | The type of subunit for which the diagnostic was requested. |
| c | The number of the subunit under diagnosis. |
| d | The helper peripheral unit bus (PUB) that was requested. |
| e | <p>The termination mode for the diagnostic:</p> <p>ABORTED — The diagnostic was abnormally stopped due to an interrupt, error in execution, or due to a STOP:MACLI input request.</p> <p>COMPLETED — The diagnostic completed normally.</p> <p>STOPPED — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution.</p> |
| f | <p>The results of the diagnostic:</p> <p>ATP — All tests passed.</p> <p>CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.</p> <p>NTR — No tests were executed.</p> <p>STF — Some tests failed.</p> <p>STF-BOF — The number of failed tests has filled the buffer. Before any more tests are run, the system prints out the contents of the buffer and then clears it.</p> |

SEE PROPRIETARY NOTICE ON COVER PAGE

- g An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped. The reasons are identified by their bit positions in the 16-digit octal number that is printed. For example, if g is (40000000 00001000), then tests were skipped for reasons 9 and 47.

The reasons are as follows:

BIT	REASONS FOR TESTS SKIPPED
0	Peripheral unit bus (PUB) 0 out-of-service
1	PUB 1 out-of-service
2	Primary signaling processor (SP) pulse points out-of-service
3	Secondary SP pulse points out-of-service
4	Mate unit out-of-service
5	Power control switch in request out-of-service (ROS) position or diagnostic requested from power control switch
8	CI has other units responding
9	MI has other units responding
10	GI has other units responding
11	PUB not duplex
12	No SM flywheel tests - all voiceband interface units (VIUs) alarming
13	Protection switch (PSW) skipped - VIU protection switched
14	Simplex mode - controller powered off
15	VIU unavailable - all VIUs have SD alarms
16	VIU 7 unavailable
17	Autonomous peripheral unit failure (APUF)-CI has other units responding
18	Autonomous peripheral unit trouble (APUT)-CI has other units responding
24	SP scan / distribute points out-of-service

If STF, this field gives the number of failing phases, number of failing tests, trouble number. For example, (2,9, 00101545) indicates 2 phases failed, 9 tests failed, and a trouble number of 00101545.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs

PUDGVC-- if subunit type is CONTR

PUDGVC01 if subunit type is IPUB

PUDGVU-- if subunit type is VIU

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Messages

EX:VIF

STOP:EX

STOP:MACLI

Output Message

DGN:VIF-PUB

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:VIF-SUSP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] EX:VIF a,b c:d e SUSPENDED
- [2] EX:VIF a,b c:d e SUSPENDED AT PH f ADR g [i]
- [3] EX:VIF a,b c:d e SUSPENDED AT PH f ADR g AFTER TEST h[i]
- [4] EX:VIF a,b c:d e SUSPENDED ILLEGAL INPUT

2. REASON FOR OUTPUT

To print whenever interactive diagnostic execution is suspended. Each of the four formats identifies a specific type of suspension:

Format [1] is printed if there was no phase active.

Format [2] is printed if the suspension occurred at the address specified by the input message.

Format [3] is printed if the suspension occurred at the point immediately following a test.

Format [4] is printed if the diagnostic was suspended because the input was illegal.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed.
- b The subunit type being diagnosed.
- c The submember number of the subunit being diagnosed.
- d The helper unit type, if specified.
- e The helper member number, if specified.
- f The diagnostic phase in which the diagnostic suspended. If no phase was active, then this phase does not occur.
- g The address in the diagnostic phase at which the suspension occurred.
- h The last test executed before the suspension occurred.
- i The reason the suspension occurred:
 - ADVANCE — The diagnostic has been executed up to the specified address.

SEE PROPRIETARY NOTICE ON COVER PAGE

FIRST FAILURE — The diagnostic has been suspended because the first failure has been encountered.

PAUSE — The diagnostic has been paused at the specified address.

STEP — The requested number of steps have been completed.

NOTE: If there is no phase active, this field will not be specified.

4. ACTION TO BE TAKEN

Specify another EX:VIF input message.

5. REFERENCES

PIDENT
PUDGVC

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Message
EX:VIF

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:VIF-TERM
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:VIF a,b c:d e TERMINATED AT PH f ADR g AFTER TEST h [FORCED]

2. REASON FOR OUTPUT

To print whenever the diagnostic terminates early. This early termination will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the unit being diagnosed.
b	The subunit type being diagnosed.
c	The submember number of the subunit being diagnosed.
d	The helper unit type, if specified.
e	The helper member number, if specified.
f	The diagnostic phase in which the termination occurred.
g	The address in the diagnostic phase (or subroutine) at which the termination occurred.
h	The last test executed before the termination occurred.
FORCED	The termination is unconditional. Termination in this way is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

Repair the faulty frame.

5. REFERENCES

PIDENTs

PUDGVC-- if subunit type is CONTR

PUDGVU-- if subunit type is VIU

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Output Message

DGN:VIF-TERM

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:VIF-TEST
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:VIF a, b c:d e f g [h]
[TEST MISMATCH SUPPLEMENTARY DATA
i jjjjjjjj kkkkkkkk llllllll mmmmmmmm nnnnnnnn oooooooooo
pppppppp qqqqqqqq rrrrrrrr]

2. REASON FOR OUTPUT

To report the interactive diagnostic results on a phase basis. This occurs in the case of a partial diagnosis, or a test failure.

3. VARIABLE FIELD DEFINITIONS

- | | | | | | | | | | | | |
|---------|---|-----|---------------------|------|---|-----|---------------------------|-----|----------------------|---------|---|
| a | The member number of the unit being diagnosed. | | | | | | | | | | |
| b | The subunit type being diagnosed. | | | | | | | | | | |
| c | The submember number of the subunit being diagnosed. | | | | | | | | | | |
| c | The helper member number specified. | | | | | | | | | | |
| d | The helper unit type, if specified. | | | | | | | | | | |
| e | The helper member number, if specified. | | | | | | | | | | |
| f | The diagnostic phase number for which the results are reported. | | | | | | | | | | |
| g | <p>The results of the diagnostic:</p> <table border="0" style="margin-left: 40px;"> <tr> <td>ATP</td> <td>— All tests passed.</td> </tr> <tr> <td>CATP</td> <td>— All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.</td> </tr> <tr> <td>NTR</td> <td>— No tests were executed.</td> </tr> <tr> <td>STF</td> <td>— Some tests failed.</td> </tr> <tr> <td>STF-BOF</td> <td>— The number of failed tests has filled the buffer. Before any more tests are run, the system prints out the contents of the buffer and then clears it.</td> </tr> </table> | ATP | — All tests passed. | CATP | — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test. | NTR | — No tests were executed. | STF | — Some tests failed. | STF-BOF | — The number of failed tests has filled the buffer. Before any more tests are run, the system prints out the contents of the buffer and then clears it. |
| ATP | — All tests passed. | | | | | | | | | | |
| CATP | — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test. | | | | | | | | | | |
| NTR | — No tests were executed. | | | | | | | | | | |
| STF | — Some tests failed. | | | | | | | | | | |
| STF-BOF | — The number of failed tests has filled the buffer. Before any more tests are run, the system prints out the contents of the buffer and then clears it. | | | | | | | | | | |
| h | <p>An optional field that will appear only if the results were not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit positions in the 16-digit octal number that is printed. For example, if the h is (40000000 00001000), then tests were skipped for reasons 9 and 47.</p> | | | | | | | | | | |

SEE PROPRIETARY NOTICE ON COVER PAGE

The reasons are as follows:

BIT	REASONS FOR TESTS SKIPPED
0	Peripheral unit bus (PUB) 0 out-of-service
1	PUB 1 out-of-service
2	Primary signaling processor (SP) pulse points out-of-service
3	Secondary SP pulse points out-of-service
4	Mate unit out-of-service
5	Power control switch in request out-of-service (ROS) position or diagnostic requested from power control switch
8	CI has other units responding
9	MI has other units responding
10	GI has other units responding
11	PUB not duplex
12	No SM flywheel tests - all voiceband interface units (VIUs) alarming
13	Protection switch (PSW) skipped - VIU protection switched
14	Simplex mode - controller powered off
15	VIU unavailable - all VIUs have SD alarms
16	VIU 7 unavailable
17	Autonomous peripheral unit failure (APUF)-CI has other units responding
18	Autonomous peripheral unit trouble (APUT)-CI has other units responding
24	SP scan / distribute points out-of-service

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, h is (7,40000000 00001000), seven tests failed, plus tests were skipped for reasons 9 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

The following appear only if the diagnostic was STF:

- i The test number of the failing test.
- j The bits which were in error; that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.
- k The actual result of the test.

SEE PROPRIETARY NOTICE ON COVER PAGE

l	The last order to the voiceband interface controller (VIC).
m	The expected result of the test.
n	The address in the phase (or subroutine) of the test that failed.
o	Bits 14-1 contain the VIC involved in the test. Bits 23-21 contain the count of the number of words of supplementary data that follows. Bits 20-18 contain the count of the number of words of DOLOOP data that follows. Bits 17-15 contain the count of the number of words of subroutine data that follows.
p	Supplementary data words. The p is repeated x times, where x is bits 23-21 of o. This data supplies information about the test being executed. The last supplementary data word specified is printed first.
q	DOLOOP data words. The q is repeated y times, where y is bits 20-18 of o. The data is the value of the DOLOOP variables at the time of the test failure. The value of the innermost DOLOOP is printed first.
r	Subroutine data words. The r is repeated z times, where z is bits 17-15 of o. This data is the address of the callsubs which led up to this point in the diagnostic. The address of the last callsub is printed first.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

5. REFERENCES

PIDENTs

PUDGVC-- if subunit type is CONTR

PUDGVC01 if subunit type is IPUB

PUDGVU-- if subunit type is VIU

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Message

EX:VIF

Output Message

DGN:VIF-TEST

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:XPWR
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:XPWR a b c [d]

2. REASON FOR OUTPUT

To report both the diagnostic results and the termination mode at the conclusion of the interactive diagnostic execution on a miscellaneous power (XPWR) unit.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit under diagnosis (0 or 1).
- b The termination mode for the diagnostic:
- ABORTED — The diagnostic was abnormally stopped because of an interrupt, error in execution, or because of a STOP:MACLI input request.
- COMPLETED — The diagnostic completed normally.
- STOPPED — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution.
- c The results of the diagnostic:
- ATP — All tests passed.
- CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.
- NTR — No tests were executed.
- STF — Some tests failed.
- STF-BOF — The number of failed tests has filled the buffer. Before any more tests are run the system prints out the contents of the buffer and then clears it.
- d An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (40000000 00010000), then tests were skipped for reasons 12 and 47.

SEE PROPRIETARY NOTICE ON COVER PAGE

The reasons are as follows:

Bit	Meaning
12	Scan and signal distributor (SSD) out of service (OOS).
43	Power monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).
46	Frame request for PWRMON active (try again).
47	Unit not in normal state.

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, if d is (7,40000000 00010000), seven tests failed, plus tests were skipped for reasons 12 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service if possible, so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

If a diagnostic request is made from the unit power switch, power monitor tests are NOT run. This omission causes bit 46 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the teletypewriter (TTY).

Any problems indicated by CATP bits should be cleared before running the diagnostic again.

5. REFERENCES

PIDENTs

DCONTABL

XPDG--, where -- represents all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=XPDG, UTYPE=1XLUXPWR

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages

CLR:MACLI

EX:XPWR

STOP:EX

STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:XPWR-ADDR
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:XPWR a ILLEGAL ADDRESS b

2. REASON FOR OUTPUT

To report that an illegal address was used for an interactive diagnostic function on a miscellaneous power (XPWR) unit.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The type of illegal address:
- ADVANCE — The address advanced to contains an illegal address.
- DOLLOOPS — The loop of code contains an illegal address.
- INVALID MUST COMPLETE PHASE IN PROGRESS — A pause was inserted in one phase and an attempt was made to start another phase before the pause was removed from the first phase.
- LOOP END — The second address specified is illegal.
- LOOP START — The first address specified is illegal.
- SUBROUTINES — The subroutine contains an illegal address.

4. ACTION TO BE TAKEN

If INVALID MUST COMPLETE PHASE IN PROGRESS , remove the pause from the first phase and retry the diagnostic.

In all other cases, correct the address and retry the diagnostic.

5. REFERENCES

PIDENTs
DCONTABL
XPDG--, where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=XPDG, UTYPE=1XLUXPWR

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM User's Manual

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Messages
CLR:MACLI
EX:XPWR
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:XPWR-ILL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:XPWR a ILLEGAL PHASE

2. REASON FOR OUTPUT

To report when only illegal diagnostic phases have been requested on a partial interactive diagnostic request for a miscellaneous power (XPWR) unit.

3. VARIABLE FIELD DEFINITIONS

a The member number of the unit being diagnosed (0 or 1).

4. ACTION TO BE TAKEN

Check PIDENT DCONTABL for PREFIX=XPDG, UTYPE=1XLUXPWR to obtain the list of valid phase numbers.

5. REFERENCES

PIDENTs
DCONTABL
XPDG--, where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=XPDG, UTYPE=1XLUXPWR

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages
CLR:MACLI
EX:XPWR
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:XPWR-LOOP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:XPWR a LOOPING b

2. REASON FOR OUTPUT

To report that the interactive diagnostic on a miscellaneous power (XPWR) unit has either started looping through the specified code, or has completed the looping function.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b COMPLETE — Looping has terminated.
 STARTED — Looping has begun.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
DCONTABL
XPDG--, where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=XPDG, UTYPE=1XLUXPWR

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages
CLR:MACLI
EX:XPWR
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:XPWR-NOT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:XPWR a NOT STARTED - b

2. REASON FOR OUTPUT

To report when the interactive diagnostic request cannot be started for the miscellaneous power (XPWR) unit. This usually occurs when the unit for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The reason the diagnostic was not started.

4. ACTION TO BE TAKEN

If the specified unit cannot be removed from service because there is no spare, restore a spare unit to service.

5. REFERENCES

PIDENTs
DCONTABL
XPDG--, where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=XPDG, UTYPE=1XLUXPWR

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM User's Manual

Input Messages
CLR:MACLI
EX:XPWR
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:XPWR-SUSP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

- [1] EX:XPWR a SUSPENDED
- [2] EX:XPWR a SUSPENDED AT PH b ADR c [e]
- [3] EX:XPWR a SUSPENDED AT PH b ADR c AFTER TEST d [e]
- [4] EX:XPWR a SUSPENDED ILLEGAL INPUT

2. REASON FOR OUTPUT

To report when interactive diagnostic execution has been suspended for a miscellaneous power (XPWR) unit. Each of the four formats identifies a specific type of suspension:

Format [1] if there was no phase active.

Format [2] at the address specified by the input message.

Format [3] the point immediately following a test.

Format [4] if the input is illegal.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The diagnostic phase in which the diagnostic suspended.
- c The address in the diagnostic phase at which the suspension occurred.
- d The last test executed before the suspension occurred.
- e The reason the suspension occurred:
 - ADVANCE — The diagnostic has been executed up to the specified address.
 - FIRST FAILURE — The diagnostic has been suspended because the first failure has been encountered.
 - PAUSE — The diagnostic has been paused at the specified address.
 - STEP — The requested number of steps have been completed.

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

Specify another EX: input. If no further interactive diagnostic execution is desired, specify a STOP:MACLI input message for the appropriate subclass.

5. REFERENCES

PIDENTs

DCONTABL

XPDG--, where -- represents all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=XPDG, UTYPE=1XLUXPWR

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages

CLR:MACLI

EX:XPWR

STOP:EX

STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:XPWR-TERM
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:XPWR a TERMINATED AT PH b ADR c AFTER TEST d [FORCED]

2. REASON FOR OUTPUT

To report when the interactive diagnostic terminates early for a miscellaneous power (XPWR) unit. This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the unit being diagnosed (0 or 1).
b	The diagnostic phase in which the termination occurred.
c	The address in the diagnostic phase at which the termination occurred.
d	The last test executed before the termination occurred.
FORCED	The termination is unconditional. Termination in this way is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

Repair the faulty frame. If further diagnostic execution is desired, specify UCL on the DGN: input message. This will inhibit all early terminations except those that are forced.

5. REFERENCES

PIDENTs
DCONTABL
XPDG--, where -- represents all valid phase numbers
listed in PIDENT DCONTABL for PREFIX=XPDG, UTYPE=1XLUXPWR

Practice 254-280-040, *Diagnostic Language - DL-1*
Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Messages

CLR:MACLI
DGN:XPWR
EX:XPWR
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:XPWR-TEST
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EX:XPWR a PH b c [d]
[TEST MISMATCH SUPPLEMENTARY DATA
ee ffffffff gggggggg]

2. REASON FOR OUTPUT

To report when the diagnostic results are printed on a phase basis for a Miscellaneous Power (XPWR) unit. This occurs in the case of a partial diagnosis, a test failure, or when RAW was requested on the input message.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0 or 1).
- b The diagnostic phase number for which the results are reported.
- c The results of the diagnostic:
- ATP — All tests passed.
 - CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.
 - NTR — No tests were executed.
 - STF — Some tests failed.
 - STF-BOF — Some tests failed and the test failure buffer overflowed.
- d An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if d is (40000000 00010000), then tests were skipped for reasons 12 and 47.

The reasons are as follows:

Bit	Meaning
12	Scan and Signal Distributor (SSD) Out Of Service (OOS).
43	Power Monitor (PWRMON) test timed out (try again).
44	Two PWRMON jobs concurrently active (try again).
45	PWRMON work table full (try again).

SEE PROPRIETARY NOTICE ON COVER PAGE

Bit	Meaning
46	Frame request for PWRMON active (try again).
47	Unit not in normal state.

If STF, this field gives the number of test failures in addition to the reasons that tests were skipped. For example, if d is (7,40000000 00010000), seven tests failed, plus tests were skipped for reasons 12 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

The following appear only if the diagnostic was STF.

- e Test number of the failing test.
- f The bits that were in error; that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.
- g An optional field containing supplementary data concerning the failing test if available. This field may contain up to seven words. See diagnostic Pident for an explanation of the data.

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed.

5. REFERENCES

PIDENTs

DCONTABL

XPDG--, where -- represents all valid phase numbers

listed in PIDENT DCONTABL for PREFIX=XPDG, UTYPE=1XLUXPWR

Practice 254-280-040, *Diagnostic Language - DL-1*

Practice 254-280-220, *Diagnostic Programs - Description*

PA-4A002-01, *4ESSTM User's Manual*

Input Messages

CLR:MACLI

EX:XPWR

STOP:EX

STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:XTSI-ADDR
WORK CENTER.. MOC, TEC
GENERIC 4E24 Rel. 2 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:XTSI a,b c:d e ILLEGAL ADDRESS f

2. REASON FOR OUTPUT

To indicate that an illegal address was used for an interactive diagnostic function on an Expanded Time Slot Interchange (XTSI).

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0-63).
- b The subunit type being diagnosed.
- c The submember number of the subunit being diagnosed.
- d The helper unit type, if specified.
- e The helper member number, if specified.
- f The type of illegal address:
- ADVANCE — The address advanced to contains an illegal address.
- DOLLOOPS — The loop of code contains an illegal address.
- INVALID MUST COMPLETE PHASE IN PROGRESS — A pause was inserted in one phase and an attempt was made to start another phase before the pause was removed from the first phase.
- LOOP END — The second address specified is illegal.
- LOOP START — The first address specified is illegal.
- SUBROUTINES — The subroutine contains an illegal address.

4. ACTION TO BE TAKEN

If INVALID . . . PROGRESS, remove the pause from the first phase and retry the diagnostic.

In all other cases correct the address and retry the diagnostic.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs

PUDGDS--, if D3U is specified as the subunit
PUDGIB--, if IBU is specified as the subunit
PUDGXS--, if SPU is specified as the subunit
PUDGXT--, if CONTR is specified as the subunit
PUDGXT99, if IPUB is specified as the subunit

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:XTSI-ILL
WORK CENTER.. MOC, TEC
GENERIC 4E24 Rel. 2 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:XTSI a,b c:d e ILLEGAL PHASE

2. REASON FOR OUTPUT

To print whenever one or more illegal diagnostic phases have been requested. The illegal phase will not be executed; however, all valid phases will be run.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the unit being diagnosed (0-63).
b	The subunit type being diagnosed.
c	The submember number of the subunit being diagnosed.
d	The helper unit type, if specified.
e	The helper member number, if specified.

4. ACTION TO BE TAKEN

Check the *Input Message Document* for the list of valid phase numbers.

5. REFERENCES

PIDENTs
DCONTOLL
PUDGDS--, if D3U is specified as the subunit
PUDGIB--, if IBU is specified as the subunit
PUDGXS--, if SPU is specified as the subunit
PUDGXT--, if CONTR is specified as the subunit
PUDGXT99, if IPUB is specified as the subunit

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:XTSI-LOOP
WORK CENTER.. MOC, TEC
GENERIC 4E24 Rel. 2 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:XTSI a,b c:d e LOOPING {COMPLETED|STARTED}

2. REASON FOR OUTPUT

To indicate that the interactive diagnostic on an Expanded Time Slot Interchange (XTSI) has either started looping through the specified code, or has completed the looping function.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the unit being diagnosed (0-63).
b	The subunit type being diagnosed.
c	The submember number of the subunit being diagnosed.
d	The helper unit type, if specified.
e	The helper member number, if specified.
COMPLETE	Looping has terminated.
STARTED	Looping has begun.

4. ACTION TO BE TAKEN

If desired, stop an infinite loop using the input command: EX:XTSI a!

5. REFERENCES

PIDENTs
PUDGDS--, if D3U is specified as the subunit
PUDGIB--, if IBU is specified as the subunit
PUDGXS--, if SPU is specified as the subunit
PUDGXT--, if CONTR is specified as the subunit
PUDGXT99, if IPUB is specified as the subunit

Practice 234-180-020, *Diagnostic Language - DIAL*
Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Message
EX:XTSI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:XTSI-NOT
WORK CENTER.. MOC, TEC
GENERIC 4E24 Rel. 2 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:XTSI a,b c:d e NOT STARTED - f

2. REASON FOR OUTPUT

To print whenever the interactive diagnostic request cannot be started. This is usually when the unit for which the diagnostic was requested cannot be removed from service.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the unit being diagnosed (0-63).
b	The subunit type being diagnosed.
c	The submember number of the subunit being diagnosed.
d	The helper unit type.
e	The helper member number.
f	The reason the diagnostic was not started.

4. ACTION TO BE TAKEN

If the specified unit cannot be removed from service because there is no spare, restore a spare unit to service.

5. REFERENCES

PIDENTs
MCFWPEMO
PUDGDS--, if D3U is specified as the subunit
PUDGIB--, if IBU is specified as the subunit
PUDGXS--, if SPU is specified as the subunit
PUDGXT--, if CONTR is specified as the subunit
PUDGXT99, if IPUB is specified as the subunit

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:XTSI-PUB
WORK CENTER.. MOC, TEC
GENERIC 4E24 Rel. 2 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:XTSI a b c:PUB d e f [g]

2. REASON FOR OUTPUT

To specify both the diagnostics results and the termination mode. This message is printed at the conclusion of the interactive diagnostic execution.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | The member number of the Expanded Time Slot Interchange (XTSI) frame under diagnosis (0-63). |
| b | The type of subunit for which the diagnostic was requested. |
| c | The number of the subunit under diagnosis. |
| d | The helper Peripheral Unit Bus (PUB) that was requested. |
| e | <p>The termination mode for the diagnostic:</p> <p>ABORTED — The diagnostic was abnormally stopped due to an interrupt, error in execution, or due to a STOP:MACLI or STOP:EX input request.</p> <p>COMPLETED — The diagnostic completed normally.</p> <p>STOPPED — The diagnostic was terminated under program control since further testing would not improve diagnostic resolution.</p> |
| f | <p>The results of the diagnostic:</p> <p>ATP — All tests passed.</p> <p>CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.</p> <p>NTR — No tests were executed.</p> <p>STF — Some tests failed.</p> <p>STF-BOF — The number of failed tests has filled the buffer. Before any more tests are run the system prints out the contents of the buffer and then clears it.</p> |

SEE PROPRIETARY NOTICE ON COVER PAGE

g An optional field that will appear only if the results are not ATP. If CATP or NTR, this field identifies the reason that the tests were skipped. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if g is (40000000 00001000), then tests were skipped for reasons 9 and 47.

The reasons for XTSI controllers and Digital Signal Level 3 Units (D3Us), Signal Processing Unit (SPU) or In-Band Unit (IBU) are as follows:

BIT	REASONS FOR TESTS SKIPPED
0	Peripheral Unit Bus (PUB) 0 out-of-service
1	PUB 1 out-of-service
2	Primary Signaling Processor (SP) pulse points out-of-service
3	Secondary SP pulse points out-of-service
4	Mate unit out-of-service
5	Power control switch in Request Out-Of-Service (ROS) position
6	Central Controller (CC) 0 Out Of Service
7	CC 1 Out Of Service
8	Power monitor tests skipped on manual ROS test (diagnostic requested from power control switch)
9	Member Interrogate (MI) has other units responding
10	Group Interrogate (GI) has other units responding
11	PUB not duplex
12	Autonomous Peripheral Unit Failure (APUF) CATP flag
13	Autonomous Peripheral Unit Trouble (APUT) CATP flag
14	Network blockage encountered
15	Time Slot Interchange Frame (TSIF) in growth
17	Some other frame responding to Poll High Priority (PHP) polling
18	Some other frame responding to Poll Low Priority (PLP) polling
19	Some other frame responding to Poll Digit (PDG) polling
20	Some other frame responding to Poll Seizure (PSZ) polling
22	Controller 0 Out Of Service
23	Controller 1 Out Of Service
24	SP scan / distribute points out-of-service
25	SP bus out-of-service
26	Some Protection Switch Client (PSC) is protection switched
27	Controller not duplex
28	One or both controller power feeds are not available
30	Some PSC port is pested

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BIT	REASONS FOR TESTS SKIPPED (continued)
31	Network clock 0 Out Of Service
32	Network clock 1 Out Of Service
33	Time Multiplexed Switch (TMS) is Out Of Service
34	A-Link Controller (ALC) is powered down
35	Controller 0 is powered down
36	Controller 1 is powered down
37	Some PSC Power Control Switch is in Request Out Of Service (ROS) position
38	Some PSC Port is not running operational load
39	Digital Signal Level 3 Units (D3Us) Signal Processing Units (SPUs) or In-Band Unit (IBU) not in growth or special growth
40	D3U or SPU not protection switched
41	IBU Out-Of-Service
42	IBU Power control switch in Request Out-Of-Service (ROS) position
43	IBU is not running operational load
44	IBU port is pested

If subunit type is IPUB:

BIT	REASONS FOR TESTS SKIPPED
6	Central Controller (CC) 0 out-of-service
7	CC 1 out-of-service
12	Helper controller 0 out-of-service
13	Helper controller 1 out-of-service
26	Interface Peripheral Unit Bus (IPUB) out-of-service
27	DTFRIGAL return failed

If STF, this field gives the number of failing phases, number of failing tests, and trouble number. For example, (2,9,00101545) indicates 2 phases failed, 9 tests failed, and a trouble number of 00101545.

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, repair the unit as quickly as possible. Otherwise, no action is needed. Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 8 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the Teletypewriter (TTY).

5. REFERENCES

PIDENTs

PUDGDS--, if D3U is specified as the subunit
PUDGIB--, if IBU is specified as the subunit
PUDGXS--, if SPU is specified as the subunit
PUDGXT--, if CONTR is specified as the subunit
PUDGXT99, if IPUB is specified as the subunit

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Messages

EX:XTSI
STOP:EX
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:XTSI-SUSP
WORK CENTER.. MOC, TEC
GENERIC 4E24 Rel. 2 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] EX:XTSI a,b c:d e SUSPENDED
- [2] EX:XTSI a,b c:d e SUSPENDED AT PH f ADR g [i]
- [3] EX:XTSI a,b c:d e SUSPENDED AT PH f ADR g AFTER TEST h [i]
- [4] EX:XTSI a,b c:d e SUSPENDED ILLEGAL INPUT

2. REASON FOR OUTPUT

To print whenever interactive diagnostic execution is suspended. Each of the formats identifies a specific type of suspension:

Format [1] is printed if there was no phase active.

Format [2] is printed if the suspension occurred at the address specified by the input message.

Format [3] is printed if the suspension occurred at the point immediately following a test.

Format [4] is printed if the diagnostic was suspended because the input was illegal.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0-63).
- b The subunit type being diagnosed.
- c The submember number of the subunit being diagnosed.
- d The helper unit type, if specified.
- e The helper member number, if specified.
- f The diagnostic phase in which the diagnostic suspended. If no phase was active, then this phase does not occur.
- g The address in the diagnostic phase at which the suspension occurred.
- h The last test executed before the suspension occurred.
- i The reason the suspension occurred:
 - ADVANCE — The diagnostic has been executed up to the specified address

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FIRST FAILURE — The diagnostic has been suspended because the first failure has been encountered

PAUSE — The diagnostic has been paused at the specified address

STEP — The requested number of steps have been completed

NOTE: If there is no phase active, this field will not be specified.

4. ACTION TO BE TAKEN

Specify another EX:XTSI input message. If no further interactive diagnostic executed is desired, specify a STOP:MACLI or STOP:EX input message.

5. REFERENCES

PIDENTs

PUDGDS--, if D3U is specified as the subunit
PUDGIB--, if IBU is specified as the subunit
PUDGXS--, if SPU is specified as the subunit
PUDGXT--, if CONTR is specified as the subunit
PUDGXT99, if IPUB is specified as the subunit

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Messages

EX:XTSI
STOP:EX
STOP:MACLI

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ID EX:XTSI-TERM
WORK CENTER.. MOC, TEC
GENERIC 4E24 Rel. 2 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

EX:XTSI a,b c:d e TERMINATED AT PH f ADR g AFTER TEST h [FORCED]

2. REASON FOR OUTPUT

To print whenever the interactive diagnostic terminates early. This early termination of execution will only occur if some tests have failed and further execution will degrade fault resolution or cause system problems.

3. VARIABLE FIELD DEFINITIONS

a	The member number of the unit being diagnosed (0-63).
b	The subunit type being diagnosed.
c	The submember number of the subunit being diagnosed.
d	The helper unit type, if specified.
e	The helper member number, if specified.
f	The diagnostic phase in which the termination occurred.
g	The address in the diagnostic phase (or subroutine) at which the termination occurred.
h	The last test executed before the termination occurred.
FORCED	The termination is unconditional. Termination in this way is restricted to cases where further diagnostic execution will cause system problems.

4. ACTION TO BE TAKEN

Repair the faulty frame.

5. REFERENCES

PIDENTs
PUDGDS--, if D3U is specified as the subunit
PUDGIB--, if IBU is specified as the subunit
PUDGXS--, if SPU is specified as the subunit
PUDGXT--, if CONTR is specified as the subunit
PUDGXT99, if IPUB is specified as the subunit

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Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EX:XTSI-TEST
WORK CENTER.. MOC, TEC
GENERIC 4E24 Rel. 2 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] EX:XTSI a,b c:d e PH f g [h]
[TEST MISMATCH SUPPLEMENTARY DATA
i jjjjjjjj kkkkkkkk llllllll mmmmmmmm nnnnnnnn ooooooooo
pppppppp qqqqqqqq rrrrrrrr]
- [2] EX:XTSI a, CONTR s PH f g [h] MSG STARTED
[TEST MISMATCH SUPPLEMENTARY DATA
i jjjjjjjj 00tttttt uuuuvvvv vvvvvvvv wwwwww xyza1.a1
0b1c1.c1 00d1..d1 00e1..e1 00f1..f1 00g1..g1
00h1..h1 00i1..i1]
- [3] EX:XTSI a, D3U j1, PH f g [h] MSG STARTED
[TEST MISMATCH SUPPLEMENTARY DATA
i jjjjjjjj 00tttttt uuuuvvvv vvvvvvvv wwwwww xyza1.a1
0b1c1.c1 00d1..d1 00e1..e1 00f1..f1 00g1..g1
00h1..h1 00i1..i1]
- [4] EX:XTSI a, SPU k1, PH f g [h] MSG STARTED
[TEST MISMATCH SUPPLEMENTARY DATA
i jjjjjjjj 00tttttt uuuuvvvv vvvvvvvv wwwwww xyza1.a1
0b1c1.c1 00d1..d1 00e1..e1 00f1..f1 00g1..g1
00h1..h1 00i1..i1]
- [5] EX:XTSI a, IBU 0, PH f g [h] MSG STARTED
[TEST MISMATCH SUPPLEMENTARY DATA
i jjjjjjjj 00tttttt uuuuvvvv vvvvvvvv wwwwww xyza1.a1
0b1c1.c1 00d1..d1 00e1..e1 00f1..f1 00g1..g1
00h1..h1 00i1..i1]

2. REASON FOR OUTPUT

To report the interactive diagnostic results on a phase basis. This occurs in the case of a particular diagnosis, or a test failure.

Format [1] is the general format.

Format [2] is the Controller (CONTR) resident format.

Format [3] is the Digital Signal Level 3 Unit (D3U) resident format.

Format [4] is the Signal Processing Unit (SPU) resident format.

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Format [5] is the In-Band Unit (IBU) resident format.

3. VARIABLE FIELD DEFINITIONS

- a The member number of the unit being diagnosed (0-63).
- b The subunit type being diagnosed.
- c The submember number of the subunit being diagnosed.
- d The helper unit type, if specified.
- e The helper member number, if specified.
- f The diagnostic phase number for which the results are reported.
- g The results of the diagnostic:
 - ATP — All tests passed.
 - CATP — All tests passed; however, some tests were skipped due to the unavailability of a system resource which was needed to perform the test.
 - NTR — No tests were executed.
 - STF — Some tests failed.
 - STF-BOF — Some tests failed and the raw data buffer overflowed. The phase has not been completed.
- h An optional field that will appear only if the results were not ATP. If CATP and NTR, this field identifies the reason that the tests were skipped in this phase. The reasons are identified by their bit position in the 16-digit octal number that is printed. For example, if h is (40000000 00001000), then tests were skipped for reasons 9 and 47.

The reasons for XTSI controllers and D3Us, SPU's or IBU are as follows:

BIT	REASONS FOR TESTS SKIPPED
0	Peripheral Unit Bus (PUB) 0 out-of-service
1	PUB 1 out-of-service
2	Primary Signaling Processor (SP) pulse points out-of-service
3	Secondary SP pulse points out-of-service
4	Mate unit out-of-service
5	Power control switch in Request Out-Of-Service (ROS) position
6	Central Controller (CC) 0 Out Of Service
7	CC 1 Out Of Service

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BIT	REASONS FOR TESTS SKIPPED (continued)
8	Power monitor tests skipped on manual ROS test (diagnostic requested from power control switch)
9	Member Interrogate (MI) has other units responding
10	Group Interrogate (GI) has other units responding
11	PUB not duplex
12	Autonomous Peripheral Unit Failure (APUF) CATP flag
13	Autonomous Peripheral Unit Trouble (APUT) CATP flag
14	Network blockage encountered
15	Time Slot Interchange Frame (TSIF) in growth
17	Some other frame responding to Poll High Priority (PHP) polling
18	Some other frame responding to Poll Low Priority (PLP) polling
19	Some other frame responding to Poll Digit (PDG) polling
20	Some other frame responding to Poll Seizure (PSZ) polling
22	Controller 0 Out Of Service
23	Controller 1 Out Of Service
24	SP scan / distribute points out-of-service
25	SP bus out-of-service
26	Some Protection Switch Client (PSC) is protection switched
27	Controller not duplex
28	One or both controller power feeds are not available
30	Some PSC port is pested
31	Network clock 0 Out Of Service
32	Network clock 1 Out Of Service
33	Time Multiplexed Switch (TMS) is Out Of Service
34	A-Link Controller (ALC) is powered down
35	Controller 0 is powered down
36	Controller 1 is powered down
37	Some PSC Power Control Switch is in Request Out Of Service (ROS) position
38	Some PSC Port is not running operational load
39	Digital Signal Level 3 Unit (D3U) Signal Processing Unit (SPU) or In-Band Unit (IBU) not in growth or special growth
40	D3U or SPU not protection switched
41	IBU Out-Of-Service
42	IBU Power control switch in Request Out-Of-Service (ROS) position
43	IBU is not running operational load
44	IBU port is pested

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If subunit type is IPUB:

BIT	REASONS FOR TESTS SKIPPED
6	Central Controller (CC) 0 out-of-service
7	CC 1 out-of-service
12	Helper controller 0 out-of-service
13	Helper controller 1 out-of-service
26	Interface Peripheral Unit Bus (IPUB) out-of-service
27	DTFRIGAL return failed

If STF, this field gives the number of test failures, in addition to the reasons that tests were skipped. For example, if h is (7,40000000 00001000), seven tests failed, plus tests were skipped for reasons 9 and 47.

If STF-BOF, the number of test failures is the number of test failures up to the point of buffer overflow.

The following appear only if the diagnostic was STF.

i	The test number of the failing test.
j	The bits which were in error; that is, a 1 in a bit position indicates that the response from the unit did not match the expected response in that bit.
k	RAW response from the unit.
l, m	Information concerning the test being executed. Details of are specified in the diagnostic listing.
n	The address in the phase (or subroutine) of the test that failed.
o	Bits 14-0 contain information for the Trouble Location Procedure (TLP) programs. Bits 23-21 contain the count of the number of words of supplementary data that follows. Bits 20-18 contain the count of the number of words of DOLLOOP data that follows. Bits 17-15 contain the count of the number of words of subroutine data that follows.
p	Supplementary data words. Repeated x times, where x is bits 23-21 of variable o. This data supplies information about the test being executed. The last supplementary data word specified is printed first.
q	DOLLOOP data words. Repeated y times, where y is bits 20-18 or variable o. This data is the value of the DOLLOOP variables at the time of the test failure. The value of the innermost DOLLOOP is printed first.
r	Subroutine data words. Repeated z times, where z is bits 17-15 of variable o. This data is the address of the callsubs which led up to this point in the diagnostic. The address of the last callsub is printed first.
s	Controller number (0 or 1).

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t	The least significant 16 bits represent the actual octal data from the half word of LR57, where a mismatch with expected data occurred. The expected data must be derived from the actual and mismatched data fields.
u	PU address bus bits of the bus order sent to the subunit (12 bits).
v	PU write bus bits of the order sent to the subunit (36 bits). The upper 7 bits are the opcode and the remaining 29 bits are the data for the order. For subunit PUMACRO orders this includes the PUMACRO macro ID, a data expected flag (write only vs. a write/read order), a sub-opcode, and the test group number.
w	DIAL address of the instruction that failed.
x	Number of words of supplementary data.
y	Number of words of do-loop data. Not defined by subunit code.
z	Number of words of subroutine data. Not defined by subunit code.
a1	Trouble Location Procedure (TLP) data. Not defined by subunit code.
b1	Indicates in which half word of the subunit 32 bit word the mismatched data occurred. (0 least significant, 1 most significant)
c1	Subunit microprogram address of the previous function called, i.e., the first function on the stack or the function that called DGFAIL.
d1	Subunit microprogram address of the second function on the stack, i.e., the address of a subroutine call which then called DGFAIL.
e1	The 16 bit field of supplementary data written to the least significant half word of LR58. NOTE: The upper 8 bits of this and the following octal words will always be zero, i.e., only the lower 16 bits are used.
f1	The 16 bit field of supplementary data written to the most significant half word of LR59. NOTE: A 32 bit data word in LR59 is split between the lower 16 bits of two 24 bit supplementary data words.
g1	The 16 bit field of supplementary data written to the least significant half word of LR59.
h1	The 16 bit field of supplementary data written to the most significant half word of LR60.
i1	The 16 bit field of supplementary data written to the least significant half word of LR60.
j1	Digital Signal Level 3 Unit (D3U) number.
k1	Signal Processing Unit (SPU) number.

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4. ACTION TO BE TAKEN

If the results are CATP, restore the indicated system resource to service so that all tests may be executed. If STF, the unit should be repaired as quickly as possible. Otherwise, no action is needed. Diagnostics may also be requested via the main frame. When they are, power monitor tests are omitted. This omission causes bit 8 in the CATP field to be set. If power monitor tests are desired, the diagnostic must be requested via the Teletypewriter (TTY).

5. REFERENCES

PIDENTs

PUDGDS--, if D3U is specified as the subunit
PUDGIB--, if IBU is specified as the subunit
PUDGXS--, if SPU is specified as the subunit
PUDGXT--, if CONTR is specified as the subunit
PUDGXT99, if IPUB is specified as the subunit

Practice 234-180-020, *Diagnostic Language - DIAL*

Practice 234-180-260, *4ESSTM Peripheral Diagnostic Program - Description*

Input Message
EX:XTSI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID EXC:UTILDS
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

EXC:UTILDS a b
[c] [d]
[e]

2. REASON FOR OUTPUT

To report the status of the request to execute a previously input utility data set (UTILDS).

3. VARIABLE FIELD DEFINITIONS

a	Utility data set name.
b	Status of request: ABORTED — Execution has stopped at line indicated because of error condition. COMPLETED — All statements in data set have been successfully processed IN PROGRESS — Execution is continuing.
c	Number of line most recently processed.
d	Data set line.
e	Acknowledgment.

4. ACTION TO BE TAKEN

If status of the request is ABORTED, view data set using the OP:UTILDS input command, and correct the error.

5. REFERENCES

PIDENTs
GULPDSET
GULRUTCR

Practice 234-301-003, *1B Processor Generic Utility Program (GULP) Application - Description*

Input Messages
EXC:UTILDS
IN:UTILDS
OP:UTILDS

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1. FORMAT

2. REASON FOR OUTPUT

3. VARIABLE FIELD DEFINITIONS

4. ACTION TO BE TAKEN

5. REFERENCES

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ID IN:ERAPCOND
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

IN:ERAPCOND a b c

2. REASON FOR OUTPUT

To report the disposition of the IN:ERAPCOND input message.

3. VARIABLE FIELD DEFINITIONS

- a Name of the condition that was input.
- b Disposition of the input request:
- COMPLETED — The condition has been successfully stored in disk memory and is ready for use.
- STOPPED — A problem was encountered in processing the input message and, consequently, the condition was not stored in disk memory.
- c Failure indication if b is STOPPED:
- ?D, INC DATA — Indicates that the item named as an argument of ITEM1 (or ITEM2) is not recognized as being contained in the data block named as an argument of DATA1 (or DATA2). Alternatively, it indicates that the two data blocks named as arguments of DATA1 and DATA2 do not belong to the same type of file. (See the table of file types in the description of the OP:ERAPDATA input message.)
- ?D, INV DATA — Indicates that the argument of DATA1 (or DATA2) is not recognized as a valid data block name.
- ?I, INC DATA — Indicates that the condition name is already in use; that is, a condition of the same name is already stored.
- COND MEMORY FULL — Indicates that all available disk memory for storing conditions is already in use.

4. ACTION TO BE TAKEN

Use the CLR:ERAPCOND input message to delete conditions currently in storage if all available disk memory has been used.

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Use the OP:ERAPCOND a! input message to output condition a stored in memory.

Use the OP:ERAPCOND;SUM! input message to list all conditions currently in storage.

5. REFERENCES

PIDENTs
ERAP
ERIF

Practice 254-200-215, *Error Analysis Program Application*
Practice 254-280-320, *Error Analysis Program*

Input Messages
CLR:ERAPCOND
IN:ERAPCOND
OP:ERAPCOND
OP:ERAPDATA

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ID IN:OWBUF
 WORK CENTER.. MOC
 GENERIC 4E21 and later
 APPLICATION .. 4E,1B
 TYPE Output

1. FORMAT

[1] IN:OWBUF
 CORE ADR OLD DATA NEW DATA
 a b c
 .
 .

[2] IN:OWBUF
 FS ADR ID TAG OLD DATA NEW DATA
 d e b c
 .
 .

2. REASON FOR OUTPUT

To respond to the IN:OWBUF input message. Prints the address of the overwrite, the data currently at that address, and the data to be placed there. This enables the user to verify that the overwrite is in the correct location.

Format [1] prints for nonsecure call store (CS), call store secure (CSS), program store secure (PSS), and extended non-secure call store (XS).

Format [2] prints for file system (FS) data.

3. VARIABLE FIELD DEFINITIONS

- a Thirty bit main memory address.
- b Data currently in system.
- c Data to be placed in system.
- d Relative 1B file address.
- e Identification tag used by the IN:OWBUF input message.

4. ACTION TO BE TAKEN

Assure that OLD DATA matches what is expected. If it does not, input address may be wrong.

5. REFERENCES

PIDENTs
 GULPOWRT

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4ESS
OM-4B000-01

IN:OWBUF

Input Messages
COPY:OWBUF
IN:OWBUF
STOP:OVRWRT

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IN:OWBUF-2

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ID IN:UTILDS
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

IN:UTILDS a b

2. REASON FOR OUTPUT

To indicate the status of the data set input mode.

3. VARIABLE FIELD DEFINITIONS

a	Data set name.
b	ABORTED TIMEOUT — Input mode has been aborted because lines were not input in a given amount of time.
	COMPLETED — Data set has been cataloged.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
GULPDSET

Practice 234-301-003, *1B Processor Generic Utility Program (GULP) Application - Description*

Input Message
IN:UTILDS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID INH:E2A
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

INH:E2A INPUT COMPL

2. REASON FOR OUTPUT

To report that the E2A telemetry input has been manually inhibited by the operation of the "CONT INH" key on the master control complex (MCC) panel.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
MCCMS CCP
MCCMSCCR

Practice 254-280-212, *Master Control Complex Common Control and Monitor Program*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID INH:LIBMSG
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

INH:LIBMSG:CLIENT a b

2. REASON FOR OUTPUT

To report that the auxiliary input message facility for client a has been deactivated. Auxiliary input messages may no longer be entered into client a. The deactivation was either in response to an INH:LIBMSG input message, or the facility was automatically timed-out when some other client was queued for the facility and no auxiliary input message was entered into client a for three minutes.

3. VARIABLE FIELD DEFINITIONS

a Client number (0-7) assigned to a library program task being executed.
b COMPLETED — The auxiliary input message facility for client a has been deactivated.

4. ACTION TO BE TAKEN

If further auxiliary input is needed for client a, use the ALW:LIBMSG input message to request the auxiliary input facility.

5. REFERENCES

PIDENT
LIBRINPT

Practice 254-280-214, *Library Control Program*
Input Messages
ALW:LIBMSG
INH:LIBMSG

SEE PROPRIETARY NOTICE ON COVER PAGE

ID INH:MUPAUD
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

- [1] INH:MUPAUD MUP a COMPLETED BANK b c
- [2] INH:MUPAUD MUP a STOPPED d
- [3] INH:MUPAUD MUP a ABORTED

2. REASON FOR OUTPUT

To report the termination status of INH:MUPAUD input message and/or any errors that were found during the execution of the INH:MUPAUD command.

3. VARIABLE FIELD DEFINITIONS

- a Member number of the master control complex (MCC) and utility processor (MUP) (0 or 1).
- b MUP audit bank number from 0 to 3.
- c Inhibit status in terms of a 32 bit binary bit map, where the 0 bit (right most bit) indicates the inhibit status of audit #1 of the bank b, and the 1st bit indicates the inhibit status of audit #2 of the bank b, and so on.

For each bit set, the corresponding audit is inhibited. For example, if audit #2 and #3 are inhibited (assume others are not inhibited), then the output will be as follows:

111111111111111111111111111111110110

NOTE: Bit 4 to bit 31 will always be 1 since the corresponding audits are not implemented.

- d Possible reasons for stop:
- MUP OOS — MUP is out-of-service.
- MUP/IFB COMMUNICATION ERROR — Failed to communicate with MUP.
- MUPAUD ERROR — Error source is the MUP audit (MUPAUD) process.
- MUPOS ERROR — Error source is the MUP operating system (MUPOS) process.

SEE PROPRIETARY NOTICE ON COVER PAGE

TIME OUT ERROR — Failed to finish the job within the time limit.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

Input Messages
ALW:MUPAUD
INH:MUPAUD
OP:MUPAUD
STOP:MUPAUD
TEST:MUPAUD

SEE PROPRIETARY NOTICE ON COVER PAGE

ID INH:RC
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

INH:RC MSG, RESTRICTED TO MOC

2. REASON FOR OUTPUT

To indicate that the master control complex (MCC) recent change (RC) restrict key was pushed. Recent changes are restricted to RCMOC, MTC, and SREC1 input channels.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

Wait for ALW:RC output message before inputting recent change messages from outside the MOC area.

5. REFERENCES

PIDENT
RCMAMAIN

Translation Guide, 4ESSTM, TG-4

Output Message
ALW:RC

SEE PROPRIETARY NOTICE ON COVER PAGE

ID INH:SP
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

INH:SP a MTX FLT DET COMPL

2. REASON FOR OUTPUT

To report that the signaling processor (SP) matrix fault detect is inhibited.

3. VARIABLE FIELD DEFINITIONS

a Member number of SP (0-31).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
MCFWIOCP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID INH:USGMEAS
WORK CENTER.. MAC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

INH:USGMEAS:TSI a SPC b c

2. REASON FOR OUTPUT

To report the disposition of a request to inhibit the scanning of a time slot interchange (TSI) for usage measurements.

3. VARIABLE FIELD DEFINITIONS

- a TSI frame (00-63).
- b Switching and permuting controller (0 or 1).
- c Disposition of the corresponding input message processing:
- ABORTED — Processing is not completed; memory may have been updated.
- COMPLETED — The TSI has been removed from the list of TSIs for which usage measurements are obtained.
- NOT STARTED — Processing is not completed. No memory has been updated.
- NOT STARTED UNAS — Processing cannot continue. TSI is not on the list of TSIs for which usage measurements were obtained.

4. ACTION TO BE TAKEN

If the disposition of the input message is ABORTED, output the set of TSIs currently scanned for usage to determine what changes, if any, were made. See input message OP:MEASTSI.

5. REFERENCES

PIDENT
TRAFMSGs

Translation Guide, 4ESSTM, TG-4, Division 10, Section 3b

Input Messages
INH:USGMEAS-TS
OP:MEASTSI

SEE PROPRIETARY NOTICE ON COVER PAGE

4ESS
OM-4B000-01

INH:USGMEAS

Output Message
OP:MEASTSI

SEE PROPRIETARY NOTICE ON COVER PAGE

INH:USGMEAS-2

Issue 1.8
September 2001

ID INH:UTIL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

INH:UTIL a

2. REASON FOR OUTPUT

To report the results of the request to deactivate generic utility flags.

3. VARIABLE FIELD DEFINITIONS

a Disposition of the request:

 COMPLETED — Operation successful. Active system flags have been
 deactivated by pesting G-level source.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
GULPUTPP
GULPUTXP
GULRUTCR

Practice 234-301-003, *1B Processor Generic Utility Program (GULP) Application - Description*

PA-4A002-01, *4ESSTM User's Manual*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID INH:VSSID
WORK CENTER.. TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

INH:VSSID a, SID b; {STBYACT|EXTUPD}
FAILURE REASON c

2. REASON FOR OUTPUT

To respond to the input message INH:VSSID and to supply the reason that the message was not acted on.

3. VARIABLE FIELD DEFINITIONS

a	5-digit voice storage system (VSS) identification (VSSID).
b	7-digit service identification (SID).
STBYACT	Activation delayed on a standby announcement from a VSS, direct producer, or manual recording update.
EXTUPD	External updates on VSS or direct producer types of announcements.
c	Reason for failure: ANN LOCKOUT — Announcement handling locked out. CB QR FAIL — Callback queue request failed. INVALID TYPE — Announcement is barge-in type. INVALID STE — Announcement state is not standby full. MISC ERROR — Audit problem, etc.

4. ACTION TO BE TAKEN

Correct error before retrying input message.

5. REFERENCES

PIDENTs
ANNHTTYM
TMAD0005

Input Message
INH:VSSID

SEE PROPRIETARY NOTICE ON COVER PAGE

ID INIT:ALM
WORK CENTER.. MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

INIT:ALM COMPL

2. REASON FOR OUTPUT

To report that the initialization of the office alarm system has been completed as a result of the input message INIT:ALM.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
ALRM01

Input Message
INIT:ALM

SEE PROPRIETARY NOTICE ON COVER PAGE

- TSN — SP-ROW-POINT Trunk Scanner Number (TSN) of trunk in the digroup.
- SP = A 2-digit decimal number indicating the SP member number, range 00-31.
- ROW = A 3-digit decimal number indicating the row in the SP, range 000-255.
- POINT = A 2-digit decimal number indicating the point in the row, range 00-15.
- XTSI, D3U, DG — The Expanded Time Slot Interchange (XTSI), D3U unit and digroup number.
- b Number of DIF digroups.
- c COMPLETED — Request was honored.
- REJECTED — Request was denied.
- REJECTED NONOPERATIONAL UNIT — Request denied, TSI port, DT, DTU, TSI, D3U, DIF or DIU is not operational.
- REQUESTED NON DTU TRUNK — Request denied, input trunk is not a DTU, DIU or D3U.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
TMAD0005
TMAD0061
TMTCXTSI

Input Messages
ANALY: DIGROUP
INIT: DGSTAT
OP: DGSTAT
SET: DIGROUP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID INIT:LIBSYS
WORK CENTER.. MAC, MOC, NMOC, TEC,
 TOC
GENERIC 4E22 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

INIT:LIBSYS a

2. REASON FOR OUTPUT

To report the disposition of the INIT portion of the LOAD:LIBSYS input message .

3. VARIABLE FIELD DEFINITIONS

a Disposition of the requested action:

ABORTED — Interrupt occurred while processing, causing the request to be aborted. Resubmit the input message.

COMPLETED — Library file store area has been initialized.

STOPPED — The initialization was terminated by manual request.

STOPPED ERROR ON FS OPERATION — Read or write of the library file store area failed. Resubmit the input message. If failures continue, verify ID2FS map for 1DKLIBRARY.

STOPPED FS AREA NOT DEFINED — No library file store area was defined for storing library packages. INIT:LIBSYS is not required.

STOPPED SAWS INHIBIT ERROR — System audit of writable stores (SAWS) program could not be interrupted at this time to perform a write into the library file store area. Resubmit the input message.

STOPPED SOFT ERROR — Library control status words were zeroed before maintenance control program (MACP) began the execution for the initialization (INIT) program. Resubmit the input message.

4. ACTION TO BE TAKEN

Action to be taken depends on the disposition of the request. See VARIABLE FIELD DEFINITIONS.

5. REFERENCES

PIDENT
LIBRLOAD

SEE PROPRIETARY NOTICE ON COVER PAGE

4ESS
OM-4B000-01

INIT:LIBSYS

Input Message
LOAD:LIBSYS

SEE PROPRIETARY NOTICE ON COVER PAGE

INIT:LIBSYS-2

Issue 1.8
September 2001

ID INIT:PMSTAT
WORK CENTER.. MOC, TEC, TOC
GENERIC 4E22 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

INIT:PMSTAT,a b:c

2. REASON FOR OUTPUT

To indicate the disposition of an INIT:PMSTAT input message.

3. VARIABLE FIELD DEFINITIONS

a	The identity of the Expanded Time Slot Interchange (XTSI) Digital Signal Level 1's (DS1s):	
ALL	Indicates performance measurement registers for all XTISs, D3Us and DGs equipped were reset.	
CIN	Circuit Identification Number (CIN) of any trunk in the DS1.	
OTAN	Octal trunk appearance number (OTAN) of any trunk in the DS1.	
TAN	TSI-SPC-PORT-CHANNEL trunk appearance number (TAN) of any trunk in the DS1:	
	TSI —	A 2-digit decimal number indicating the TSI member number (00-63).
	SPC —	A 1-digit decimal number indicating Signaling Processor (SP) of TSI (0-1).
	PORT —	A 1-digit decimal number indicating port of Time Slot Interchange (TSI), (0-7).
	CHANNEL —	A 3-digit decimal number indicating channel (0-127).
TSN	Trunk Scanner Number (TSN) is broken down into SP-ROW-POINT:	
	SP —	A 2-digit decimal number indicating the pseudo SP number (00-31).
	ROW —	A 3-digit decimal number indicating the row in the SP (000-255).
	POINT —	A 2-digit decimal number indicating the point in the row (00-15).

SEE PROPRIETARY NOTICE ON COVER PAGE

XTSI, D3U, DG Expanded Time Slot Interchange (XTSI) number (0-63), Digital Signal Level 3 Unit (D3U) (0-5) and Digroup (DG) (1-28).

b Specifies the number of consecutive DS1s looked at starting from the specified one. That one must be operational.

c Status:

COMPLETED — Request was honored.

REJECTED — Request was denied.

REJECTED NON DS1 TRUNK — Request denied, input trunk was not a DS1.

REJECTED NONOPERATIONAL UNIT — Request denied, XTSI, D3U or DS1 is not operational.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
TMTCXTSI

Input Message
OP:PMSTAT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID INIT:SCS
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

INIT:SCS a b

2. REASON FOR OUTPUT

To respond to a INIT:SCS input message requesting the format (init) of one of the disks of a service circuit unit (SCU).

3. VARIABLE FIELD DEFINITIONS

- a Service circuit system (SCS) member number (0-7) containing the SCU.
- b Response to a format SCU disk request.
- SCU x ABORTED - MACRO REJECTED — The SCS controller did not accept the SCU disk format macro.
- SCU x ABORTED - MACRO TIMEOUT — The SCS controller did not reply to the SCU disk format macro.
- SCU x COMPLETE — The SCU disk format has completed.
- SCU x FAILED — The SCU disk format has failed.
- SCU x IN PROGRESS — The SCU disk format is in-progress.
- SCU x STARTED — The SCU disk format has started.
- SCU x STOPPED - ANN UPD IP — An announcement update is in progress in one or more SCUs in the SCS. The SCU disk format cannot be run concurrently with an announcement update.
- SCU x STOPPED - CONTR DUP FAIL OR UNEQ — Both controllers in the SCS frame are either unequipped or out-of-service (OOS).
- SCU x STOPPED - DISK UNEQ — The SCU disk pair is unequipped.
- SCU x STOPPED - SCU DISK IN USE — An inter/intra SCU file copy, intra SCU raw disk copy, or an SCU disk format job is already in progress in the SCS frame. The SCU disk format cannot run concurrently with these jobs.
- SCU x STOPPED - SCU IN-SERVICE — The SCU is in-service ,the SCU must be taken OOS prior to format.
- SCU x STOPPED - SCU UNEQ — The SCU is unequipped.

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

If variable b is:

- SCU x ABORTED - MACRO REJECTED — Diagnose the active controller and re-enter the input message.
- SCU x ABORTED - MACRO TIMEOUT — Diagnose the active controller and re-enter the input message.
- SCU x COMPLETE — No action required.
- SCU x FAILED — Diagnose the SCU and re-enter the input message.
- SCU x IN PROGRESS — No action required.
- SCU x STARTED — No action required.
- SCU x STOPPED - ANN UPD IP — Re-enter the input message after the announcement update has completed.
- SCU x STOPPED - CONTR DUP FAIL OR UNEQ — Equip the SCS or restore at least one of the controllers and re-enter the input message.
- SCU x STOPPED - DISK UNEQ — Correct the SCU disk pair number or equip the disk pair and re-enter the input message.
- SCU x STOPPED - SCU DISK IN USE — Re-enter the input message after the interfering job in the SCS has completed or stop the interfering job.
- SCU x STOPPED - SCU IN-SERVICE — Use the RMV:SCS input message to remove the SCU and re-enter the input message.
- SCU x STOPPED - SCU UNEQ — Correct the SCU number or equip the SCU and re-enter the input message.

NOTE: Two disk packs are required to implement a disk pair. Where a disk pack (such as the TN4000) contains more than one disk drive, each drive forms part of a mirrored pair with a disk on the adjacent pack. When an INIT operation is specified by a trouble clearing procedure, growth procedure, or support organization, it may be appropriate to repeat the INIT operation for the second disk in the pair. If the need to perform the INIT operation for each pair is unclear, consult with your designated support organization.

5. REFERENCES

PIDENT
SCSFPUMP

Input Messages
INIT:SCS
STOP:INIT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID INIT:TLPQUEUE
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

INIT:TLPQUEUE STATUS

[EMPTY]

[TLPFILE a DELETED:MFNUM b]

.
.
.

[TLPFILE a DELETED:MFNUM b]

[TLPFILE a IS INVALID]

[CURRENT TLP SEARCH ABORTED]

2. REASON FOR OUTPUT

To print trouble location procedure (TLP) disk queue files that have been removed from the TLP disk queue in response to the input message INIT:TLP.

This message also indicates if the TLP disk queue is empty.

See Section C.3 trouble location procedures in PA-4A002-01, *4ESSTM User's Manual* in regard to the concepts of:

- (a) the TLP disk queue
- (b) a TLP disk queue file, and
- (c) a TLP disk queue number.

Also see input message INIT:TLP.

3. VARIABLE FIELD DEFINITIONS

a	The TLP disk queue file number.
b	Error analysis program (ERAP) file number assigned to summary data (see the OP:ERAPDATA input message).
EMPTY	There are no TLP disk queue files in the TLP disk queue.

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
DRPPASUB
DRPSUPR

Practice 234-280-230, *Trouble Location Procedure Programs - Description*

PA-4A002-01, 4ESSTM *User's Manual*

Input Messages
INIT:TLP
OP:ERAPDATA

SEE PROPRIETARY NOTICE ON COVER PAGE

ID LOAD:A1B
WORK CENTER.. MAC, MOC, NMOC, TEC,
TOC
GENERIC 4E21 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

- [1] LOAD:A1B, [XS]INDIR a[, ID b], [X]ADR c INC de [SIZE f, DISP g] h
- [2] LOAD:A1B, INDIR a, UMEM i, INC de [SIZE f, DISP g] h
- [3] LOAD:A1B, [XS]INDIR a, j, INC de [SIZE f, DISP g] h

2. REASON FOR OUTPUT

To report the results of the request to write data to the designated location for any 1B core memory (A1B) address.

Format [1] prints if location is an address.

Format [2] prints if location is in a utility memory indicator.

Format [3] prints if location is contained in a central control (CC) register.

3. VARIABLE FIELD DEFINITIONS

- a Level of indirectness.
- b File system ID tag. (Must be in file segments 1 through 3 since this is used for extended memory access.)
- c Base address.
- d Sign of address increment.
- e Address increment.
- f Decimal size of the mask.
- g Decimal displacement of the mask.
- h Disposition of the request:
COMPLETED — Function successful.
NOT STARTED — Function failed. Request to write into non call store address' is illegal.
- i Utility memory indicator.
- j CC register indicator.

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
GULPUTPP
GULPUTXP
GULRUTCR

Input Message
LOAD:A1B

SEE PROPRIETARY NOTICE ON COVER PAGE

ID LOAD:CC
WORK CENTER.. MAC, MOC, NMOC, TEC,
TOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

- [1] LOAD:CC, INDIR a, ADR b INC cd [SIZE D'e, DISP D'f] g
- [2] LOAD:CC, INDIR a, UMEM h, INC cd [SIZE D'e, DISP D'f] g
- [3] LOAD:CC, INDIR a, i, INC cd [SIZE D'e, DISP D'f] g

2. REASON FOR OUTPUT

To report the results of the request to write data to the designated location for a central control (CC) address. Format [1] prints if location is an address. Format [2] prints if location is in a utility memory indicator. Format [3] prints if location is contained in a CC register.

3. VARIABLE FIELD DEFINITIONS

- a Level of indirectness.
- b Base address.
- c Sign of address increment.
- d Address increment.
- e Decimal size of the mask.
- f Decimal displacement of the mask.
- g Disposition of the request:
 - COMPLETED — Function successful.
 - NOT STARTED — Function failed. Request to write into active CC locations is illegal.
- h Utility memory indicator.
- i CC register indicator.

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
GULPUTPP
GULPUTXP
GULRUTCR

Practice 234-301-003, *1B Processor Generic Utility Program (GULP) Application - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID LOAD:CS
WORK CENTER.. MAC, MOC, NMOC, TEC,
TOC
GENERIC 4E21 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

- [1] LOAD:CS,INDIR a,[X]ADR b INC cd [SIZE e,DISP f] g
- [2] LOAD:CS,INDIR a,UMEM h,INC cd [SIZE e,DISP f] g
- [3] LOAD:CS,INDIR a,i,INC cd [SIZE e,DISP f] g

2. REASON FOR OUTPUT

To report the results of the request to write data to the designated location for a nonsecure call store (CS) address.

Format [1] prints if location is an address.

Format [2] prints if location is in a utility memory indicator.

Format [3] prints if location is contained in a central control (CC) register.

3. VARIABLE FIELD DEFINITIONS

- a Level of indirectness.
- b Base address.
- c Sign of address increment.
- d Address increment.
- e Decimal size of the mask.
- f Decimal displacement of the mask.
- g Disposition of the request:
COMPLETED — Function successful.
NOT STARTED — Function failed. Request to write into non call store address' is illegal.
- h Utility memory indicator.
- i CC register indicator.

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
GULPUTPP
GULPUTXP
GULRUTCR

Input Message
LOAD:CS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID LOAD:CSS
WORK CENTER.. MAC, MOC, NMOC, TEC,
 TOC
GENERIC 4E21 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

- [1] LOAD:CSS, INDIR a, [X]ADR b INC cd [SIZE e, DISP f] g
- [2] LOAD:CSS, INDIR a, UMEM h, INC cd [SIZE e, DISP f] g
- [3] LOAD:CSS, INDIR a, i, INC cd [SIZE e, DISP f] g

2. REASON FOR OUTPUT

To report the results of the request to write data to the designated location for a call store secure (CSS) address.

Format [1] prints if location is an address.

Format [2] prints if location is in a utility memory indicator.

Format [3] prints if location is contained in a central control (CC) register.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | Level of indirectness. |
| b | Base address. |
| c | Sign of address increment. |
| d | Address increment. |
| e | Decimal size of the mask. |
| f | Decimal displacement of the mask. |
| g | Disposition of the request:

COMPLETED — Function successful.

NOT STARTED — Function failed. Request to write into non call store
address' is illegal. |
| h | Utility memory indicator. |
| i | CC register indicator. |

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
GULPUTPP
GULPUTXP
GULRUTCR

Input Message
LOAD:CSS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID LOAD:DISK-SCS
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

LOAD:DISK;SCS a, SCU b c

2. REASON FOR OUTPUT

Response to a service circuit unit (SCU) disk load request.

3. VARIABLE FIELD DEFINITIONS

- a Service circuit system (SCS) member number (0-7).
- b SCU member number (0-15). Software status controller.
- c Response to a SCU disk load request.
 - ABORTED MACRO REJECTED — The SCS controller did not accept the SCU disk load macro.
 - ABORTED MACRO TIMEOUT — The SCS controller did not reply to the SCU disk load macro.
 - COMPLETED — The SCU disk load has completed.
 - FAILED — The SCU disk load has failed.
 - STOPPED ANN UPD IP — An announcement update is in progress. The SCU disk load cannot run concurrently with an announcement update.
 - STOPPED CONFIG FAILED OR UNEQ — Both controllers in the SCS frame are either unequipped or cannot be configured.
 - STOPPED DISK UNEQ — The SCU disk pair is unequipped.
 - STOPPED SCU DISK IN USE — An inter/intra SCU file copy, inter/intra SCU raw disk copy, or an SCU disk load job is already in progress. The SCU disk load cannot run concurrently with these jobs.
 - STOPPED SCU IN-SERVICE — The SCU is in-service, the SCU must be taken out-of-service (OOS) prior to load.
 - STOPPED SCU UNEQ — The SCU is unequipped.

4. ACTION TO BE TAKEN

If variable c is:

- ABORTED MACRO REJECTED — Diagnose the active controller and re-enter the input message.

SEE PROPRIETARY NOTICE ON COVER PAGE

ABORTED MACRO TIMEOUT — Diagnose the active controller and re-enter the input message.

COMPLETED — No action required.

FAILED — Diagnose the SCU and re-enter the input message.

STOPPED ANN UPD IP — Re-enter the input message after the announcement update has completed.

STOPPED CONFIG FAILED OR UNEQ — Equip the SCS or diagnose the controllers and re-enter the input message.

STOPPED DISK UNEQ — Correct the SCU disk pair number or equip the disk pair and re-enter the input message.

STOPPED SCU DISK IN USE — Re-enter the input message after the interfering job in the SCS has completed or stop the interfering job.

STOPPED SCU IN-SERVICE — Use the RMV:SCS input message to remove the SCU and re-enter the input message.

STOPPED SCU UNEQ — Correct the SCU number of equip the SCU and re-enter the input message.

5. REFERENCES

PIDENT
SCSFPUMP

Input Messages
LOAD:DISK-SCS
RMV:SCS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID LOAD:EST-CREG
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

LOAD:EST a[,CONTR b], CREG c:d[,MSK e]!f

2. REASON FOR OUTPUT

To print the results of a request to load an echo suppressor terminal (EST) critical register (CREG) with specified data through a mask.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | The EST member number (1-31). |
| b | The controller number (0 or 1). |
| c | Critical register number:
0 — Controller 0 status register.
1 — Controller 1 status register.
2 — Unit status register.
3 — Error source register 1.
4 — Error source register 2.
5 — Error source register 3.
6 — Error source register 4.
7 — Pest register 12.
10 — Pest register 34.
11 — Unit summary register.
12 — Unit pest register.
13 — Exercise register.
14 — Protection switch request register.
15 — Unit power alarm register. |
| d | Data to be loaded; upper half (bits 23-12) are used as enables if critical register number 0 or 1 is specified. |
| e | Mask that data is to be loaded through; not specified if critical register number 0 or 1 is entered. |

SEE PROPRIETARY NOTICE ON COVER PAGE

f Disposition of message:

COMPLETED

NOT STARTED — CONTROLLER NOT IN SERVICE

NOT STARTED — ILLEGAL MESSAGE

NOT STARTED — INVALID INPUT FOR UNIT TYPE OR
FUNCTION SPECIFIED

NOT STARTED — INVALID MEMBER, CONTROLLER, SUBUNIT,
ADDRESS, OR RANGE SPECIFIED

NOT STARTED — UNIT OR SUBUNIT UNEQUIPPED

REPEAT LATER — THIS UNIT IS BEING DIAGNOSED

4. ACTION TO BE TAKEN

Correct message.

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID LOAD:EST-ESU
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

LOAD:EST a[,CONTR b], ESU c, TSMEM d-e:f!g

2. REASON FOR OUTPUT

To print the results of a request to load the specified trunk status store with the specified disabled/enabled or split/full indicators.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | The echo suppressor terminal (EST) number (1-31). |
| b | The controller number (0 or 1). |
| c | The echo suppressor unit (ESU) number (0-15). |
| d | Start trunk status store word. |
| e | End trunk status store word. |

NOTE: For d and e, bits 10-7 are the ESU number and bits 6-0 are the trunk number.

- | | |
|---|--|
| f | 0 — Disabled and split.
2 — Enabled and split.
3 — Enabled and full. |
|---|--|

- | | |
|---|-------------------------|
| g | Disposition of message: |
|---|-------------------------|

COMPLETED

NOT STARTED — CONTROLLER NOT IN SERVICE

NOT STARTED — ILLEGAL MESSAGE

NOT STARTED — INVALID INPUT FOR UNIT TYPE OR
FUNCTION SPECIFIED

NOT STARTED — INVALID MEMBER, CONTROLLER, SUBUNIT,
ADDRESS, OR RANGE SPECIFIED

NOT STARTED — UNIT OR SUBUNIT UNEQUIPPED

REPEAT LATER — THIS UNIT IS BEING DIAGNOSED

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

Correct message.

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID LOAD:EST-LLMEM
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

LOAD:EST a[,CONTR b], LLMEM c:d!e

2. REASON FOR OUTPUT

To print the results of a request to load the last look store random access memory (RAM) with a specified value.

3. VARIABLE FIELD DEFINITIONS

- a The echo suppressor terminal number (1-31).
- b The controller number (0 or 1).
- c Last look store address. Bits 4-1 select echo suppressor unit (ESU); bit 0 selects word 1 or 0.
- d Function to be written to last look store RAM:
- 0 — Halt autonomous RAM updating.
 - 1 — Write RAM to all 0s.
 - 2 — Write RAM to all 1s.
 - 3 — Write specified row to 0; all other rows to all 1s.
 - 4 — Write specified row to all 1s; all other rows to 0.
 - 5 — Write 0 to two contiguous rows; all other rows to all 0s.
 - 6 — Write 1 to two contiguous rows; all other rows to all 0s.
 - 7 — Write only specified row to 0.
 - 10 — Write only specified row to all 1s.
 - 11 — Freeze RAM (inhibit RAM writes).
- e Disposition of message:
- COMPLETED
- NOT STARTED — CONTROLLER NOT IN SERVICE
- NOT STARTED — ILLEGAL MESSAGE
- NOT STARTED — INVALID INPUT FOR UNIT TYPE OR
FUNCTION SPECIFIED

SEE PROPRIETARY NOTICE ON COVER PAGE

NOT STARTED — INVALID MEMBER, CONTROLLER, SUBUNIT,
ADDRESS, OR RANGE SPECIFIED

NOT STARTED — UNIT OR SUBUNIT UNEQUIPPED

REPEAT LATER — THIS UNIT IS BEING DIAGNOSED

4. ACTION TO BE TAKEN

Correct message.

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID LOAD:LIBSYS
WORK CENTER.. MOC, TEC
GENERIC 4E22 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

- [1] LOAD:LIBSYS a!
- [2] LOAD:LIBSYS STOPPED LIBRARY TAPE GENERIC ID DOES NOT MATCH SYSTEM
 TAPE GENERIC ID: b
 SYSTEM GENERIC ID: c
- [3] LOAD:LIBSYS STOPPED CODE d CODE e

2. REASON FOR OUTPUT

To indicate the action taken in response to the LOAD:LIBSYS input message.

Format [1] is the general output format.

Format [2] is output when the tape generic ID does not match the system generic ID.

Format [3] is output when loading from tape to file store.

3. VARIABLE FIELD DEFINITIONS

- a Disposition of the request:
 - ABORTED — The load procedure was terminated because of an interrupt. The procedure must be restarted.
 - COMPLETED — The library tape was loaded into LBKC successfully.
 - STOPPED — The load procedure was manually terminated by a STOP:MACLI input message.
 - STOPPED COPY FAILED — The data copied from tape failed the hash sum check.
 - STOPPED INVALID TAPE — The tape being copied is not a library tape or the client scratch area overlaps with the program data in LBKC.
 - STOPPED PKG NAME NOT UNIQUE — The package that was requested to be loaded is already loaded.
 - STOPPED PKG NOT FOUND — The tape was searched and no package was found with the name specified on the input message.

SEE PROPRIETARY NOTICE ON COVER PAGE

STOPPED PKG SIZE ERROR—The package size exceeds the contiguous memory space available in the file store library program area. One or more existing packages can be deleted using the INIT:LIBSYS input message; or the library area can be repacked using the UPD:LIBSYS input message.

STOPPED SOFT ERROR—The LIBRLOAD state table has reached an invalid state. Retry request.

STOPPED TAPE SYSTEM TROUBLE—An error occurred as a result of a tape operation.

b Generic ID in library tape header.

c Generic ID stored in system.

d 1B error codes:

- 1— Maintenance Control Program (MACP) unable to send message via Attached Processor Message Handler (APMH) to DMERT Interface (DMI).
- 2— Timed out waiting for the 3B DMI to fork job (Attached Processor Tape Unit Process [APTUP]).
- 3— DMI failure when trying to fork job (APTUP).
- 4— MACP unable to send message via APMH to 3B tape manager (APTUP).
- 5— Timed out waiting for the 3B (APTUP) to open/read tape.
- 6— APTUP open failure of tape device or tape read failure.
- 7— MACP unable to send message to open 3B file.
- 8— Timed out waiting for the 3B file manager to open file.
- 9— /tmp/tape_file file open failure.
- 10— /tmp/tape_file file open failure.
- 11— MACP unable to send message to read 3B file.
- 12— Timed out waiting for the 3B file manager to read the file.
- 13— /tmp/tape_file file read failure.
- 14— /tmp/tape_file file read failure.
- 15— Fork routine got a message from someone other than DMI.
- 16— APTUP routine got a message from someone other than APTUP.

SEE PROPRIETARY NOTICE ON COVER PAGE

- 17 — Open file routine got a message from someone other than the file manager.
- 18 — Read file routine got a message from someone other than the file manager.
- 19 — APTUP unable to startup, tape device may not be read mode, or open failure on file /tmp/tape_file.
- 20 — Unable to complete the load of all library packages identified in the library tape header, possible tape problem.

e

3B error codes:

- 5 — Failed to open tape drive. Possible explanations: incorrect tape drive specified, tape drive not on line, tape not loaded, tape drive in use by another 3B process.
- 6 — Failed to open 3B transfer file /tmp/tape_file.
- 8 — A read failure from the tape drive. Possible explanations: bad tape, tape device error.
- 13 — Write to 3B /tmp/tape_file transfer file failed.
- 14 — 3B received a bad or incorrect message.

4. ACTION TO BE TAKEN

Action to be taken depends on the disposition of the request. See VARIABLE FIELD DEFINITIONS.

5. REFERENCES

PIDENT
LIBRLOAD

Input Message
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID LOAD:MCC
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

LOAD:MCC 0,MTX a: b[,MSK c]! d

2. REASON FOR OUTPUT

To report the loading of the peripheral processor interface (PPI) matrix.

3. VARIABLE FIELD DEFINITIONS

- a Row loaded (1-5).
- b Data loaded into row.
- c Mask the data is loaded through.
- d Dumped data is as follows:

COMPLETED

NOT STARTED — CONTROLLER NOT IN SERVICE

NOT STARTED — ILLEGAL MESSAGE

NOT STARTED — INVALID INPUT FOR UNIT TYPE OR
FUNCTION SPECIFIED

NOT STARTED — INVALID MEMBER, CONTROLLER, SUBUNIT,
ADDRESS, OR RANGE SPECIFIED

NOT STARTED — UNIT OR SUBUNIT UNEQUIPPED

4. ACTION TO BE TAKEN

Correct message.

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID LOAD:MEMORY-SCS
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

[1] LOAD:MEMORY SCS a CONTR[b] c

[2] LOAD:MEMORY SCS a SCU d e

2. REASON FOR OUTPUT

This message prints in response to a LOAD:MEMORY-SCS input message. Format [1] is output if the input request specified a write of a service circuit system (SCS) controller memory. Format [2] is output if the input request specified a write of a service circuit unit (SCU) memory.

3. VARIABLE FIELD DEFINITIONS

- a SCS member number in decimal (0-7).
- b Controller (0 or 1). Default is the active controller.
- c Controller request code:
- COMPLETED The controller memory was written.
- DENIED - CONTR DUP Request denied because the frame is duplex and a controller was specified. This would result in an interrupt from the frame.
- DENIED - SCS UNEQ Request denied because the frame is unequipped.
- RL - CONTR LOM Request denied because the a frame controller is in listen-only mode and a controller was specified. Retry later, as this condition should be cleared quickly.
- d SCU number in decimal (0-15).
- e SCU request code:
- ABORTED - MACRO REJECTED Request for the given SCU was aborted because the SCS frame rejected the write command. Contact the Technical Assistance Center for further information.
- ABORTED - MACRO TIMEOUT Request for the given SCU was aborted because the SCS frame did not reply to the write command. Contact the Technical Assistance Center for further information.
- COMPLETED The SCU memory was written.

SEE PROPRIETARY NOTICE ON COVER PAGE

DENIED - SCU UNEQ Request for the given SCU was denied because the SCU is unequipped.

FAILED - INTERNAL ERROR Request for the given SCU failed because of an unexpected software error when processing the write command. Contact the Technical Assistance Center for further information.

STOPPED - MACRO FAILED Request for the given SCU was stopped because the SCU failed in processing the write command. Contact the Technical Assistance Center for further information.

4. ACTION TO BE TAKEN

Read the data stored in the controller or the SCU using the DUMP:MEMORY—SCS command as directed by the Technical Assistance Center.

If variable c is:

RL - CONTR LOM then retry later, as this condition should be cleared quickly.

If variable e is:

ABORTED - MACRO REJECTED then contact the Technical Assistance Center for further information.

ABORTED - MACRO TIMEOUT then contact the Technical Assistance Center for further information.

FAILED - INTERNAL ERROR then contact the Technical Assistance Center for further information.

STOPPED - MACRO FAILED then contact the Technical Assistance Center for further information.

5. REFERENCES

PIDENT
SCSBPMEM

Input Messages
DUMP:MEMORY-SCS
LOAD:MEMORY-SCS

Output Message
DUMP:MEMORY-SCS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID LOAD:MUP
WORK CENTER.. MOC
GENERIC 4E22 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

LOAD:MUP, ADR aaaaaaaa b

2. REASON FOR OUTPUT

To report the results of the request to write data to designated location(s) in the Master Control Complex (MCC) And Utility Processor (MUP).

3. VARIABLE FIELD DEFINITIONS

- a Base address specified in hexadecimal.
- b Disposition of the request:
- ABORTED —Function failed.
- COMPLETED —Function successful.
- NOT STARTED —Function failed. Possible reasons for failure:
- Direct Memory Access (DMA) timed out.
 - Dump MUP request failed.
 - MUP internal error.
 - No active MUP.
 - Unused MUP address.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
GULPUTPP
GULPUTXP
GULRUTCR

SEE PROPRIETARY NOTICE ON COVER PAGE

ID LOAD:NCLK
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

LOAD:NCLK 0, CHAIN a, CREG b:0!c

2. REASON FOR OUTPUT

To report the results of a request to change the network clock critical register (CREG).

3. VARIABLE FIELD DEFINITIONS

- a The chain number (0-3).
- b The function to be performed. This function is specified by one of the variables (0-44) listed:
- 0 — Set counter preset.
 - 1 — Release solenoid.
 - 2 — Inhibit OSC 0 to combiner for counter.
 - 3 — Inhibit OSC 1 to combiner for counter.
 - 4 — Inhibit OSC 0 to combiner for fanout.
 - 5 — Inhibit OSC 1 to combiner for fanout.
 - 6 — Inhibit phase or level to error summary.
 - 7 — Inhibit 0-0 master select to error summary.
 - 10 — Inhibit 0-1 master select to error summary.
 - 11 — Inhibit 1-0 master select to error summary.
 - 12 — Inhibit 1-1 master select to error summary.
 - 13 — Set oscillator level detector error.
 - 14 — Set master select level detector error.
 - 15 — Set phase lock error.
 - 16 — Set master phase unlock error detector.
 - 17 — Set intra bay counter select.
 - 20 — Set inter bay counter 0 select.
 - 21 — Set inter bay counter 1 select.
 - 22 — Set program disconnect.
 - 23 — Reset program disconnect.

SEE PROPRIETARY NOTICE ON COVER PAGE

- 24 — Convert 3-way match to 2-way (AC).
- 25 — Convert 3-way match to 2-way (AB).
- 26 — Common clear # 1.
- 27 — Common clear # 2.
- 30 — Common clear # 3.
- 31 — Common clear # 4.
- 32 — Common clear # 5.
- 33 — Common clear # 6.
- 34 — Set error inhibit.
- 35 — Reset error inhibit.
- 36 — Test sequence zero.
- 37 — Test sequence one.
- 40 — Set phase unlock error detector local.
- 41 — Set phase lock oven monitor.
- 42 — Disable external C leg to matcher.
- 43 — Disable external B leg to matcher.
- 44 — Set disconnect interlock.

C

Disposition of message:

COMPLETED

NOT STARTED — CONTROLLER NOT IN SERVICE

NOT STARTED — ILLEGAL MESSAGE

NOT STARTED — INVALID INPUT FOR UNIT TYPE OR
FUNCTION SPECIFIED

NOT STARTED — INVALID MEMBER, CONTROLLER, SUBUNIT,
ADDRESS, OR RANGE SPECIFIED

NOT STARTED — UNIT OR SUBUNIT UNEQUIPPED

REPEAT LATER — THIS UNIT IS BEING DIAGNOSED

4. ACTION TO BE TAKEN

Correct message.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID LOAD:PSS
WORK CENTER.. MAC, MOC, NMOC, TEC,
 TOC
GENERIC 4E21 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

- [1] LOAD:PSS, INDIR a, [X]ADR b INC cd [SIZE e, DISP f] g
- [2] LOAD:PSS, INDIR a, UMEM h, INC cd [SIZE e, DISP f] g
- [3] LOAD:PSS, INDIR a, i, INC cd [SIZE e, DISP f] g

2. REASON FOR OUTPUT

To report the results of the request to write data to the designated location for a program store secure (PSS) address.

Format [1] prints if location is an address.

Format [2] prints if location is in a utility memory indicator.

Format [3] prints if location is contained in a central control (CC) register.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | Level of indirectness. |
| b | Base address. |
| c | Sign of address increment. |
| d | Address increment. |
| e | Decimal size of the mask. |
| f | Decimal displacement of the mask. |
| g | Disposition of the request:

COMPLETED — Function successful.

NOT STARTED — Function failed. Request to write into non call store
address' is illegal. |
| h | Utility memory indicator. |
| i | CC register indicator. |

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
GULPUTPP
GULPUTXP
GULRUTCR

Input Message
LOAD:PSS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID LOAD:REG
WORK CENTER.. MAC, MOC, NMOC, TEC,
 TOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

LOAD:aREG [SIZE D'b, DISP D'c] d

2. REASON FOR OUTPUT

To report the results of the request to write data to the designated location where the destination location is a central control (CC) register.

3. VARIABLE FIELD DEFINITIONS

a	CC register name. (B, F, G, J, K, L, X, Y, or Z.)
b	Decimal size of the mask.
c	Decimal displacement of the mask.
d	Disposition of the request: COMPLETED — Function successful. NOT STARTED — Function failed.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
GULPUTPP
GULPUTXP
GULRUTCR

Practice 234-301-003, *1B Processor Generic Utility Program (GULP) Application - Description*

Input Message
LOAD:REG

SEE PROPRIETARY NOTICE ON COVER PAGE

ID LOAD:SCLK-NCSU
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

LOAD: SCLK 0, CONTR a, NCSU 0, MEM b-c:d [,MSK e]!

2. REASON FOR OUTPUT

To load the network clock synchronization unit (NCSU) memory through the system clock (SCLK).

3. VARIABLE FIELD DEFINITIONS

a	Active SCLK controller.
b	First memory address ($c - b \leq 10$).
c	Last memory address ($c - b \leq 10$).
d	Data to be loaded.
e	Mask (77777777, if defaulted).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
PULP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID LOAD:SP-ABORT
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

LOAD:SP a,ABORT 0:00000000,MSK 77777777!
b

2. REASON FOR OUTPUT

To respond to the input message of the same format.

3. VARIABLE FIELD DEFINITIONS

a Signaling processor (SP) member number (decimal).
b Dumped data is as follows:

NOT STARTED — CONTROLLER NOT IN SERVICE

NOT STARTED — ILLEGAL MESSAGE

NOT STARTED — INVALID INPUT FOR UNIT TYPE OR
FUNCTION SPECIFIED

NOT STARTED — INVALID MEMBER, CONTROLLER, SUBUNIT,
ADDRESS, OR RANGE SPECIFIED

NOT STARTED — UNIT OR SUBUNIT UNEQUIPPED

UTILITY PULSE POINT MESSAGE ABORTED — PULSE POINT
CYCLE OPERATION ABORTED PER MANUAL REQUEST

4. ACTION TO BE TAKEN

Correct message.

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID LOAD:SP-CYCLE
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

LOAD:SP a,CYCLE (b,c-d):e,MSK f!
g

2. REASON FOR OUTPUT

To respond to the input message of the same format.

3. VARIABLE FIELD DEFINITIONS

- | | |
|-----|---|
| a | Signaling processor (SP) member number (decimal). |
| b | Time limit, less than or equal to 20 minutes (octal). |
| c-d | 17-bit pulse point miscellaneous distributor number (MDN) range (octal, all points must be in same SP row). |
| e | Right-justified octal data to be written to pulse point(s). |
| f | Octal mask data is to be written through. |
| g | Dumped data is as follows: |

NOT STARTED — CONTROLLER NOT IN SERVICE

NOT STARTED — ILLEGAL MESSAGE

NOT STARTED — INVALID INPUT FOR UNIT TYPE OR
FUNCTION SPECIFIED

NOT STARTED — INVALID MEMBER, CONTROLLER, SUBUNIT,
ADDRESS, OR RANGE SPECIFIED

NOT STARTED — UNIT OR SUBUNIT UNEQUIPPED

UTILITY PULSE POINT MESSAGE IN PROGRESS — REQUESTED
PULSE POINT CYCLE OPERATION HAS BEEN STARTED

4. ACTION TO BE TAKEN

Correct message.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID LOAD:SP-IREG
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

LOAD:SP a, CONTR b, IREG c:d[,MSK e]!f

2. REASON FOR OUTPUT

To report the loading of the signaling processor (SP) internal register (IREG).

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | SP (0-31). |
| b | Controller (0 or 1). |
| c | 0(0) — Controller zero status register.*
1 — Controller one status register.*
2 — Error source register 1.
3 — Error source register 2.
4 — Pest register.
5 — Memory address register.
6 — Memory data register.
7 — Memory access test points.*
10 — Coder.
11 — Matrix address register.
12 — Matrix work register.
13 — Matrix hold register.
14 — Miscellaneous control register.
15 — Matrix access test points.*
16 — MF work register.
17 — DP work register.
20 — T-bit shift register.
21 — Present-look shift register.
22 — Executive and DP out sequencer control register.
23 — Scan and digit sequencer control register. |

SEE PROPRIETARY NOTICE ON COVER PAGE

- 24 — Matrix and MF out sequencer control register.
- 25 — Millisecond clock.
- 26 — Extended millisecond clock A.
- 27 — Extended millisecond clock B.
- 30 — Clock error detector register.*
- 31 — Pointer status.*
- 32 — High-priority buffer read pointer.
- 33 — High-priority buffer write pointer.
- 34 — Seizure buffer read pointer.
- 35 — Seizure buffer write pointer.
- 36 — Low-priority buffer read pointer.
- 37 — Low-priority buffer write pointer.
- 40 — Digit buffer read pointer.
- 41 — Digit buffer write pointer.
- 42 — DP OUT worklist read pointer.
- 43 — DP OUT worklist write pointer.
- 45 — DP OUT worklist read pointer. FOR SP2
- 46 — Error source register 3.
- 47 — Receiver routing for lower DT ports.
- 50 — Receiver routing for upper DT ports.
- 51 — Temporary buffer status for all DTs.
- 52 — DT counter.
- 53 — Input/output (I/O) and message distributor sequencer state.
- 54 — DT interface sanity timer.
- 55 — DT shift register A address.
- 56 — DT shift register B address.
- 57 — DT shift register A data and opcode.
- 60 — DT shift register B data and opcode.

NOTE *: These registers have no write access.

- d Data to be loaded into register
- e Mask through which data is loaded.

SEE PROPRIETARY NOTICE ON COVER PAGE

f Dumped data is as follows:

COMPLETED

NOT STARTED — CONTROLLER NOT IN SERVICE

NOT STARTED — ILLEGAL MESSAGE

NOT STARTED — INVALID INPUT FOR UNIT TYPE OR
FUNCTION SPECIFIED

NOT STARTED — INVALID MEMBER, CONTROLLER, SUBUNIT,
ADDRESS, OR RANGE SPECIFIED

NOT STARTED — UNIT OR SUBUNIT UNEQUIPPED

4. ACTION TO BE TAKEN

Correct message.

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID LOAD:SP-MEM
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

LOAD:SP a, CONTR b, MEM c-d:e[,MSK f]!g

2. REASON FOR OUTPUT

To report the loading of the specified signaling processor (SP) memory.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | SP (0-31). |
| b | Controller (0 or 1). |
| c | First memory address to be loaded. |
| d | Last memory address to be loaded (<_ 3777 for SP: <_ 5777 for SP2). |
| e | Data to be loaded in specified memory. |
| f | Mask through which data is loaded. |
| g | Dumped data is as follows: |

COMPLETED

NOT STARTED — CONTROLLER NOT IN SERVICE

NOT STARTED — ILLEGAL MESSAGE

NOT STARTED — INVALID INPUT FOR UNIT TYPE OR
FUNCTION SPECIFIED

NOT STARTED — INVALID MEMBER, CONTROLLER, SUBUNIT,
ADDRESS, OR RANGE SPECIFIED

NOT STARTED — UNIT OR SUBUNIT UNEQUIPPED

4. ACTION TO BE TAKEN

Correct message.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID LOAD:SP-TDN
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

LOAD:SP a, {TDN|MDN|PP} b-c:d!e

2. REASON FOR OUTPUT

To report the loading of the signaling processor (SP) signal distributor (SD) matrix.

3. VARIABLE FIELD DEFINITIONS

- a SP (0-31).
- b First matrix point to loaded.
- c Last matrix point to be loaded.
- d Right-adjusted data for setting each point in row of SD matrix from point c through point b.
- e Dumped data is as follows:

COMPLETED

NOT STARTED — CONTROLLER NOT IN SERVICE

NOT STARTED — ILLEGAL MESSAGE

NOT STARTED — INVALID INPUT FOR UNIT TYPE OR
FUNCTION SPECIFIED

NOT STARTED — INVALID MEMBER, CONTROLLER, SUBUNIT,
ADDRESS, OR RANGE SPECIFIED

NOT STARTED — UNIT OR SUBUNIT UNEQUIPPED

4. ACTION TO BE TAKEN

Correct message.

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID LOAD:TMSP-CREG
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

LOAD:TMSP a, CONTR b, CREG c:d[,MSK e]!f

2. REASON FOR OUTPUT

To report the loading of the specified time multiplexed switch pair (TMSP) critical register.

3. VARIABLE FIELD DEFINITIONS

a	TMSP (0-3).
b	Controller (0 or 1).
c	0 — Lower-status register. 1 — Upper-status register. 2 — Error source register (ESR) 0. 3 — ESR 1. 4 — Lower status register with ESR clear.
d	Data to be loaded into register.
e	Mask through which data is loaded.
f	Dumped data is as follows: COMPLETED NOT STARTED — CONTROLLER NOT IN SERVICE NOT STARTED — ILLEGAL MESSAGE NOT STARTED — INVALID INPUT FOR UNIT TYPE OR FUNCTION SPECIFIED NOT STARTED — INVALID MEMBER, CONTROLLER, SUBUNIT, ADDRESS, OR RANGE SPECIFIED NOT STARTED — UNIT OR SUBUNIT UNEQUIPPED

4. ACTION TO BE TAKEN

Correct message.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID LOAD:TMSP-IREG
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

LOAD:TMSP a, CONTR b, IREG c:d[,MSK e]!f

2. REASON FOR OUTPUT

To report the loading of the specified time multiplexed switch pair (TMSP) internal register.

3. VARIABLE FIELD DEFINITIONS

- a TMSP (0-3).
- b Controller (0 or 1).
- c Internal register (IREG) written by O(130) opcode:
- 0 — Write output register.
 - 1 — Write address and data registers.
 - 2 — Control points register 0.
 - 3 — Write to step clock.
 - 4 — Time-slot counter write.
 - 5 — Time-slot sequence and double rail inhibits.
 - 6 — Error bits - Write points.
 - 7 — Error source register - Bits 23C0C write points.
- d Data to be loaded into register.
- e Mask through which data is loaded.
- f Dumped data is as follows:
- COMPLETED
- NOT STARTED — CONTROLLER NOT IN SERVICE
- NOT STARTED — ILLEGAL MESSAGE
- NOT STARTED — INVALID INPUT FOR UNIT TYPE OR
FUNCTION SPECIFIED
- NOT STARTED — INVALID MEMBER, CONTROLLER, SUBUNIT,
ADDRESS, OR RANGE SPECIFIED

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NOT STARTED — UNIT OR SUBUNIT UNEQUIPPED

4. ACTION TO BE TAKEN

Correct message.

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID LOAD:TMSP-MEM
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

LOAD:TMSP a, CONTR b, MEM c, d-e:f[,MSK g]!h

2. REASON FOR OUTPUT

To report the loading of the specified time multiplexed switch (TMS) pair (TMSP) memory.

3. VARIABLE FIELD DEFINITIONS

a TMSP (0-3).
b Controller (0 or 1).
c Memory within TMS to be loaded (0-177).
d First memory address to be loaded (0-177).
e Last memory address to be loaded (0-177).
f Data to be loaded into specified memory address(s).
g Mask through which data is loaded.
h Dumped data is as follows:

COMPLETED

NOT STARTED — CONTROLLER NOT IN SERVICE

NOT STARTED — ILLEGAL MESSAGE

NOT STARTED — INVALID INPUT FOR UNIT TYPE OR
FUNCTION SPECIFIED

NOT STARTED — INVALID MEMBER, CONTROLLER, SUBUNIT,
ADDRESS, OR RANGE SPECIFIED

NOT STARTED — UNIT OR SUBUNIT UNEQUIPPED

4. ACTION TO BE TAKEN

Correct message.

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5. REFERENCES

PIDENT
PULP

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Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

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ID LOAD:TSI-MEM
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

LOAD:TSI a, CONTR b, SPC c, MEM (d, e, f-g):h[MSK i]!j

2. REASON FOR OUTPUT

To report the loading of the specified Time Slot Interchange (TSI) memory.

3. VARIABLE FIELD DEFINITIONS

- a TSI (0-63).
b Controller (0 or 1).
c A digit (0 or 1).
d Time Slot Interchange Frame (TSIF) memory type.
 0 — Receive Time-Slot Memory (RTSM).
 1 — Transmit Time-Slot Memory (TTSM).
 2 — Busy-Idle Memory Map (BIMM).
 3 — Buffer Memory Address Map (BMAM).
e For RTSM or TTSM e = level (0 - 127); for others, e = 0.
f First word.
g Last word.
h Data to be loaded into specified memory address(s).
i Mask through which data is loaded.
j Dumped data is as follows:

COMPLETED

NOT STARTED — CONTROLLER NOT IN SERVICE

NOT STARTED — ILLEGAL MESSAGE

NOT STARTED — INVALID INPUT FOR UNIT TYPE OR
FUNCTION SPECIFIED

NOT STARTED — INVALID MEMBER, CONTROLLER, SUBUNIT,
ADDRESS, OR RANGE SPECIFIED

NOT STARTED — UNIT OR SUBUNIT UNEQUIPPED

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

Correct message.

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID LOAD:TSIFILE
WORK CENTER.. MOC, TEC
GENERIC 4E21 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

LOAD:TSIFILE;XTSI a,[CONTR b,]FILE c,HADR d:HDATA e!f

2. REASON FOR OUTPUT

Prints in response to a LOAD:TSIFILE input command. Indicates the status of Expanded Time Slot Interchange (XTSI) file load request.

3. VARIABLE FIELD DEFINITIONS

- a XTSI member number (0-63). (32 XTSI frames-allows only even XTSI numbers.)
- b XTSI controller number (0-1). Optional parameter. If duplex, this field must be left blank. If simplex, the default is the active controller. If duplex failed, this parameter must be specified.
- c XTSI file descriptor number (0-127). For XTSI Controller (XTC) files only (files 0-11), writing to active files (file versions that are currently in use) will be disallowed.
- d Hex address offset within a file (23 bit hex address).
- e 16 bit hex data.
- f Dumped data:

ABORTED - CANT CONFIG CONTR—The out of service XTSI controller cannot be brought into a state in which it will communicate with the 1B processor. One likely reason for this is that the controller is powered down.

ABORTED - SOFTWARE ERROR—The status should never come up. If it does, please contact support.

COMPLETE—The XTSI file load request has completed. Please verify success using the DUMP:TSIFILE input message.

DENIED - CONTR MUST BE SPECIFIED—The CONTR keyword and it's argument must be specified when the XTSI is in a duplex failed state.

DENIED - CONTR CANT BE SPECIFIED—The CONTR keyword and it's argument must not be specified when the XTSI is in a duplex state.

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- DENIED - FILE IS ACTIVE** — This version of a XTSI file is marked in the unit translator as being a file that will be pumped from during restores. Writes to this file will be disallowed. Only files 0-11 (XTC files) will have this type of checking done.
- DENIED - INV TSI TYPE OR UNEQ** — The load command must be sent to equipped XTSI frames only.
- DENIED - ODD TSI MEMBER** — The load command must be sent to even XTSI members only.
- DENIED - TSI LOM** — The XTSI is in Listen Only Mode (LOM). The load command will be denied when either XTSI controller is in the LOM state.
- ERASE FLASH ABORTED - ERASE ERROR** — The XTSI frame failed executing the load command in the middle of the operation. Restore the file to it's original state using either **COPY:XTSI** or **COPY:TSIFILE**. If the frame did not F-level when trying the load request, try again, and if this status is seen again, restore the file to it's original state and contact support.
- ERASE FLASH ABORTED - FILE NOT ALLOCATED** — The XTSI file specified in the load command has a size of zero and cannot be written to using this command.
- ERASE FLASH ABORTED - UNUSED ADDRESS** — This address (HADR) is outside the range of the file (for example, this status would be given if the file is allocated for the address range of HEX 0 to HEX ffff and HADR = 10000 in the load command).
- ERASE FLASH ABORTED - FRAME ERROR - (error data)** — The 1B processor has received an invalid error from the XTSI frame. Restore the file to it's original state using either **COPY:XTSI** or **COPY:TSIFILE** and contact support with the erroneous error data.
- ERASE FLASH ABORTED - MACRO ERROR - (error data)** — The 1B processor returned an invalid error. Restore the file to it's original state using either **COPY:XTSI** or **COPY:TSIFILE** and contact support with the erroneous error data.
- ERASE FLASH ABORTED - MACRO REJECTED** — The XTSI frame is not accepting the load request. Restore the file to it's original state using either the **COPY:XTSI** or **COPY:TSIFILE** input messages. If the frame did not F-level when trying the load request, try again, and if this status is seen again, restore the file to it's original state and contact support.

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- ERASE FLASH ABORTED - MACRO TIMEOUT—The 1B processor is not waiting long enough for the load request to be completed. Restore the file to it's original state using either COPY:XTSI or COPY:TSIFILE commands. If the frame did not F-level when trying the load request, try again, and if this status is seen again, restore the file to it's original state and contact support.
- ERASE FLASH ABORTED - RESPONSE NOT READY—The 1B processor did not receive a response from the XTSI frame. Restore the file to it's original state using either COPY:XTSI or COPY:TSIFILE. If the frame did not F-level when trying the load request, try again, and if this status is seen again, restore the file to it's original state and contact support.
- WRITE FLASH ABORTED - FILE NOT ALLOCATED—DANGER:
The XTSI load command should have never gotten to this point. The next physical block on the flash memory is now corrupted. Restore the flash memory to it's original state and contact support.
- WRITE FLASH ABORTED - FLASH JOB FAILED—The XTSI frame failed executing the load command in the middle of the operation. Restore the file to it's original state using either COPY:XTSI or COPY:TSIFILE. If the frame did not F-level when trying the load request, try again, and if this status is seen again, restore the file to it's original state and contact support.
- WRITE FLASH ABORTED - FRAME ERROR - (error data)—
The 1B processor has received an invalid error from the XTSI frame. Restore the file to it's original state using either COPY:XTSI or COPY:TSIFILE and contact support with the erroneous error data.
- WRITE FLASH ABORTED - MACRO ERROR - (error data)—
The 1B processor returned an invalid error. Restore the file to it's original state using either COPY:XTSI or COPY:TSIFILE and contact support with the erroneous error data.
- WRITE FLASH ABORTED - MACRO REJECTED—The XTSI frame is not accepting the load request. Restore the file to it's original state using either the COPY:XTSI or COPY:TSIFILE input messages. If the frame did not F-level when trying the load request, try again, and if this status is seen again, restore the file to it's original state and contact support.
- WRITE FLASH ABORTED - MACRO TIMEOUT—The 1B processor is not waiting long enough for the load request to be completed. Restore the file to it's original state using either COPY:XTSI or COPY:TSIFILE commands. If the frame did not F-level when trying the load request, try again, and if this status is seen again, restore the file to it's original state and contact support.

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WRITE FLASH ABORTED - RESPONSE NOT READY— The 1B processor did not receive a response from the XTSI frame. Restore the file to it's original state using either COPY:XTSI or COPY:TSIFILE. If the frame did not F-level when trying the load request, try again, and if this status is seen again, restore the file to it's original state and contact support.

WRITE FLASH ABORTED - UNUSED ADDRESS— DANGER: The XTSI load command should have never gotten to this point. The next physical block on the flash memory is now corrupted. Restore the flash memory to it's original state and contact support.

4. ACTION TO BE TAKEN

Correct the message.

5. REFERENCES

PIDENT
XTSIFILU

Input Messages
COPY:XTSI
COPY:TSIFILE
DUMP:TSIFILE
LOAD:TSIFILE

SEE PROPRIETARY NOTICE ON COVER PAGE

WARNING
INAPPROPRIATE USE OF THIS
MESSAGE MAY INTERRUPT OR
DEGRADE SERVICE. READ PURPOSE
CAREFULLY.

ID LOAD:TSIMEM
WORK CENTER.. MOC
GENERIC 4E24 Rel. 2 and later
APPLICATION .. 4E
TYPE Output

WARNING

1. FORMAT

- [1] LOAD:TSIMEM XTSI a [CONTR b] {CRAM|GRAM|LRAM|MRAM} c ...
HDATA d HMSK e COMPLETED
- [2] LOAD:TSIMEM XTSI a [CONTR b] {CRAM|GRAM|LRAM|MRAM} c ...
HDATA d HMSK e f
- [3] LOAD:TSIMEM XTSI a D3U g HADR h HDATA i HMSK e COMPLETED
- [4] LOAD:TSIMEM XTSI a D3U g HADR h HDATA i HMSK e j
- [5] LOAD:TSIMEM XTSI a SPU k HADR h HDATA i HMSK e COMPLETED
- [6] LOAD:TSIMEM XTSI a SPU k HADR h HDATA i HMSK e j
- [7] LOAD:TSIMEM XTSI a IBU 0 HADR h HDATA i HMSK e COMPLETED
- [8] LOAD:TSIMEM XTSI a IBU 0 HADR h HDATA i HMSK e j
- [9] LOAD:TSIMEM XTSI a [CONTR b] SPC l PRTI m [LEVEL n] ADR o:...
DATA p MASK1 q COMPLETED
- [10] LOAD:TSIMEM XTSI a [CONTR b] SPC l PRTI m [LEVEL n] ADR o:...
DATA p MASK1 q f
- [11] LOAD:TSIMEM XTSI a [CONTR b] {ES|MS|TBITS} r DATA s COMPLETED
- [12] LOAD:TSIMEM XTSI a [CONTR b] {ES|MS|TBITS} r DATA s f
- [13] LOAD:TSIMEM XTSI a [CONTR b] SPC l PCIS r DATA s COMPLETED
- [14] LOAD:TSIMEM XTSI a [CONTR b] SPC l PCIS r DATA s f
- [15] LOAD:TSIMEM XTSI a IBU 0 {SD|MTBITS} t DATA u COMPLETED
- [16] LOAD:TSIMEM XTSI a IBU 0 {SD|MTBITS} t DATA u j

2. REASON FOR OUTPUT

This message prints in response to a LOAD:TSIMEM input message.

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Formats [1-2] are output if the input request specified a write of Expanded Time Slot Interchange (XTSI) controller memory.

Formats [3-4] are output if the input request specified a write of a Digital Signal Level 3 Unit (D3U) memory.

Formats [5-6] are output if the input request specified a write of a Signal Processing Unit (SPU) memory.

Formats [7-8] are output if the input request specified a write of a In-Band Unit (IBU) memory.

Formats [9-10] are output if the input request specified a write of a Time Slot Memory (TSM).

Formats [11-14] are output if the input request specified a write of the Controller Signal Processor (CSP) memory.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | XTSI member number in decimal. |
| b | Controller. |
| c | Controller address written in hexadecimal. |
| d | Controller data written in hexadecimal. |
| e | 32-bit mask in hexadecimal. |
| f | Controller request fail code:

DENIED - CONTR DUP — Request denied because the frame is duplex and a controller was specified. This will result in an interrupt from the frame.

DENIED - CONTR DUP FAIL — Request denied because a Protection Switch Client (PSC) is not allowed with controller duplex failed.

DENIED - CONTR LOM — Request denied because the a frame controller is in listen-only mode and a controller was specified. Retry later, as this condition should be cleared quickly.

DENIED - ODD MEMBER — Request denied because the XTSI specified was an odd member number.

DENIED - TSI UNEQ — Request denied because the frame is unequipped. |
| g | D3U number in decimal. |

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h	D3U, SPU or IBU memory address output in hexadecimal. Address is also preceded by the digit 0, 1 or 2 to indicate memory access type long, word or byte respectively. For example "0 FF" represents an access type of "long" and an address of FF and "2 401FFF" represents an access type of "byte" and an address of 401FFF.
i	D3U, SPU or IBU data written in hexadecimal.
j	D3U, SPU or IBU request fail code: ABORTED - MACRO REJECTED Request for the given D3U, SPU or IBU was aborted because the XTSI frame rejected the write command. Contact the Technical Assistance Center for further information. ABORTED - MACRO TIMEOUT Request for the given D3U, SPU or IBU was aborted because the XTSI frame did not reply to the write command. Contact the Technical Assistance Center for further information. ABORTED - NON-ADDRESSABLE BYTE Request for the given D3U or SPU was aborted because address is not on a word boundary. ABORTED - UNUSED-ADDRESS Request for the given D3U, SPU or IBU was aborted because of an invalid access type or because this address is currently unused by the software. DENIED - D3U UNEQ Request for the given D3U, SPU or IBU was denied because the D3U, SPU or IBU is unequipped. FAILED - INTERNAL ERROR Request for the given D3U, SPU or IBU failed because of an unexpected software error when processing the write command. Contact the Technical Assistance Center for further information. STOPPED - MACRO FAILED Request for the given D3U, SPU or IBU was stopped because the D3U, SPU or IBU failed in processing the write command. Contact the Technical Assistance Center for further information.
k	SPU number in decimal.
l	Switching And Permuting Controller (SPC) (0-1).
m	Partition (PRTI) (0-3).
n	A-link level number (0-7) (when PRTI 0 is specified).
o	Address of Time Slot Memory (TSM).
p	Data to be written.
q	MASK1 15 bit mask.
ES	E-Store memory.
MS	M-Store memory.

SEE PROPRIETARY NOTICE ON COVER PAGE

PCIS	Per channel inhibit state memory.
TBITS	Trunk bits.
r	Data to be written.
s	Controller Signal Processor (CSP) trunk designation, controller, in octal (0-7777).
SD	Signal distribute point.
MTBITS	Miscellaneous trunk bits.
t	Controller Signal Processor (CSP) trunk designation in octal (3000-3430).

4. ACTION TO BE TAKEN

Read the data stored in the controller or the D3U, SPU or IBU using the DUMP:TSIMEM command as directed by the Technical Assistance Center.

5. REFERENCES

PIDENTs
XTSIMEMU

Input Messages
DUMP:TSIMEM
LOAD:TSIMEM

Output Message
DUMP:TSIMEM

SEE PROPRIETARY NOTICE ON COVER PAGE

ID LOAD:UMEM
WORK CENTER.. MAC, MOC, NMOC, TEC,
 TOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

LOAD:UMEM a [SIZE D'b, DISP D'c] d

2. REASON FOR OUTPUT

To report the results of the request to write data to the designated location where the destination is a utility memory indicator.

3. VARIABLE FIELD DEFINITIONS

a	Utility memory indicator.
b	Decimal size of the mask.
c	Decimal displacement of the mask.
d	Disposition of the request: COMPLETED — Function successful. NOT STARTED — Function failed.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
GULPUTPP
GULPUTXP
GULRUTCR

Practice 234-301-003, *1B Processor Generic Utility Program (GULP) Application - Description*

Input Message
LOAD:UMEM

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ID LOAD:VIF
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

LOAD:VIF x!y

2. REASON FOR OUTPUT

To report to the user that execution of the input message was not started or was completed.

3. VARIABLE FIELD DEFINITIONS

x LOAD:VIF input message entered by the user. Valid forms of the message are listed here. See the corresponding input LOAD message for further information.

LOAD:VIF a, EPS:0!
LOAD:VIF a, USAF:0!
LOAD:VIF a, VIU b, ETSE(c, d, e, f):0!
LOAD:VIF a, VIU b, FA:0!
LOAD:VIF a, VIU b, FB:0!
LOAD:VIF a, VIU b, GAF:0!
LOAD:VIF a, VIU b, GAS:0!
LOAD:VIF a, VIU b, GTF:c!
LOAD:VIF a, VIU b, GTS:c!
LOAD:VIF a, VIU b, LAF:0!
LOAD:VIF a, VIU b, LAI:0!
LOAD:VIF a, VIU b, LAS:0!
LOAD:VIF a, VIU b, LBS:0!
LOAD:VIF a, VIU b, LFC0:0!
LOAD:VIF a, VIU b, LRSM:0!
LOAD:VIF a, VIU b, LTF:c!
LOAD:VIF a, VIU b, LTI:c!
LOAD:VIF a, VIU b, LTS:c!
LOAD:VIF a, VIU b, RSM:0!
LOAD:VIF a, VIU b, SAF:0!
LOAD:VIF a, VIU b, SAS:0!
LOAD:VIF a, VIU b, STF:c!
LOAD:VIF a, VIU b, STS:c!
LOAD:VIF a, VIU b, ULCSB:0!
LOAD:VIF a, VIU b, UUCSB:0!
LOAD:VIF a, [CONTR b,]ATA:0!
LOAD:VIF a, [CONTR b,]CSM:0!
LOAD:VIF a, [CONTR b,]DLFC0:0!
LOAD:VIF a, [CONTR b,]DLFC1:0!

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LOAD:VIF a,[CONTR b,]DLFC2:0!
LOAD:VIF a,[CONTR b,]DMVIU:0!
LOAD:VIF a,[CONTR b,]DTSE:0!
LOAD:VIF a,[CONTR b,]EMVIU:0!
LOAD:VIF a,[CONTR b,]ENICF:0!
LOAD:VIF a,[CONTR b,]EQT:0!
LOAD:VIF a,[CONTR b,]ESM:0!
LOAD:VIF a,[CONTR b,]ETA:0!
LOAD:VIF a,[CONTR b,]EVICS:0!
LOAD:VIF a,[CONTR b,]EVIUS:0!
LOAD:VIF a,[CONTR b,]EX:c!
LOAD:VIF a,[CONTR b,]EX00F:0!
LOAD:VIF a,[CONTR b,]EXSIM:0!
LOAD:VIF a,[CONTR b,]EXVIC:0!
LOAD:VIF a,[CONTR b,]INHIC:0!
LOAD:VIF a,[CONTR b,]IPS:0!
LOAD:VIF a,[CONTR b,]ISM:0!
LOAD:VIF a,[CONTR b,]LFC1:0!
LOAD:VIF a,[CONTR b,]LFC2:0!
LOAD:VIF a,[CONTR b,]LR c:d!
LOAD:VIF a,[CONTR b,]RC:0!
LOAD:VIF a,[CONTR b,]REFF:0!
LOAD:VIF a,[CONTR b,]RESM:c!
LOAD:VIF a,[CONTR b,]RESR:0!
LOAD:VIF a,[CONTR b,]RMW:0!
LOAD:VIF a,[CONTR b,]RSIEX:0!
LOAD:VIF a,[CONTR b,]RTA:0!
LOAD:VIF a,[CONTR b,]RVICX:0!
LOAD:VIF a,[CONTR b,]SEFF0:0!
LOAD:VIF a,[CONTR b,]SEFF1:0!
LOAD:VIF a,[CONTR b,]SVF0:0!
LOAD:VIF a,[CONTR b,]SVF1:0!
LOAD:VIF a,[CONTR b,]UFA:0!
LOAD:VIF a,[CONTR b,]UFB:0!
LOAD:VIF a,[CONTR b,]UGAF:0!
LOAD:VIF a,[CONTR b,]UGAS:0!
LOAD:VIF a,[CONTR b,]ULAF:0!
LOAD:VIF a,[CONTR b,]ULAI:0!
LOAD:VIF a,[CONTR b,]ULAS:0!
LOAD:VIF a,[CONTR b,]ULBS:0!
LOAD:VIF a,[CONTR b,]ULTF:0!
LOAD:VIF a,[CONTR b,]ULTS:0!
LOAD:VIF a,[CONTR b,]UPSW:0!
LOAD:VIF a,[CONTR b,]URSM:0!
LOAD:VIF a,[CONTR b,]USAS:0!
LOAD:VIF a,[CONTR b,]VI:0!
LOAD:VIF a,[CONTR b,]WRSM c:d!

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y

Status of message execution:

COMPLETED

NOT STARTED — CONTROLLER NOT IN SERVICE

NOT STARTED — ILLEGAL MESSAGE

NOT STARTED — INVALID INPUT FOR UNIT TYPE OR
FUNCTION SPECIFIED

NOT STARTED — INVALID MEMBER, CONTROLLER, SUBUNIT,
ADDRESS, OR RANGE SPECIFIED

NOT STARTED — UNIT OR SUBUNIT UNEQUIPPED

4. ACTION TO BE TAKEN

Correct message if execution is not started. See the corresponding input LOAD message for further information.

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

Input Message
LOAD:VIF-[unit]

SEE PROPRIETARY NOTICE ON COVER PAGE

ID LOAD:XS
WORK CENTER.. MAC, MOC, NMOC, TEC,
 TOC
GENERIC 4E21 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

[1] LOAD:XS,XSINDIR a[, ID b], [X]ADR c INC de [SIZE f, DISP g] h

[2] LOAD:XS,XSINDIR a,i, INC de [SIZE f, DISP g] h

2. REASON FOR OUTPUT

To report the results of the request to write data to the designated location for a extended non-secure call store (XS) address.

Format [1] prints if location is an address.

Format [2] prints if location is contained in a central control (CC) register.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | Level of indirectness. |
| b | File system ID tag. (Must be in file segments 1 through 3 since this is used for extended memory access.) |
| c | Base address. |
| d | Sign of address increment. |
| e | Address increment. |
| f | Decimal size of the mask. |
| g | Decimal displacement of the mask. |
| h | Disposition of the request:

COMPLETED — Function successful.

NOT STARTED — Function failed. Request to write into non call store address' is illegal. |
| i | CC register indicator. |

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
GULPUTPP
GULPUTXP
GULRUTCR

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Message
LOAD:XS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID LOAD:XTSI-D3U
WORK CENTER.. MOC, TEC
GENERIC 4E21 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

LOAD:XTSI a,D3U b,IREG c:d[,MSK e]
f

2. REASON FOR OUTPUT

To report the loading of the Internal Registers (IREG) of the specified Digital Signal Level 3 Unit (D3U), in a particular Expanded Time Slot Interchange (XTSI) Frame.

3. VARIABLE FIELD DEFINITIONS

a	XTSI member number (0-63).
b	D3U unit number (0-7).
c	0 — INVALID - D3U Software Status (D3USTATUS) register. 1 — INVALID - D3U Hardware Status (D3USTAT) register. 2 — D3U Control (D3UCTL) register bits 0-23. 3 — INVALID - D3U Error Source Register (D3UESR). 4 — D3U Exercise Register (D3UEXR) register bits 0-23.
d	Data to be loaded into register.
e	Mask through which data is loaded. Default mask is all ones.
f	Status of message execution: COMPLETED NOT STARTED - CONTROLLER NOT IN SERVICE NOT STARTED - ILLEGAL MESSAGE NOT STARTED - INVALID INPUT FOR UNIT TYPE OR FUNCTION SPECIFIED NOT STARTED - INVALID MEMBER, CONTROLLER, SUBUNIT, ADDRESS, OR RANGE SPECIFIED NOT STARTED - UNIT OR SUBUNIT UNEQUIPPED

4. ACTION TO BE TAKEN

Correct message.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

Input Messages
DUMP:XTSI-D3U
LOAD:XTSI-D3U

Output Message
DUMP:XTSI-D3U

SEE PROPRIETARY NOTICE ON COVER PAGE

ID LOAD:XTSI-IBU
WORK CENTER.. MOC, TEC
GENERIC 4E24 Rel. 2 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

LOAD:XTSI a, IBU 0, IREG c:d[,MSK e]
f

2. REASON FOR OUTPUT

To report the loading of the Internal Registers (IREG) of the specified In-Band Unit (IBU), in a particular Expanded Time Slot Interchange (XTSI) Frame.

3. VARIABLE FIELD DEFINITIONS

a	XTSI member number (0-63).
b	IBU number (0).
c	0 — INVALID - IBU Software Status (IBUSTATUS) register. 1 — INVALID - IBU Hardware Status (IBUSTAT) register. 2 — IBU Control (IBUCTL) register bits 0-23. 3 — INVALID - IBU Error Source Register (IBUESR). 4 — IBU Exercise Register (IBUEXR) register bits 0-23.
d	Data to be loaded into register.
e	Mask through which data is loaded. Default mask is all ones.
f	Status of message execution: COMPLETED NOT STARTED - CONTROLLER NOT IN SERVICE NOT STARTED - ILLEGAL MESSAGE NOT STARTED - INVALID INPUT FOR UNIT TYPE OR FUNCTION SPECIFIED NOT STARTED - INVALID MEMBER, CONTROLLER, SUBUNIT, ADDRESS, OR RANGE SPECIFIED NOT STARTED - UNIT OR SUBUNIT UNEQUIPPED

4. ACTION TO BE TAKEN

Correct message.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

Input Messages
DUMP:XTSI-IBU
LOAD:XTSI-IBU

Output Message
DUMP:XTSI-IBU

SEE PROPRIETARY NOTICE ON COVER PAGE

ID LOAD:XTSI-IREG
WORK CENTER.. MOC, TEC
GENERIC 4E21 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

LOAD:XTSI a, {IREG|CREG} b:c[,MSK d]
e

2. REASON FOR OUTPUT

To report the loading of the specified Expanded Time Slot Interchange (XTSI) Internal Register (IREG) or Critical Register (CREG).

3. VARIABLE FIELD DEFINITIONS

a XTSI member number (0 - 63).

b Register Numbers in octal:

0 — Hardware Status Register (STATR) bits 12-23.

NOTE: Controller can be specified in the input command for the hardware register only. Example: LOAD:XTSI a[,CONTR f] {IREG|CREG} b:c[,MSK d]!

1 — Hardware Status Register (STATR) bits 0-11.

NOTE: Controller can be specified in the input command for the hardware register only. Example: LOAD:XTSI a[,CONTR f]{IREG|CREG} b:c[,MSK d]!

5 — Controller Error Source Register (CESR).

6 — Controller pest register.

7 — Controller Control (CNTL) register.

24 — Maintenance Buffer Pointers (MBPTR).

25 — Shadow Maintenance Buffer Pointer (SHDWMBPTR).

34 — Time Slot Interchange (TSI) Control (TSICTL) register.

40 — TSI Exercise Register 0 (TSIEXR0).

41 — TSI Exercise Register 1 (TSIEXR1).

45 — FBI Status And Control (FBICTL) register.

47 — Protection Switch Client (PSC) Error Pest (PSCPEST) register.

51 — PSC Pulse Code Modulated (PCM) Cutoff (PSCPCMCO) register.

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- 52 — PSC Control Bus Cutoff (PSCBCO) register.
- 55 — A-Link Formatter Exercise Register 0 (ALFEXR0).
- 56 — A-Link Formatter Exercise Register 1 (ALFEXR1).
- c 24 bit data to be loaded into register, in octal.
- d 24 bit mask through which data is loaded, in octal. Default mask is all ones.
- e Status of message execution:
 - COMPLETED
 - NOT STARTED - CONTROLLER NOT IN SERVICE
 - NOT STARTED - ILLEGAL MESSAGE
 - NOT STARTED - INVALID INPUT FOR UNIT TYPE OR FUNCTION SPECIFIED
 - NOT STARTED - INVALID MEMBER, CONTROLLER, SUBUNIT, ADDRESS, OR RANGE SPECIFIED
 - NOT STARTED - UNIT OR SUBUNIT UNEQUIPPED
- f CONTR NUMBER, CONTR FIELD CAN ONLY BE SPECIFIED WHEN b=0 OR b=1.

4. ACTION TO BE TAKEN

Correct message.

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

Input Messages
DUMP:XTSI - IREG
LOAD:XTSI - IREG

Output Message
DUMP:XTSI - IREG

SEE PROPRIETARY NOTICE ON COVER PAGE

ID LOAD:XTSI-SPU
WORK CENTER.. MOC, TEC
GENERIC 4E22 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

LOAD:XTSI a,SPU b,IREG c:d[,MSK e]
f

2. REASON FOR OUTPUT

To report the loading of the Internal Registers (IREG) of the specified Signal Processing Unit (SPU), in a particular Expanded Time Slot Interchange (XTSI) Frame.

3. VARIABLE FIELD DEFINITIONS

a	XTSI member number (0-63).
b	SPU unit number (0-11).
c	0 — INVALID - SPU Software Status (SPUSTATUS) register. 1 — INVALID - SPU Hardware Status (SPUSTAT) register. 2 — INVALID - SPU Error Source Register (SPUESR). 3 — SPU Control (SPUCTL) register bits 0-23. 4 — SPU Exercise Register (SPUEXR) register bits 0-23.
d	Data to be loaded into register.
e	Mask through which data is loaded. Default mask is all ones.
f	Status of message execution: COMPLETED NOT STARTED - CONTROLLER NOT IN SERVICE NOT STARTED - ILLEGAL MESSAGE NOT STARTED - INVALID INPUT FOR UNIT TYPE OR FUNCTION SPECIFIED NOT STARTED - INVALID MEMBER, CONTROLLER, SUBUNIT, ADDRESS, OR RANGE SPECIFIED NOT STARTED - UNIT OR SUBUNIT UNEQUIPPED

4. ACTION TO BE TAKEN

Correct message.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

Input Messages
DUMP:XTSI-SPU
LOAD:XTSI-SPU

Output Message
DUMP:XTSI-SPU

SEE PROPRIETARY NOTICE ON COVER PAGE

ID MON:0
WORK CENTER.. MOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

MON:a, b TRAPN c dd

2. REASON FOR OUTPUT

To acknowledge the creation of a new trunk subgroup (TSG) or TSG counting trap, the turn on/turn off a scheduled trap, or failure because of an input error introduced when attempting to modify or create a TSG trap.

3. VARIABLE FIELD DEFINITIONS

- a Trunk subgroup:
- IATSG — Trunk subgroup dumping trap.
 - 1ATSGCNT — Trunk subgroup counting trap.
- b NEW — A trap block has been reserved.
- REJECTED — The previous input could not be acted upon.
- c The particular TSG dumping or counting trap number (1-31).
- d Disposition of the request:
- AUDIT CONDITION DETECTED. TRAP MAY BE AFFECTED — A detailed audit printout went to master control complex (MCC) TTY.
 - DATA COLLECTION STARTED — trap is now active.
 - DATA COLLECTION STOPPED — trap is no longer active but is still defined.
 - INVALID TIME — See *Input Message Document* for proper time format.
 - MULTIPLE SAMPLE RATES ILLEGAL ON TSG TRAP — A sample rate applies to the aggregate of ineffective attempt (IA) occurrences for a given TSG trap.
 - NUMBER OUT OF RANGE — TAN range input value is greater than 127.
 - TAN RANGE SLOTS FULL — Only two trunk appearance number (TAN) ranges may be specified.
 - TOO MANY IA TYPES PRESENT — Use add option to include IA types, limit 19 per input message.

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TSG IS ALREADY TRAPPED ON — A TSG can appear in only one trap.

TSG LIMIT OF 6 REACHED — Only six TSGs per trap are allowed.

TRAP BLOCK HELD — The trap has RPT option specified and will resume data collection as scheduled.

TRAP BLOCK RELEASED — The trap is no longer defined.

TRAPN INVALID — TSG or TSGCNT trap number (TRAPN) is limited to 1-31.

TRAPN IS ACTIVE ON ANOTHER TTY — A trap may only be modified from the teletypewriter (TTY) used to define the trap.

UNA — Unassigned trunk.

UNKNOWN INPUT CHARACTER STRING — An invalid character appears in message, or a data field item is misspelled.

4. ACTION TO BE TAKEN

Action to be taken depends on disposition of the request. See Variable Field Definitions.

5. REFERENCES

PIDENTs
TMAD0005
TMAD0002
TMADTRAP

Practice 234-100-051, *Call Irregularities Facility for Data Output on Request*

Input Messages
ALW:IATSG
ALW:IATSGCNT
INH:IATSG
INH:IATSGCNT
MON:IATSG
MON:IATSGCNT
STOP:MON-IATSG

SEE PROPRIETARY NOTICE ON COVER PAGE

ID MON:IAOFC
WORK CENTER.. MOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

MON:IAOFC, b TRAPN c dd

2. REASON FOR OUTPUT

To acknowledge the creation of a new office trap, the turn on/turn off of a scheduled trap, the failure in an attempt to create or modify a trap, or the rejection of an attempt to create or modify a trap because of an input error.

3. VARIABLE FIELD DEFINITIONS

b NEW — A trap block has been reserved.
 REJECTED — The previous input could not be acted upon.

c Office trap number (32-35). May be omitted if request rejected.

dd Disposition of the request:

 AN IA IS ALREADY TRAPPED ON TRAPN AC — An ineffective attempt (IA) can only appear in one office trap.

 AUDIT CONDITION DETECTED. TRAP MAY BE AFFECTED — A detailed audit printout went to the master control complex (MCC) TTY.

 DATA COLLECTION STARTED — Trap is now active.

 DATA COLLECTION STOPPED — Trap is no longer active but is still defined.

 INVALID TIME — See *Input Message Document* for proper time format.

 TOO MANY IA TYPES PRESENT — Text string too long; see multiple input message MON:IAOFC to define IA types for a TRAP.

 TRAPN INVALID — Office traps are limited to 32 - 35.

 TRAPN IS ACTIVE ON ANOTHER TTY — A trap can only be modified from the teletypewriter (TTY) used to define the trap.

 UNKNOWN INPUT CHARACTER STRING — An invalid character appears in message, or a data field item is misspelled.

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4. ACTION TO BE TAKEN

Action to be taken depends on disposition of the request. See Definition of Variable Fields.

5. REFERENCES

PIDENTs
TMAD0002
TMAD0005
TMADTRAP

Practice 234-100-051, *Call Irregularities Facility for Data Output on Request*

Input Messages
ALW: IAOFC
INH: IAOFC
MON: IAOFC
STOP: MON - IAOFC

SEE PROPRIETARY NOTICE ON COVER PAGE

ID MON:IATSGCNT
WORK CENTER.. MOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

MON:IATSGCNT, TRAPN a			
PST bbbbbb	PDT cccccc	PER dddddd	FSA eeeeeee
PDA ffffff	MAB gggggg	AOF hhhhhh	CST iiiiii
UXS jjjjjj	IKF kkkkkk	CPF llllll	NSD mmmmm
XST nnnnnn	ANF oooooo	AIF pppppp	CKF qqqqqq
GLR rrrrrr	GLC ssssss	USIS tttttt	FSIS uuuuuu
PTS0 vvvvvv	SPT0 wwwwww	IATO xxxxxx	USRS yyyyyy
PSE5 zzzzzz	DSCF a ¹ ..a ¹	USDS b ¹ ..b ¹	DST0 c ¹ ..c ¹
PTST d ¹ ..d ¹	OSTE e ¹ ..e ¹	USOS f ¹ ..f ¹	BFOS g ¹ ..g ¹
PPTS h ¹ ..h ¹	WATO i ¹ ..i ¹	USIG j ¹ ..j ¹	USOG k ¹ ..k ¹
WABF l ¹ ..l ¹	ASTO m ¹ ..m ¹	PAOG n ¹ ..n ¹	URAI o ¹ ..o ¹
URAO p ¹ ..p ¹	CBTO q ¹ ..q ¹	FRCF r ¹ ..r ¹	CBAT s ¹ ..s ¹
CFTO t ¹ ..t ¹	RGTO u ¹ ..u ¹	PRGS v ¹ ..v ¹	ISA5 w ¹ ..w ¹
IADA x ¹ ..x ¹	MAB5 y ¹ ..y ¹	MSAF z ¹ ..z ¹	IUR6 a ² ..a ²
ATVC b ² ..b ²	ATIR c ² ..c ²	GLR5 d ² ..d ²	NSD5 e ² ..e ²
OPF5 f ² ..f ²	ISI5 g ² ..g ²	MRI h ² ..h ²	

2. REASON FOR OUTPUT

To dump the value of Ineffective Attempt (IA) occurrence counts when a Trunk Subgroup (TSG) counting trap is allowed, inhibited, stopped, or the scheduled time-off has occurred. The counts are set to zero only when trap data collection starts. Inhibit and allow do not affect the contents of the counters.

3. VARIABLE FIELD DEFINITIONS

a	Trap Number (TRAPN) (1 - 15).
b	Permanent signal time-out.
c	Partial dial time-out.
d	Pulsing error.
e	False start abandon.
f	Partial dial abandon.
g	Miscellaneous abandon.
h	Automatic Number Identification (ANI) local office failure: information digit time-out.
i	Centralized Automatic Message Accounting (CAMA).
j	Unexpected stop.

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k	Integrity check failure.
l	Continuity polarity failure.
m	No start dial.
n	Expected stop time-out.
o	ANI failure indicated.
p	ANI office failure indicated by information digits.
q	Common Channel Interoffice Signaling (CCIS) continuity check failure.
r	Glare condition, far-end office controls.
s	Glare condition, this office controls.
t	Unreasonable signal idle state.
u	False seizure time-out.
v	Incoming proceed to send time-out Incoming Trunk (ICT) (6 seconds to remove incoming seizing signal).
w	Incoming start of pulsing time-out (2 seconds).
x	Incoming incomplete address time-out (5 seconds).
y	Unreasonable signal received state.
z	Consultative Committee on International Telephone & Telegraph Common Channel Signaling System Number 5 (CCITT5) incoming state pulsing error.
a ¹	Outgoing state double seizure clear forward.
b ¹	Outgoing state unreasonable signal during double seizure timing (850 ms).
c ¹	Double seizure time-out (glare) outgoing state (20 seconds).
d ¹	Outgoing waiting for proceed to send time-out.
e ¹	Outpulsing state transmitter error.
f ¹	Unreasonable signal outpulsing state.
g ¹	Outgoing Trunk (OGT) busy flash during outpulsing state.
h ¹	Persisting proceed to send after outpulsing (20-second time-out).
i ¹	Waiting answer time-out (4 minutes).
j ¹	Unreasonable ICT signal in waiting for answer state.
k ¹	Unreasonable OGT signal in waiting for answer state.
l ¹	Waiting answer - busy flash Received (RCVD) on OGT awaiting answer.
m ¹	Answer signal acknowledgement 15-second time-out ICT.

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n ¹	Waiting for answer persisting answer signal on OGT (6-second time-out).
o ¹	Unreasonable signal on ICT after answer.
p ¹	Unreasonable signal on OGT after answer.
q ¹	Clear back and busy flash signal Acknowledge (ACK) 15-second time-out on ICT (disconnect stage).
r ¹	Without clear forward after ICT clear back or busy flash was sent (disconnect stage).
s ¹	Persisting clear back signal on OGT (disconnect stage).
t ¹	Disconnect stage failure to get a release guard on OGT.
u ¹	6-second release guard time-out waiting for ICT clear forward removal (disconnect stage).
v ¹	Disconnect stage OGT persisting release guard signal (15 seconds).
w ¹	CCITT5 incoming seizure abandon (clear forward received).
x ¹	Incomplete address abandon.
y ¹	CCITT5 miscellaneous abandon.
z ¹	Multiple scan points active-fault.
a ²	Unreasonable signal on idle CCITT6 trunk.
b ²	Invalid incoming Automatic Trunk Maintenance Equipment (ATME) test call.
c ²	ATME director / responder irregularities.
d ²	CCITT5 first trial glare fail.
e ²	CCITT5 first trial No Start Dial (NSD) fail.
f ²	CCITT5 first trial outpulsing fail.
g ²	CCITT5 incoming signaling irregularity before answer.
h ²	Misrouted intra-LATA calls.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
TMAD0002
TMAD0005
TMADTRAP

Practice 234-105-016, *Call Irregularities Facility For Data Output On Request*

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Messages
ALW: IATSGCNT
INH: IATSGCNT
MON: IATSGCNT
OP: IATSGCNT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID MON:MCCREPT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

- [1] MON:MCCREPT a:bc ... bc
- [2] MON:MCCREPT:UPD ABORTED
MCC OOS

2. REASON FOR OUTPUT

To send application panel Master Control Complex (MCC) data to a Switching Control Center (SCC).

Format [1] To send application panel MCC data to an SCC.

Format [2] Request was aborted because MCC was out of service.

3. VARIABLE FIELD DEFINITIONS

- a Update indicator:
- NULL — All nonzero application panel points are being sent.
 - UPD — The data being sent represents changes on the application panel.
- bc Application panel data. Each 12 bits of data is represented by two American Standard Code For Information Interchange (ASCII) characters. Each character is formed by adding octal 40 to 6 bits of the binary data. The most significant 6 bits are represented by b, and the least significant 6 bits by c. The first 12 bits (two characters) represent a message sequence number in binary. The remaining 12-bit fields (2-character pairs) represent application panel data. The data may be an MCC point or a bar graph value, as determined by the state of bit 11.

If bit 11 is 0, the data represents an MCC point with the following layout:

BIT	DESCRIPTION
11	Bar graph bit (reset with this layout).
10	Value of MCC point being sent.
5-9	MCC matrix row.
0-4	MCC matrix column.

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If bit 11 is 1, the data represents a bar graph value with the following layout:

BIT	DESCRIPTION
11	Bar graph bit (set with this layout).
7-10	Bar number (0 - 15).
0-6	Bar value (0 - 100).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
MCCMSCCP
MCCMSCCR

Practice 254-280-212, *Master Control Complex Common Control and Monitor Program*

Input Message
STOP:MON-MCCRE

SEE PROPRIETARY NOTICE ON COVER PAGE

ID MON:NCATANOM
WORK CENTER.. MOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

MON:NCATANOM, [a] [TRAPN b] [c] [d]

2. REASON FOR OUTPUT

To acknowledge the creation of a new non-call associated temporary signaling connection (NCAT) anomaly trap, the turning on or off of a scheduled trap, the failure in an attempt to create or modify a trap, or the rejection of an attempt because of an input error.

3. VARIABLE FIELD DEFINITIONS

- a NEW — NCAT anomaly trap created.
REJECTED — NCAT anomaly trap request denied.
- b NCAT anomaly trap number (0 or 1). May be omitted if the request is rejected.
- c Disposition of the request:
DATA COLLECTION STARTED — Trap is now active and will output data if an NCAT anomaly occurs.
DATA COLLECTION STOPPED — Trap is no longer collecting data but may still be defined. (See variable d).
INVALID TIME — TIMEON or TIMEOFF format is invalid (See *Input Message Document* for proper time format).
TOO MANY NACCs ENTERED — Limit of 4 NACCs per input request. Use multiple input messages if more NACCs are required.
TRAPN INVALID — NCAT anomaly traps are limited to either 0 or 1.
TRAPN IS ACTIVE ON ANOTHER TTY — A trap can only be modified from the teletypewriter (TTY) from which it was defined.
UNKNOWN INPUT CHARACTER STRING — An invalid character appears in the message or a data field item is misspelled.

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4. ACTION TO BE TAKEN

5. REFERENCES

Input Messages

SEE PROPRIETARY NOTICE ON COVER PAGE

ID MON:SUTRAP
WORK CENTER.. MOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

MON:SUTRAP					
CIN/SIGLK	DIRECTION	MESSAGE	SIGNAL UNIT	TIME	
a	b	c	d	e	

2. REASON FOR OUTPUT

To respond to a MON:SUTRAP input message. The SUTRAP feature provides a monitor of signal units (SU) being received or transmitted over a particular signaling link or signals for a particular circuit identification number (CIN).

NOTE: This message applies to international terminals only.

3. VARIABLE FIELD DEFINITIONS

a	CIN of a talking trunk assigned to a signaling link or a signaling link number.
b	RECEIVE TRANSMIT
c	The mnemonic name of common channel signaling system number 6 (CCITT6) message.
d	Octal number representing the SU.
e	Time of day, half-hour to ms.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
ISCDISP6
ISCLSCHI

Input Message
MON:SUTRAP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:ALMSTAT
WORK CENTER.. MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

```
OP:ALMSTAT
  XFER    XFER INTO  ALM      GROUP      LINKS
MC  TC      FROM      SIL      WITH      IN
MOC aa bbbbbbbbbbbbbbb c ddddddddddddddd eeeeeeeeeeeeeee
TEC1 aa bbbbbbbbbbbbbbb c ddddddddddddddd eeeeeeeeeeeeeee
TEC2 aa bbbbbbbbbbbbbbb c ddddddddddddddd eeeeeeeeeeeeeee
TEC3 aa bbbbbbbbbbbbbbb c ddddddddddddddd eeeeeeeeeeeeeee
TEC4 aa bbbbbbbbbbbbbbb c ddddddddddddddd eeeeeeeeeeeeeee
TEC5 aa bbbbbbbbbbbbbbb c ddddddddddddddd eeeeeeeeeeeeeee
TOC aa bbbbbbbbbbbbbbb c ddddddddddddddd eeeeeeeeeeeeeee
```

```
LINKS
OUT
fffffffffffffffffff
fffffffffffffffffff
fffffffffffffffffff
fffffffffffffffffff
fffffffffffffffffff
fffffffffffffffffff
fffffffffffffffffff
```

2. REASON FOR OUTPUT

To indicate the present status of the office alarm system indicating the active alarm routing and grouping. This message is in response to the input message OP:ALMSTAT.

3. VARIABLE FIELD DEFINITIONS

- a Indicates which maintenance center the MC is transferred to:
- 0 — Not transferred.
 - 1 — Maintenance operations center (MOC).
 - 2 — Terminal equipment center 1 (TEC1).
 - 3 — Terminal equipment center 2 (TEC2).
 - 4 — Terminal equipment center 3 (TEC3).
 - 5 — Terminal equipment center 4 (TEC4).
 - 6 — Terminal equipment center 5 (TEC5).
 - 7 — Trunk operations center (TOC).
 - 8-15 — Reserved for future centers

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- b Indicates which maintenance centers are transferred into the MC:
- Binary data (15-bit positions - Bit 0 is rightmost bit)
14 13 12 11 10 9 8 7 6 5 4 3 2 1 0
- Bit
- | | |
|--------|-------------------------------|
| 0 | — MOC |
| 1 | — TEC1 |
| 2 | — TEC2 |
| 3 | — TEC3 |
| 4 | — TEC4 |
| 5 | — TEC5 |
| 6 | — TOC |
| 7 - 14 | — Reserved for future centers |
- c Indicates if the audible alarms have been silenced in the MC:
- | | |
|---|----------------|
| 1 | — Silenced |
| 0 | — Not silenced |
- d Binary data bits indicating which maintenance centers are grouped with this MC:
- Bit
- | | |
|--------|-------------------------------|
| 0 | — MOC |
| 1 | — TEC1 |
| 2 | — TEC2 |
| 3 | — TEC3 |
| 4 | — TEC4 |
| 5 | — TEC5 |
| 6 | — TOC |
| 7 - 14 | — Reserved for future centers |
- e Binary data bits indicating which maintenance centers are linked into the MC. These centers will send their alarms and output messages into the MC.
- Bit
- | | |
|---|--------|
| 0 | — MOC |
| 1 | — TEC1 |
| 2 | — TEC2 |

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	3	— TEC3
	4	— TEC4
	5	— TEC5
	6	— TOC
	7 - 14	— Reserved for future centers
f	Binary data bits indicating which maintenance centers the MC is linked-out to. These centers will receive alarms and output messages originated by the MC.	
	Bit	
	0	— MOC
	1	— TEC1
	2	— TEC2
	3	— TEC3
	4	— TEC4
	5	— TEC5
	6	— TOC
	7 - 14	— Reserved for future centers

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
ALRM01

Practice 234-100-040, *Office Alarm System Description and Theory*

Input Message
OP:ALMSTAT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:ANMC
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

OP:AUTOMATIC NETWORK MANAGEMENT CONTROLS IN EFFECT
DOC RECEIVED:
a MC3
b MC2
c MC1
DOC SENT: d

2. REASON FOR OUTPUT

To indicate which automatic network management controls are in effect at the present time.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | The number of times machine congestion level 3 (MC3) was received. |
| b | The number of times MC2 was received. |
| c | The number of times MC1 was received. |
| d | The number of times that the dynamic overload control (DOC) was sent. |

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
NMGTDEM

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:ANNSTAT
WORK CENTER.. TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] OP:ANNSTAT,VSSID UNASSIGNED,SID UNASSIGNED MEMN a ANNUM b
- [2] OP:ANNSTAT,VSSID c,SID d {ANNUM INVALID|BARGEIN ANNUM b}
[FRAME DUPLEX FAILED]
MANUAL CONTROLS:[INHIBIT ACTIVATION]
[INHIBIT UPDATE REPORTS]
[INHIBIT EXTERNAL UPDATES]
{ACTIVE MESSAGE|STANDBY:MESSAGE}
[START TIME & DATE [ee:ff] gghhii]
STOP TIME&DATE [ee:ff] gghhii
- [3] OP:ANNSTAT,VSSID c, SID d MEMN a ANNUM b
[FRAME DUPLEX FAILED]
MANUAL CONTROLS: [INHIBIT ACTIVATION]
[INHIBIT UPDATE REPORTS]
[INHIBIT EXTERNAL UPDATES]
ACTIVE MESSAGE VERSION [j]
AUDIO {NONE|SIMPLEX REC METHOD {NONE|VSS|DIRECT
SUBMEM k|DUPLEX} PROD|MANUAL|MASNAC}
STOP TIME&DATE [ee:ff] gghhii ACTUAL MESSAGE LENGTH m SEC
- STANDBY MESSAGE VERSION [j]
AUDIO {NONE|SIMPLEX REC METHOD {NONE|VSS|DIRECT
SUBMEM k|DUPLEX} PROD|MANUAL|MASNAC}
TRANS COUNT n TYPE [{NOISE FAILURE|PILOT TONE FAILURE}]
VERIFIED {NO p|YES} ACTUAL MESSAGE LENGTH m SEC
START TIME&DATE [ee:ff] gghhii STOP TIME&DATE [ee:ff] gghhii

2. REASON FOR OUTPUT

To print the status of an announcement. Format [1] prints for unassigned announcements. Format [2] prints for barge-in announcements. Format [3] prints for non-barge-in announcements.

3. VARIABLE FIELD DEFINITIONS

- a Mass announcement system (MAS) member number.
- b Announcement number.
- c 5-digit voice storage system (VSS) identification (VSSID).
- d 7-digit service identification (SID).

SEE PROPRIETARY NOTICE ON COVER PAGE

e	Start or stop hour.
f	Start or stop minute.
g	Start or stop month.
h	Start or stop day.
i	Start or stop year.
j	VSS version number.
k	0 or 1.
m	Message length in seconds (0-180).
n	Number of transmission errors in message (0-4).
p	1 - Verification in progress. 2 - Callback failure.
NONE	No audio.
SIMPLEX SUBMEN	One copy of announcement is available.
DUPLEX	Two copies of announcement are available.
VSS	Produced by VSS.
DIRECT PROD	Produced directly by customer.
MANUAL	Produced at office.
MASNAC	Produced at MAS national administration center.
NOISE FAILURE	Audio failure.
PILOT TONE FAILURE	No tone signal.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
ANNHTTYM
TMAD0005

Input Message
OP:ANNSTAT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:APS-0
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

OP:APS 0
AP COMM LINK - a
[CNI STREAM - b]
1A FILE ACCESS - c
[3B OOS UNITS - d]

2. REASON FOR OUTPUT

This message is either printed in response to an master control complex (MCC) attached processor system (APS) 0 status key request or, if the office has the AP3BIO (APMSG) feature, as part of the report generated by the OP:OOSUNITS request.

3. VARIABLE FIELD DEFINITIONS

- a Reports on the status of the attached processor interface (API) communications link (0 and 1):
- ACTIVE — APIs are not duplex failed.
- OOS — APIs are duplex failed.
- b Reports on the status kept by the 1A Processor for the common network interface (CNI) stream. The CNI stream status will only print if the CNI feature exists in the office:
- ACTIVE — CNI stream is up and handling messages.
- OOS — CNI stream is down.
- c Reports on the status of the 1A file:
- ACTIVE — 1A file is available.
- DUPLEX FAIL — 1A file is duplex failed.
- d If present, reports on the status of the APS out-of-service units list request. If the office does not have the AP3BIO feature, the 3B out-of-service (OOS) units status will not print:
- NOT AVAILABLE — APS out-of-service units report was not requested because the AP3BIO feature is inhibited.
- NOT AVAILABLE — APS out-of-service units report was not requested because the APIs are duplex failed.
- REQUESTED — APS out-of-service units report was requested.

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
IOCPUSR1

4ESSTM/APS I/O Message Document, IM/OM-4A001-01

Input Messages
ALW:APMSG
INH:APMSG
OP:00SUNITS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:APSTATUS
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1A-APS
TYPE Output

1. FORMAT

OP:APSTATUS:
APS a API b c API b c
 d
 .
 .
 .
OP:APSTATUS
APS a API b c API b c
 d

2. REASON FOR OUTPUT

To print the current status of all known attached processor systems (APSs) on the 1A processor.

3. VARIABLE FIELD DEFINITIONS

- a APS number (0-7).
- b Attached processor interface (API) number (0-15).
- c API status:
 ACT — Active and in service.
 DPF — Duplex failed
 GRO — Growth state.
 OOS — Out of service.
 SBY — Standby and in service.
- d 1 of the 8 following formats:
 1) 3B20D STATUS UNAVAILABLE - MESSAGE TIMED OUT
 2) APS COMM LINK OUT OF SERVICE
 3) CU 0 IS e CU 1 IS e
 MHD STATUS
 f g
 INVALID DATA RECEIVED FROM APS
 4) CU 0 IS e CU 1 IS e
 MHD STATUS
 f g
 1A FILE h IS ACTIVE ACCESS MODE IS i

SEE PROPRIETARY NOTICE ON COVER PAGE

- 5) INVALID DATA RECEIVED FROM APS
- 6) NO ACCESS TO 1A STATUS FILE
CU 0 IS e CU 1 IS e
MHD STATUS
f g
- 7) NO ACCESS TO ECD
1A FILE h IS ACTIVE ACCESS MODE IS i
- 8) NO ACCESS TO ECD AND 1A STATUS FILE

e

Control unit (CU) status:

ACT — Active and in service.
GRO — Unit control block (UCB) is being grown.
INI — Device currently being initialized.
OOS — Out of service.
SBY — Standby and in service.
UNA — Unavailable.

f

Moving head disk (MHD) number (0-7).

g

MHD status:

ACT — Active and in service.
GRO — UCB is being grown.
INI — Device currently being initialized.
OFL — Off line.
OOS — Out of service.

h

1A FILE number (0, 1).

i

ACCESS MODE status:

NORMAL — 1A backup file access mode used during standard 1A operation.
UPDATE — 1A backup file access mode used in a 4ESSTM update after the 4ESSTM has been PC'd to the new load and before the UPD: COMMIT; NORMFILE has been run.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
APFRBASE
IOCPOMC1

SEE PROPRIETARY NOTICE ON COVER PAGE

Practice 254-280-210, *Maintenance Control Program*

Input Message
OP:APSTATUS

SEE PROPRIETARY NOTICE ON COVER PAGE

1. FORMAT

2. REASON FOR OUTPUT

Format [2] prints if there are no audit programs inhibited or quieted.

a Number of inhibited audit programs.

b Number of audit programs in the quiet mode due to a manual request.

OP:AUDSTAT-1

- c Number of audit programs in the quiet mode due to a program request.
- d Throttle level:
- 1 — 500 milliseconds
 - 2 — 90 seconds
 - 3 — 5 minutes
- e Throttle reason:
- 1 — 3B disk driver overload.
 - 2 — Ring Init 2.
 - 3 — Ring Init 3.
 - 4 — Ring Init 4.
 - 5 — 3B Boot 52.
 - 6 — 3B Boot 53.
 - 7 — 3B Boot 54.
 - 8 — 3B recording capacity enhancement.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
AUDSCTRL

Input Messages
ALW:AUD
ALW:AUDMSG
INH:AUD
INH:AUDMSG
OP:AUDSTAT
SET:AUD

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:BANDSTAT
WORK CENTER.. MOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

OP:BANDSTAT SIGLK aabb

BAND	STATUS	BAND	STATUS	BAND	STATUS	BAND	STATUS
c	de	c	de	c	de	c	de
.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.

2. REASON FOR OUTPUT

To respond to an OP:BANDSTAT input message. It gives the status of all bands restricted or prohibited.

3. VARIABLE FIELD DEFINITIONS

- a A terminal grouping (TGR) frame number (0-15).
- b A terminal subunit number within the frame (0-15).
- c Band number (0-511) for domestic terminals, or band number (0-127) for international terminals.
- d Far end status:
 - PR — Prohibited.
 - RE — Restricted.
- e Near end status international only:
 - NEP — Near end prohibited.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
CCISIOPR
ISCLUTIL

Input Message
OP:BANDSTAT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:BP-SCS
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] OP:BP SCS a CONTR e
[NONE]
- [2] OP:BP SCS a CONTR COMPLETED
b c
[d]
- [3] OP:BP SCS a SCU f g
[NONE]
- [4] OP:BP SCS a SCU f COMPLETED
b c
- [5] OP:BP SCS a ALL e
[NONE]
- [6] OP:BP SCS a ALL COMPLETED
[CONTR b c]
[CONTR d]
[CONTR e]
[SCU f b c]
[SCU f d]
[SCU f g]
- [7] OP:BP SCS a SUM e
[NONE]
- [8] OP:BP SCS a SUM COMPLETED
[CONTR]
[SCU f]

2. REASON FOR OUTPUT

This message prints in response to an OP:BP-SCS input message. Format [1], or [2] is output if the input request specified that all breakpoints of a service circuit system (SCS) simplex controller or duplex controllers be listed. Format [3], or [4] is output if the input request specified that all breakpoints of a service circuit unit (SCU) be listed. Format [5], or [6] is output if the input request specified that all breakpoints of an SCS frame (controllers and SCUs) be listed. Format [5], or [6] may result in more than one output message depending on the amount of data to be printed. Formats [1] through [6] give the micro-instruction random access memory (MRAM) address and type for each breakpoint listed. Format [7], or [8] is output if the input request specified a summary breakpoint listing

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only. The summary only lists those units (including the controller) that have one or more breakpoints.

3. VARIABLE FIELD DEFINITIONS

- a SCS member number in decimal (0-7).
- b The address of the breakpoint in hexadecimal.
- c Breakpoint type:
— CUSTOM
— FAST
— NORMAL
- d Summary data fail code:
FAILED - INTERNAL ERROR The controller summary data word is inconsistent with the breakpoint data from the hardware (controller or SCU). The summary data word indicates the unit has a breakpoint and no breakpoint data was reported by the unit. Because of the data inconsistency, the breakpoints listed are suspect. Contact the Technical Assistance Center for further information.
- e Controller request status code:
COMPLETED All breakpoints have been output. (Not valid for format 6.)
DENIED - CONTR DUP FAILED Request denied because the frame is duplex failed.
DENIED - SCC IN GROWTH Request denied because the frame is in growth or special growth.
DENIED - SCC UNEQ Request denied because the frame is unequipped.
RL - CONTR LOM Request denied because the a frame controller is in listen-only mode. Retry later, as this condition should be cleared quickly.
- f SCU number in decimal (0-15).
- g SCU request status code:
ABORTED - MACRO REJECTED Request for the given SCU was aborted because the SCS frame rejected the list command. Contact the Technical Assistance Center for further information.
ABORTED - MACRO TIMEOUT Request for the given SCU was aborted because the SCS frame did not reply to the list command. Contact the Technical Assistance Center for further information.

SEE PROPRIETARY NOTICE ON COVER PAGE

COMPLETED All breakpoints have been output. (Not valid for format 6.)

DENIED - CONTR DUP FAILED Request denied because the frame is duplex failed.

DENIED - SCU IN GROWTH Request for the given SCU was denied because the SCU is in growth or special growth.

DENIED - SCU IS OOS Request for the given SCU was denied because the SCU is out of service.

DENIED - SCU UNEQ Request for the given SCU was denied because the SCU is unequipped.

FAILED - INTERNAL ERROR Request for the given SCU failed because of an unexpected software error when processing the list command. Contact the Technical Assistance Center for further information.

STOPPED - MACRO FAILED Request for the given SCU was stopped because the SCU failed in processing the list command. Contact the Technical Assistance Center for further information.

RL - CONTR LOM Request denied because the a frame controller is in listen-only mode. Retry later, as this condition should be cleared quickly.

4. ACTION TO BE TAKEN

If variable d is:

FAILED - INTERNAL ERROR then contact the Technical Assistance Center for further information.

If variable e is:

RL - CONTR LOM then retry later, as this condition should be cleared quickly.

If variable g is:

ABORTED - MACRO REJECTED then contact the Technical Assistance Center for further information.

ABORTED - MACRO TIMEOUT then contact the Technical Assistance Center for further information.

FAILED - INTERNAL ERROR then contact the Technical Assistance Center for further information.

STOPPED - MACRO FAILED then contact the Technical Assistance Center for further information.

SEE PROPRIETARY NOTICE ON COVER PAGE

RL - CONTR LOM then retry later, as this condition should be cleared quickly.

5. REFERENCES

PIDENT
SCSBPMEM

Input Messages
CLR:BP-SCS
OP:BP-SCS
SET:BP-SCS

Output Message
REPT:BP-SCS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:CCSTATUS
WORK CENTER.. MOC
GENERIC 4E20 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

OP:CCSTATUS
CC 0 - a [b DAY(S) LEFT TO SOAK]
CC 1 - a [b DAY(S) LEFT TO SOAK]
STATUS - c

2. REASON FOR OUTPUT

To print the status of the central controllers (CCs)

3. VARIABLE FIELD DEFINITIONS

- a State of the central controller:
- ACTIVE — CC is active.
 - FORCED ACTIVE — CC is forced active.
 - INVALID — State of the CC could not be determined.
 - MATCH — Standby CC.
 - OOS — CC is out of service.
 - OOS - TRBL — CC is out of service and in trouble.
 - POWERED DOWN — CC is in the powered down condition.
- b Number of soak days remaining.
- NOTE:** If variable b and its corresponding message is blank then no soak is in progress.
- c Contains the contents of the CC status word CC1STATUS. See the REPT:CC output message for the CC status word layout.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
CCFRTEST

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Message
OP:CCSTATUS

Output Message
REPT:CC

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:CGA
WORK CENTER.. MOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

OP:CGA TSN aaaaaaa, IGNORE

2. REASON FOR OUTPUT

To report carrier group alarms (CGAs) that are set to IGNORE in response to input message OP:CGASTAT. This message is also in response to an automatic entry around 7:00 AM. (One message is printed for each CGA alarm set to IGNORE.) Both hardware and software carrier alarms are printed out. The VER:TRKNAME, TSN aaaaaaa; DELT! teletypewriter (TTY) input message verifies whether the alarm for the trunk scanner number (TSN) printed is a hardware CGA or software carrier group alarm (SCGA) type.

3. VARIABLE FIELD DEFINITIONS

a Base trunk scanner number (TSN) (decimal) for the carrier group.

4. ACTION TO BE TAKEN

Verify that the carrier group should be in the IGNORE state. If not, set to active, using the SET:CGACNTL input message.

5. REFERENCES

PIDENT
CGAP00

Input Messages
OP:CGASTAT
SET:CGACNTL
VER:TRKNAME

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:CGALIST
WORK CENTER.. MOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

OP:CGALIST [a]
b

2. REASON FOR OUTPUT

To print all carrier group alarms (CGA) trunk scanner numbers (TSNs) on the test list in response to input message OP:CGASTAT. This message is also printed in response to an automatic entry.

3. VARIABLE FIELD DEFINITIONS

- a NONE — There are no carrier groups in the test state on the test list.
- b A list of TSNs and their input teletypewriter (TTY) channels which are on the CGA test list.

4. ACTION TO BE TAKEN

Verify if the carrier group(s) should be on the test list; if not, delete the carrier group(s) using the IN:CGALIST input message.

5. REFERENCES

PIDENT
CGAP00

Input Messages
IN:CGALIST
OP:CGASTAT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:CHAN
WORK CENTER.. MAC, MOC, NMOC, TEC,
 TOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

OP:CHAN a b
c

2. REASON FOR OUTPUT

To list the channel monitoring or routing currently taking place in the system in response to an OP:CHAN input message.

3. VARIABLE FIELD DEFINITIONS

- a MON — Monitoring of output messages from one channel by another.
- RTE — Routing of output messages from one channel to another.
- SCC — Monitoring of input and output messages from a channel by an
 switching control center (SCC) channel.
- b MSG COMPL — Last segment of partitioned message.
- MSG IP — Partitioned output message is proceeding.
- MSG STARTED — First segment of partitioned message.
- c NONE — No condition specified by a is present, or one of the following
 message layouts.

List of conditions, as shown in [1], [2], and [3]:

If variable a is: MON

[1] CHANNEL MONITORED BY

d	e
.	.
.	.
d	Monitored channel.
e	Monitoring channel.

SEE PROPRIETARY NOTICE ON COVER PAGE

If variable a is: RTE

[2]	CHANNEL	ROUTED TO
	d	e
	.	.
	.	.
	d	Channel message intended for.
	e	Channel message sent to.

If variable a is: SCC

[3]	CHANNEL	MONITORED BY
	d	e
	.	.
	.	.
	d	Monitored channel.
	e	SCC channel.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
IOCPREA1

Input Message
OP:CHAN

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:CSSTATUS
WORK CENTER.. MOC
GENERIC 4E21 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

```
[1]  OP:CSSTATUS
      CALL STORE STATUS
      ACTIVE CC  IS a, STANDBY CC  IS bbb
      ACTIVE BUS IS c, STANDBY BUS IS ddd
      [** REPT:CALL STORE MCODE SIMPLEX **]
      MEMN      MCODE      STATUS      SUSP      FF      [SOAK DAYS]
      e         f         g         [h]      i         [j]
      .         .         .         .         .
      .         .         .         .         .
      e         f         g         [h]      i         [j]
```

```
[2]  OP:CSSTATUS k
```

2. REASON FOR OUTPUT

There are two possible formats for this message:

Format [1] prints the current call store (CS) MCODE status of the system and an alarm message if there is a CS MCODE that should be duplicated but is not.

Format [2] reports acceptance or denial of a master control complex (MCC) request to print the status of the CS community. If the request has been accepted, a format [1] message reporting the status of the CS community will print later.

3. VARIABLE FIELD DEFINITIONS

- a Number of the active central control (CC) (0 - 1).
- b Status of the standby CC:
 - INS — In service.
 - OOS — Out-of-service.
- c Defines the CS bus used by the active CC (0 - 1) .
- d Status of the standby CS bus:
 - INS — In service.
 - OOS — Out-of-service.
- ** REPT:CALL STORE MCODE SIMPLEX ** — See ACTION TO BE TAKEN.
- e Member number (MEMN) (0 - 39).

SEE PROPRIETARY NOTICE ON COVER PAGE

- f MCODE associated with member number (000-377, 770 - 777) .
- g Status of the member number:
- ACT DUPLEX — Active and duplex.
 - ACT SIMPLEX — Active and simplex.
 - FRZ — Frozen state.
 - OOS — Out-of-service.
 - OOS GROWTH — Out-of-service, growth state.
 - OOS SGROWTH — Out-of-service, special growth state.
 - OOS UPDATE — Out-of-service, update mode.
 - SBY — Standby.
- h Suspect member number (1, 2, or blank).
- i Flip-flop number, indicating the states of the RO, RS1, and RS0 flip-flops. Octal (0-7), represents 3 binary bits indicating the states of the RO,S1,S0 where RO is the most significant bit, S1 is the second to most significant bit and S0 is the least significant bit.
- (for example: if i= octal 5, i.e binary 1 0 1)
- ```

 | | |
 | | | S0
 | | |
 | | | S1
 | | |
 | | | RO

```
- States for RO:
- 0 — This MEMN is receiving on CS BUS 0
  - 1 — This MEMN is receiving on CS BUS 1
- States for S0:
- 0 — This MEMN is NOT sending on CS BUS 0
  - 1 — This MEMN is sending on CS BUS 0
- States for S1:
- 0 — This MEMN is NOT sending on CS BUS 1
  - 1 — This MEMN is sending on CS BUS 1
- j Soak days remaining. A store is placed on the soak list when it is first grown to the operational (OPER) equipage state. A store can also be placed on the soak list manually by use of the SET:SOAK command. A store on the soak list is not considered to be soaking unless it is in service.

The soak days value is decremented for each soaking store at the beginning of the routine exercise (REX) period. Soak days will not be decremented for stores that are out-of-service (OOS) at the start of their respective REX period.

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**NOTE:** The SOAK DAYS column heading will print only when there are stores on the soak list.

k

The MCC request disposition:

REQUEST ACCEPTED — The MCC request has been accepted and the maintenance job has been scheduled.

REQUEST DENIED - FAC BUSY RETRY LATER — The MCC request has been denied because the job queue was full.

#### 4. ACTION TO BE TAKEN

If \*\* REPT:CALL STORE MCODE SIMPLEX \*\* is present, reconfigure system.  
The call stores should be reconfigured to properly duplicate them.

If the output is the result of an MCC request to print the status of the CS community:

REQUEST ACCEPTED — Wait for current status message.

REQUEST DENIED - FAC BUSY RETRY LATER — Try again later.

#### 5. REFERENCES

PIDENTs  
CSFRBSLV  
MIRA  
XAPP

Practice 254-280-210, *Maintenance Control Program*  
Practice 254-280-310, *Fault Recovery Program*

Input Messages  
OP:CSSTATUS  
RMV:CS  
RST:CS  
SET:CS  
SET:SOAK

SEE PROPRIETARY NOTICE ON COVER PAGE



ID ..... OP:DCONN  
WORK CENTER.. MOC, TEC, TOC  
GENERIC ..... 4E19 and later  
APPLICATION .. 4E  
TYPE ..... Output

## 1. FORMAT

[1] OP:DCONN 100

DIGITAL SEIZURE / GLARE MEASUREMENT REPORT

| TSG | SZ | DSZ | PDSZ | PDP | GLR | PGLR |
|-----|----|-----|------|-----|-----|------|
| a   | b  | c   | d    | e   | f   | g    |
| .   | .  | .   | .    | .   | .   | .    |
| .   | .  | .   | .    | .   | .   | .    |
| .   | .  | .   | .    | .   | .   | .    |

SEG h

DIGITAL SEIZURE / GLARE MEASUREMENT REPORT

SUMMARY

| TSG | SZ | DSZ | PDSZ | GLARE | PGLR |
|-----|----|-----|------|-------|------|
| i   | j  | k   | l    | m     | n    |

SEG CMPL

[2] OP:DCONN 101

DIGITAL SEIZURE / GLARE MEASUREMENT REPORT

SUMMARY

| TSG | SZ | DSZ | PDSZ | GLARE | PGLR |
|-----|----|-----|------|-------|------|
| i   | j  | k   | l    | m     | n    |

SEG CMPL

## 2. REASON FOR OUTPUT

This message provides digital information on a per trunk subgroup (TSG) basis. The message is output automatically at 23:37:30 and upon demand.

SEE PROPRIETARY NOTICE ON COVER PAGE

### 3. VARIABLE FIELD DEFINITIONS

|   |                                                  |
|---|--------------------------------------------------|
| a | Trunk subgroup name.                             |
| b | Number of seizures.                              |
| c | Number of digital seizures.                      |
| d | Percentage of digital seizures.                  |
| e | Percentage of trunks that are digital preferred. |
| f | Number of occurrences of second trial glare.     |
| g | Percentage of second trial glare.                |
| h | Segment number.                                  |
| i | Total number of TSGs with digital seizures.      |
| j | Total number of seizures.                        |
| k | Total number of digital seizures.                |
| l | Percentage of digital seizures.                  |
| m | Total number of second trial glare occurrences.  |
| n | Percentage of glare.                             |

### 4. ACTION TO BE TAKEN

None. Information message.

### 5. REFERENCES

PIDENT  
TMTCSUBR

SEE PROPRIETARY NOTICE ON COVER PAGE

ID ..... OP:DGSTAT  
WORK CENTER.. MOC, TEC, TOC  
GENERIC ..... 4E21 Rel. 4 and later  
APPLICATION .. 4E  
TYPE ..... Output

## 1. FORMAT

- [1] OP:DGSTAT, a[b]:[c][d]  
DIF DIU DG LCA RMA LSA RSA DGO IGN SLIP OOF ET SYNC  
e f g h i j k l m nop[q] r[s] t [u][v]  
.  
.  
.
- [2] OP:DGSTAT, a[b]:[c][d]  
DT DTU DG LCA RMA IGN SLIP OOF BV CMP MAN SAMCNT BVSUM BVR SYNC  
e f g h i m nop[q] r[s] t w x y z [a1][u][v]  
.  
.  
.
- [3] OP:DGSTAT, a[b]:[c][d]  
-----D3U-----DS1-----  
XTSI D3U DG L3A R3A A3A LCA RMA ASA IGN SLIP OOF ET  
e f g b1 c1 d1 h i e1 m nop[q] r[s] [f1]  
.  
.  
.

## 2. REASON FOR OUTPUT

To respond to an OP:DGSTAT input message. The digroup status data is output for the single digroup requested or for a group of digroups which had the characteristics specified on the input request.

The format is dependent on the type of hardware the associated trunks are terminated on. If the trunks are terminated on a Digital Interface Frame (DIF), the DIF format is used. If the trunks are terminated on a Digroup Terminal (DT), the DT format is used. If the trunks are terminated on an Expanded Time Slot Interchange (XTSI), Digital Signal Level 3 Unit (D3U), then the Time Slot Interchange (TSI) format is used. The three formats will not be mixed when printing a group. If the first trunk is associated with a DIF, only subsequent DIF digroups within the specified group will be printed. The same holds true if the first trunk is associated with a DT or an XTSI. In other words, the first trunk within a group will determine the format used.

Format [1] is used to show the DIF format.

Format [2] is used to show the DT format.

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Format [3] is used to show the XTSI format.

### 3. VARIABLE FIELD DEFINITIONS

- a The identity of the digroup. This is output in the same form as was specified on the input request. Possible identifiers are:
- CIN — Circuit Identification Number (CIN) of a trunk in the digroup.
  - DIF, DIU, DG — DIF, DIU, DG numbers.
  - DT, DTU, DG — DT, DTU, DG numbers.
  - OTAN — Octal Trunk Appearance Number (OTAN) of a trunk in the digroup.
  - TAN — Decimal format Trunk Appearance Number (TAN) of a trunk in the digroup.
  - TSN — Decimal format Trunk Scanner Number (TSN) of a trunk in the digroup.
  - XTSI, D3U, DG — TSI, D3U, DG numbers.
- b If the output is for a group OP:DGSTAT request, then DETL, this means that one line of output per requested Digroup (DG) will be printed.
- c Data input on the input OP:DGSTAT request for group requests.
- (blank) — For a nongroup single request.
  - NUM — The number of more than one digroup (2 - 5120).
  - STAT — Digroup in a particular state.
- d Disposition of the request for nongroup requests and rejected group requests:
- COMPLETED — Single DG status request has been completed.
  - REJECTED NON DTU OR DIU TRUNK — The input trunk is not on a Digroup Terminal Unit (DTU) DIU, or D3U.
- NOTE:** For group requests, d=text describing the output segment.
- MSG COMPL SEGMENT n — Last segment to be output.
  - MSG IP SEGMENT n — One of the three or more segments to be output.
  - MSG STARTED SEGMENT 1 — This is the first segment.
  - STOPPED MAN — Manual stop request has stopped the group output.
- e Digital interface frame or digroup terminal member number or XTSI member number.
- f Digital interface unit or DT unit number or D3U unit number.

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- g Digroup number.
- h Digroup Local Alarm (LCA) status:
- 1 — Digroup is in LCA.
  - 0 — Not LCA.
- i Digroup Remote Alarm (RMA) status:
- 1 — Digroup is in RMA.
  - 0 — Not RMA.
- j E1 master local alarm data:
- 1 — When Local Subframing Alarm (LSA) is set to 1, one or more (up to 4) master E1 digroups are in local alarm. This would cause trunks on the 5th or composite digroup to be marked as out of service for <CAR> reason. The LSA will only be 1 if the digroup is the E1 composite digroup (digroup #5). If any E1 master digroup (digroups 1-4) is in local alarm, 6 trunks on the composite digroup will be out of service, since 30 circuits comprise an E1. See following table for trunks on composite digroup which are associated with E1 master digroups.
- | Master E1 Digroup | Composite Trunks |
|-------------------|------------------|
| 1                 | 1-6              |
| 2                 | 7-12             |
| 3                 | 13-18            |
| 4                 | 19-24            |
- 0 — No master E1 digroups are in local alarm, therefore 24 composite circuits are not out of service due to E1 master reasons.

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- k E1 master remote alarm data:
- 1 — When Remote Subframe Alarm (RSA) is set to 1, one or more (up to 4) master E1 digroups are in remote alarm. This would cause trunks on the 5th or composite digroup to be marked as out of service for <CAR> reason. The RSA will only be 1 if the digroup is the E1 composite digroup (digroup #5). If any E1 master digroup (digroups 1-4) is in remote alarm, 6 trunks on the composite digroup will be out of service, since 30 circuits comprise an E1. See following table for trunks on composite digroup which are associated with E1 master digroups.
- | Master E1 Digroup | Composite Trunks |
|-------------------|------------------|
| 1                 | 1-6              |
| 2                 | 7-12             |
| 3                 | 13-18            |
| 4                 | 19-24            |
- 0 — No master E1 digroups are in remote alarm, therefore 24 composite circuits are not out of service due to E1 master reasons.
- l Digroup Out Of Service (DGO) status:
- 1 — DGO for a hardware outage reason. Could not switch to spare. Check Maintenance (MTC) channel for Base Level Maintenance (BLM) interrupt. DIF only.
- 0 — Not DGO.
- m Ignore (IGN):
- 1 — Digroup is set to ignore. Applies only to hardware carrier group alarm and software carrier group alarm relative to Common Channel Signaling (CCS) trunks. Can be verified with the OP:CGASTAT input command. (Then convert TSNs to CINs). Does not apply to software carrier group alarm relative to robbed bit "wink" type trunks.
- 0 — Not set to ignore.
- n Slip count.
- o Slip count polarity:
- + — Positive.
- — Negative.
- p Slip polarity count. Not used at this time.

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- q Slip count status:  
(blank) — Below the maintenance threshold.  
H — High, i.e., exceeds the slip out-of-service threshold.  
L — Exceeds the maintenance threshold.
- r Out-Of-Frame (OOF) count.
- s Additional OOF information:  
(blank) — OOF count is below the maintenance threshold.  
H — OOF count is high, i.e., exceeds the OOF out-of-service threshold.  
L — OOF count exceeds the maintenance threshold.
- t Error Threshold (ET) (DIF only):  
(blank) — Neither Out-Of-Service (OS) nor Maintenance (MT) are in effect.  
MT — If D4 Superframing (SF): Indicates digroup performance over 40 minutes, in 16 second intervals (there are 150 16 second intervals in 40 minutes). The Framing Bit Low (FBL) counter will be incremented by 1 each 16 seconds if one or more framing bits (fe) in that 16 seconds do not match expected state(s). If the FBL counter reaches 25 in that 40 minute period FBL will be reported from the DIF and "maintenance threshold", MT, will result. There are 9.6 million framing bits in 40 minutes. A count of 25 means an error rate of 2.6 times 10 to the minus 6.  
If Extended Superframing (ESF): Indicates digroup performance over 40 minutes in 16 second intervals as described for D4 except that the error conditions which increment the counter are derived from the Cyclic Redundancy Check (CRC-6) process which is unique to ESF framing. An ESF system must be 384 times "quieter" than an SF in order to avoid the MT indicator.

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- OS — If D4 SF: Indicates digroup performance over 16 seconds in 384 millisecond intervals. There are about 42 intervals of 384 ms in 16 seconds. The Framing Bit High (FBH) counter will be incremented by 1 each 384 ms if one or more framing (fe) bits in that 384 ms do not match expected state(s). If the FBH counter reaches 37 within 16 seconds, the DIF will report FBH to the trunk maintenance programs which will cause the OS indication. There are 64000 framing bits in 16 seconds. A count of "37" means an error rate of 5.8 times 10 to the minus 4.
- If ESF: Indicates digroup performance over 16 seconds in 384 millisecond intervals as described for D4 except that the error conditions which increment the counter are derived from the Cyclic Redundancy Check (CRC-6) process which is unique to ESF framing. An ESF system must be 384 times "quieter" than an SF in order to avoid the OS indicator.
- u Digroup monitoring status:
- (blank) — Not being monitored.
- ALT — On the list of DGs being monitored for slip performance because it is designated as the alternate from which the far end may obtain network synchronization. (Established with MON:DGSTAT input message)
- MON — On the list of digroups being monitored for slip performance. (Established with MON:DGSTAT input message)
- REG — On the list of DGs being monitored for slip performance because it is designated as the one from which the far end is obtaining network synchronization. (Established with MON:DGSTAT input message)
- v Slip monitoring status:
- (blank) — Is not inhibited.
- I — Is inhibited.
- w Digroup camped on status, DT only:
- 1 — Is camped on, either automatic or manual.
- 0 — Is not camped on.
- x Digroup manually camped on status, DT only:
- 1 — Manually camped on.
- 0 — Not manually camped on.
- y Count of samples taken while measuring Bipolar Violation Rate (BVR), DT only.

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|    |                                                                                                                                                                                                                             |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| z  | Count of bipolar violations measured during sample interval, DT only.                                                                                                                                                       |
| a1 | <p>BVR status:</p> <p>(blank) — BVR is unknown.</p> <p>BVR — BVR is known.</p> <p><b>NOTE:</b> BVR is known only when the Sample Count (SAMCNT) is at 125. BVR number is presented in units of 0.000001 bit error rate.</p> |
| b1 | <p>Local Alarm (Red Alarm) on a D3U:</p> <p>1 — D3U local alarm present.</p> <p>0 — D3U local alarm not present.</p>                                                                                                        |
| c1 | <p>Remote Alarm (Yellow Alarm) on a D3U:</p> <p>1 — D3U remote alarm present.</p> <p>0 — D3U remote alarm not present.</p>                                                                                                  |
| d1 | <p>Blue Alarm on a D3U:</p> <p>1 — D3U blue alarm present.</p> <p>0 — D3U blue alarm not present.</p>                                                                                                                       |
| e1 | <p>Blue Alarm on a Digroup (D3U only):</p> <p>1 — Digroup blue alarm present.</p> <p>0 — Digroup blue alarm not present.</p>                                                                                                |
| f1 | <p>Framing error threshold, XTSI:</p> <p>(blank) — No framing error threshold in effect.</p> <p>H — High framing error threshold reached.</p> <p>L — Low framing error threshold reached.</p>                               |

#### 4. ACTION TO BE TAKEN

None.

#### 5. REFERENCES

PIDENTs  
TMAD0001  
TMAD0005  
TMAD0006  
TMTCTXSI

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Input Messages  
INIT:DGSTAT  
OP:CGASTAT  
OP:DGSTAT  
SET:DIGROUP  
STOP:OP-DGSTA

SEE PROPRIETARY NOTICE ON COVER PAGE

ID ..... OP:DTAC  
WORK CENTER.. MOC, TEC, TOC  
GENERIC ..... 4E21 Rel. 3 and later  
APPLICATION .. 4E  
TYPE ..... Output

## 1. FORMAT

[1] OP:DTAC COMPLETED  
TEST OTAN1        TEST OTAN2        MODE        ELAPSED TIME  
      a                b                c                d  
      .                .                .                .  
      .                .                .                .  
      .                .                .                .

[2] OP:DTAC, {CIN e|TAN f|OTAN g|TSN h} COMPLETED  
TEST1 OTAN i TEST2 OTAN j MODE k  
ACC1 OTAN l ACC2 OTAN m  
DNBR1 n DNBR2 o  
DOMAIN p TYPE q  
ELAPSED TIME r DAYS s HOURS t MINUTES

## 2. REASON FOR OUTPUT

Format [1] is used to output a list of trunks currently involved in a direct test access connection.

Format [2] is used to output detailed information concerning a direct test access test connection.

## 3. VARIABLE FIELD DEFINITIONS

- a                      Octal trunk appearance number of trunk involved in a direct test access connection.
- b                      Octal trunk appearance number of mate trunk (if present) involved in a direct test access connection.
- c                      Mode:  
                        ACCESS  
                        LOOP  
                        MON  
                        SPLIT
- d                      Duration of test (days, hours, and minutes).
- e                      Circuit identification number.
- f                      Trunk appearance number.

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|   |                                                                                                                       |
|---|-----------------------------------------------------------------------------------------------------------------------|
| g | Octal trunk appearance number.                                                                                        |
| h | Trunk scanner number.                                                                                                 |
| i | Octal trunk appearance number of the primary trunk.                                                                   |
| j | Octal trunk appearance number of the secondary trunk (present if the test connection is a nailed up connection).      |
| k | Mode:<br>ACCESS<br>LOOP<br>MON<br>SPLIT                                                                               |
| l | Octal trunk appearance number of primary access circuit.                                                              |
| m | Octal trunk appearance number of secondary access circuit (present if the test connection is a nailed up connection). |
| n | Directory number associated with the primary trunk under test and its access circuit.                                 |
| o | Directory number associated with the secondary trunk under test and its associated access circuit.                    |
| p | Input domain.                                                                                                         |
| q | Type of test circuit:<br>nailed-up<br>single circuit                                                                  |
| r | Number of days connection in effect.                                                                                  |
| s | Number of hours connection in effect.                                                                                 |
| t | Number of minutes connection in effect.                                                                               |

#### 4. ACTION TO BE TAKEN

This output data is informational.

#### 5. REFERENCES

PIDENT  
TMTCDTAC

Input Messages  
OP:DTAC  
SET:DTAC

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ID ..... OP:ERAP-ABORT  
WORK CENTER.. MOC  
GENERIC ..... 4E19 and later  
APPLICATION .. 4E,1B  
TYPE ..... Output

## 1. FORMAT

OP:ERAP ABORTED  
AUDIT REQUESTED

## 2. REASON FOR OUTPUT

To report that error analysis program (ERAP) has failed a defensive check in an attempt to output information from its data base. The message is given only as a fail response to an OP:ERAPSUM, OP:ERAPDATA, or OP:ERAPSRES input message. It is ordinarily followed sometime later by an AUD:ERAPDATA output message indicating the type of data base correction made.

## 3. VARIABLE FIELD DEFINITIONS

None.

## 4. ACTION TO BE TAKEN

After the requested audit has completed, reenter the original input message which failed to extract the desired information.

## 5. REFERENCES

PIDENTs  
ERAP  
ERIF

Practice 254-200-215, *Error Analysis Program Application*  
Practice 254-280-320, *Error Analysis Program*

Input Messages  
OP:ERAPDATA  
OP:ERAPSRES  
OP:ERAPSUM

Output Message  
AUD:ERAPDATA

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ID ..... OP:ERAPCOND  
WORK CENTER.. MOC  
GENERIC ..... 4E19 and later  
APPLICATION .. 4E,1B  
TYPE ..... Output

## 1. FORMAT

- [1] OP:ERAPCOND a [b]  
c d  
DATA1=e {ITEM1=f|WORD1=g} MASK1=h  
RELATION=i VALUE=j
- [2] OP:ERAPCOND a [b]  
c d  
DATA1=e {ITEM1=f|WORD1=g} MASK1=h  
RELATION=i  
DATA2=e {ITEM2=f|WORD2=g} MASK2=h

## 2. REASON FOR OUTPUT

To report the error analysis search conditions currently retained in disk storage. This message prints in response to an OP:ERAPCOND input message. This message has two formats, as shown. Format [1] prints if a search condition involves user data. Format [2] prints if the search condition involves two error analysis program (ERAP) data base items. This output message is reported until all error analysis search conditions currently contained in disk storage are printed.

## 3. VARIABLE FIELD DEFINITIONS

- a Disposition of the input request:  
COMPLETED — The input message was successfully processed.  
STOPPED — A problem was encountered in processing the input message.
- b ?I, INC DATA. Optional field that prints if a=STOPPED. Indicates failure due to an incorrect search condition name entered as a variable in the OP:ERAPCOND input message. A search condition name must match the name of a condition in disk storage. The OP:ERAPCOND;SUM! input message can be used to request a list of all conditions in disk storage.
- c Name of the condition.
- d Octal indication of the stored search results that are based on the condition.
- e Data type used in the operand of the specified condition or argument. (See input message IN:ERAPCOND.)
- f Name of the item used in the specified operand condition.

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- g Position of the word used in the specified operand condition.
- h Mask used in the operand of the specified condition.
- i Relation used in the specified operand condition.

#### 4. ACTION TO BE TAKEN

None.

#### 5. REFERENCES

PIDENTs  
ERAP  
ERIF

Practice 254-200-215, *Error Analysis Program Application*  
Practice 254-280-320, *Error Analysis Program*

Input Messages  
IN:ERAPCOND  
OP:ERAPCOND  
OP:ERAPSUM

Output Message  
OP:ERAPCOND-SM

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ID ..... OP:ERAPCOND-SM  
WORK CENTER.. MOC  
GENERIC ..... 4E19 and later  
APPLICATION .. 4E,1B  
TYPE ..... Output

## 1. FORMAT

OP:ERAPCOND;SUM COMPLETED NUM COND=a

b c d e d e d e  
.  
.  
.  
b c d e d e d e

## 2. REASON FOR OUTPUT

To report a summary of error analysis search conditions currently retained in disk storage in response to an OP:ERAPCOND;SUM input message.

## 3. VARIABLE FIELD DEFINITIONS

a Total number of search conditions currently retained in disk storage.  
b Name of the first condition.  
c Octal indication of which stored search results (SRES) (see OP:ERAPSRES output message) are based on the condition.  
d,e Same as b c for the remaining search conditions.

## 4. ACTION TO BE TAKEN

None.

## 5. REFERENCES

PIDENTs  
ERAP  
ERIF

Practice 254-200-215, *Error Analysis Program Application*  
Practice 254-280-320, *Error Analysis Program*

Input Message  
OP:ERAPCOND

Output Message  
OP:ERAPSRES

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ID ..... OP:ERAPDATA  
WORK CENTER.. MOC, TEC  
GENERIC ..... 4E19 and later  
APPLICATION .. 4E,1B  
TYPE ..... Output

## 1. FORMAT

OP:ERAPDATA a  
b

## 2. REASON FOR OUTPUT

To display the response to an OP:ERAPDATA input message that requested a printout of specified data from the error analysis data base.

## 3. VARIABLE FIELD DEFINITIONS

- a Disposition of the input message request:
- ABORTED — A print call in response to the input message could not be issued. Further processing of the input message was halted and an Input/Output (I/O) system audit requested.
- MSG COMPL — Partitioned output message indication for a successful processing.
- MSG IP — Partitioned output message indication for a successful processing.
- MSG STARTED — Partitioned output message indication for a successful processing.
- STOPPED ?D, INC DATA — One of the arguments of keyword SRES is invalid since there is no stored set of search results corresponding to the input SRES number used (see input message OP:ERAPSRES).
- STOPPED ?D, RANGE ERR — A range error was made in the argument of keyword SRES (valid range is 0-11) or in the argument of keyword MRNUM (valid range is 0-1343).
- STOPPED ?I, INV CHAR — One of the arguments of keyword ERAPDATA was not recognized (a list of valid arguments is given in the description of the input message OP:ERAPDATA).

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STOPPED ?I, INC DATA — One of the arguments of keyword ITEM or WORD was found to be inconsistent with an argument of ERAPDATA (valid combinations are given in the description of the OP:ERAPDATA input message).

COMPLETED — Indicates successful processing of the input request.

- b The bulk of the OP:ERAPDATA output message. It will only be printed if the processing was successful, i.e., a = COMPLETED. Headings 3.1 through 3.4 describe its four possible formats and the variables which will appear for each.

### 3.1 Entire Record by MRNUM Response

#### 3.1.1 Format

```
OP:ERAPDATA a
MRNUM RANGE: c THROUGH d
NUM RECORDS=e NUM WORDS=f

RECORD TYPE=g MRNUM=h
MFNUM=iiiiiii DATE=jj/jj/jj TOD=kk:kk:kk
NUM SUBRECORDS=l NUM WORDS=m
 nnnnnnnn nnnnnnnn nnnnnnnn nnnnnnnn nnnnnnnn nnnnnnnn
```

#### 3.1.2 Explanation of Variables

- a Disposition of the output message (for successful processing only):
- COMPLETED — Single segment message.
  - MSG COMPL — End segment of partitioned output message.
  - MSG IP — Middle segment of partitioned output message.
  - MSG STARTED — First segment of partitioned output message.
- c The Maintenance Record Number (MRNUM) of the first requested record in decimal.
- d The maintenance record number of either the first record requested if only one record was specified or the MRNUM of the last record, if a range of records was requested.
- e The number of records specified.
- f Number of words.
- g Name of the record.
- h The MRNUM record number that is unique to the record, in decimal (0-1343).

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|   |                                                                                                                                                             |
|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| i | The Maintenance File Number (MFNUM) of the file to which the record belongs, in octal.                                                                      |
| j | Date on which the record was collected (day/month/year).                                                                                                    |
| k | Time of day when the record was collected (hour:minute:second).                                                                                             |
| l | Number of subrecords that are present in the record; this has meaning only in a MLHIST record.                                                              |
| m | Total number of words comprising the record. This includes the number of data words printed plus an overhead of 10 words for a record header and trailer.   |
| n | The record contents in octal. The information displayed here will vary according to the contents of the record; see Heading 3.5 for additional information. |

**NOTE:** If a range of MRNUM records was specified, the data identified by variables e through l will be repeated once for each record within the range.

### 3.2 Entire File by MFNUM or SRES Response

#### 3.2.1 Format

```
OP:ERAPDATA a
c
NUM FILES=d MFNUM RANGE: e THROUGH f
[g]

FILE TYPE=h MFNUM=iiiiiii

RECORD TYPE=j MRNUM=k
MFNUM=llllllll DATE=mm/mm/mm TOD=nn:nn:nn
NUM SUBRECORDS=o NUM WORDS=p
q
 rrrrrrrr rrrrrrrr rrrrrrrr rrrrrrrr rrrrrrrr rrrrrrrr
 .
 .
 rrrrrrrr rrrrrrrr rrrrrrrr rrrrrrrr rrrrrrrr rrrrrrrr
```

#### 3.2.2 Explanation of Variables

|             |                                                                     |
|-------------|---------------------------------------------------------------------|
| a           | Disposition of the output message (for successful processing only): |
| COMPLETED   | — Single segment output message.                                    |
| MSG COMPL   | — End segment of partitioned output message.                        |
| MSG IP      | — Middle segment of partitioned output message.                     |
| MSG STARTED | — First segment of partitioned output message.                      |

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- c If data was requested for Search Results (SRES), this line has the format: INPUT SRES:x (where x is the SRES number). If the input request was for an MFNUM file, this line is not printed.
- d Number of files requested.
- e The maintenance file number of the first requested file in decimal.
- f The maintenance file number of either the first file requested, if only one file was specified, or the MFNUM of the last file, if a range or list of records was requested.
- g If the request was for MFNUM data:  
  
NUM RECORDS=x NUM WORDS=y  
  
where x is the number of records in decimal and y is the number of words in decimal.  
  
If the request was for SRES data, this line is blank.
- h The name of the file.
- i The maintenance file number in octal.
- j The record type.
- k The maintenance record number that is unique to the record, in decimal (0-1343).
- l The maintenance file number in octal.
- m The date the entry was collected (day / month / year).
- n The time of day the entry was collected (hour:minute:second).
- o The number of subrecords within the file.
- p The number of words within the subrecord.
- q If the request was for MFNUM data, this is the action line which appeared on the original interrupt, interject or base level report (see REPT:0 output message).
- r The contents of the MFNUM specified. Refer to Heading 3.5, Layouts of the Main Data Blocks, for additional information.

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### 3.3 Specific File Type(s)/Record Type(s)/Subrecord Type(s) Response

#### 3.3.1 Format

```
OP:ERAPDATA a
c
NUM FILES=d MFNUM RANGE: e THROUGH f
DATA TYPES: g

FILE TYPE=h MFNUM=iiiiiii

RECORD TYPE=j MRNUM=k
MFNUM=llllllll DATA=mm/mm/mm TOD-nn:nn:nn
NUM SUBRECORDS=o NUM WORDS=p
 qqqqqqqq qqqqqqqq qqqqqqqq qqqqqqqq qqqqqqqq qqqqqqqq
 .
 .
 qqqqqqqq qqqqqqqq qqqqqqqq qqqqqqqq qqqqqqqq qqqqqqqq
```

#### 3.3.2 Explanation of Variables

- |     |                                                                                                                                                                                                                                                                                                       |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| a-f | These variables are the same as in Heading 3.2.2.                                                                                                                                                                                                                                                     |
| g   | The name(s) of the file, record or subrecord type specified in the input message.                                                                                                                                                                                                                     |
| h-p | These variables are the same as in Heading 3.2.2.<br>In the case of a request for subrecord types, variables i through o and their identifiers will not be printed.                                                                                                                                   |
| q   | The contents of the file, record or subrecord type requested. See Heading 3.5, Layouts of the Main Data Blocks, for additional information. If the request was for subrecords, this data will be preceded by an identifying header in the format: SUBRECORD=x (where x is the type of the subrecord). |

### 3.4 Particular Items or Words from Records or Subrecords Response

#### 3.4.1 Format

```
OP:ERAPDATA a
c
NUM FILES=d MFNUM RANGE: e THROUGH f
DATA TYPES=g
 MFNUM h...h i...i j...j k...k l...l m...m
nnnnnnnn 00000000 00000000 00000000 00000000 00000000 00000000
•
•
nnnnnnnn 00000000 00000000 00000000 00000000 00000000 00000000
```

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### 3.4.2 Explanation of Variables

|       |                                                                                                                                                                                                                       |
|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| a - f | These variables are the same as in Heading 3.2.2.                                                                                                                                                                     |
| g     | The name of the record or subrecord type specified on the input message.                                                                                                                                              |
| h - m | The specified items or words in the input message. These are headings placed at the top of each one's respective column of data.                                                                                      |
| n     | The MFNUM where the data for each detail of columns h . . . h through m . . . m was found.                                                                                                                            |
| o     | The contents of the specified item or word indicated at the top of the column. The value 76543210 is inserted into an output data row if the desired item or word cannot be located in the data block being accessed. |

### 3.5 Layouts of the Main Data Blocks

The layout of the main data block depends on the particular data being output.

MLHIST Records are divided into subrecords. TABLE C of the OP:ERAPDATA input message description consists of a list of the possible subrecords of an MLHIST record. With the exception of the CCFRAF and CCFRSF subrecords, each type of error analysis subrecord corresponds to a particular block of data printed out as part of the REPT:0 output message covering interrupts, maintenance interjects and base level maintenance actions. Subrecords CCFRAF and CCFRSF are laid out like the failing data in the REPT:CC output message.

Words 0 through 31 of MLDGN data blocks are Diagnostic Buffer Tables (DBTs) and are laid out on P1A Datapool as block DG1DBT in P1ALAY COMPOOL. In addition, the MLDGN data block has

| Word Number | Meaning                                                       |
|-------------|---------------------------------------------------------------|
| 32          | Conditional All Tests Passed (CATP)<br>reason word, bits 0-23 |
| 33          | CATP reason word, bits 24-47                                  |
| 38          | Total number of failing tests                                 |
| 39          | Total number of failing phases                                |
| 40          | Scrambled trouble number                                      |

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Note that word x of the MLDGN data block is word x+9 of the MLDGN record, since each error analysis record is preceded by a 9-word header. Words 38, 39, 40 of the data block constitute the 3-word signature given by the diagnostic completion output message. TLPSUM records contain Behavioral Trouble Location Procedure (BTLP), Pattern Analysis TLP (PATLP) and Connectivity TLP (CTLP) data blocks. The BTLP data block contains a standard TLP header, described in TABLE 1, followed by the same information as that printed in the summary data output message ANALY:TLPF-SUM under values V1 through V6 for keys BP and BL.

The PATLP data block contains the TLP header followed by the ANALY:TLPF-SUM values V1 through V6 for key PA. The format of the CTLP data following the TLP header is similar to that of the ANALY:TLPF-SUM summary output message data for key CD.

The data blocks for the MLPHSE and PHSEHST record contain the same information as is printed on each entry line in the OP:PHSEHST output message. An ERATHIST data block is laid out in precisely the same as an F-level recent history table (see output message REPT:0).

DCCFRAF and DCCFRSF data blocks contain the same information as the failing data blocks printed in the TEST:CC output message. The error analysis nomenclature for DCCFRAF and DCCFRSF records is the same as that for the CCFRAF and CCFRSF subrecords as shown in the REPT:CC output message.

A REPAIREC is the result of an IN:ERAPDATA input message used to record a frame repair. The layout of a REPAIREC is given in TABLE 2.

System Audit of Writable Stores (SAWS) audit records SAWSBKFL, SAWSEXFL and SAWSIFHF are laid out as follows. A SAWSBKFL data block, depicted in TABLE 3, contains a standard SAWS record header (see output message AUD:0) followed by a SAWS subrecord giving the failing Binary K (BINK) (1024 words) address and SAWS internal address (same as data b, c, d for SAWS audit text phrases 1 through 8), then a hash code failure subrecord (same as data e, f, g, h, i, j for SAWS audit text phrases 1 through 8), and then up to six data mismatch subrecords (again see the AUD:0 output message). A SAWSEXFL data block contains the same data as given in the SAWS audit message under text phrase 9 (excessive hash failure). A SAWSIFHF data block contains the same data as given in the SAWS audit message under text phrases 10 or 11 (lockout interface failure or data mismatch during update). Unlike MLHIST subrecords, SAWS subrecords cannot be separately accessed by the OP:ERAPDATA input message.

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TABLE 1

HEADER FOR TLPSUM DATA

|      |       |          |       |         |       |
|------|-------|----------|-------|---------|-------|
| UTMN | SUTMN | FILE NUM | TLPD1 | FILE ID | INHIB |
| CNTL | TERR  | GNRCID   | TLPD2 |         |       |

Defined as:

UTMN — Same layout as word 0 of DG1DBT (See COMPOOL encoding of P1ALAY.):

Bits 0-3 = request code (PRCODE)

Bits 17-23 = unit type code

Bits 10-16 = member number

SUTMN — Same layout as word 14 of DG1DBT (See COMPOOL encoding of P1ALAY.):

Bits 14-23 = subunit type code

Bits 7-13 = subunit type number

TLPD1 — General Trouble Location Procedure (TLP) data

FILE ID — Tape file ID

FILE NUM — TLP disk queue FILE NUMBER

TLP — Inhibit flags

TLPD2 — General TLP data (status word)

CNTI — TLP locate and monitor control word

TERR — Tape error word

GNRCID — Generic ID

For a description of the last four words of the header, see PA-4A002-01, *4ESS<sup>TM</sup> User's Manual* Section C.3.

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TABLE 2  
REPAIREC LAYOUT

| UTMN | SUTMN | TRNUM | TLPPOS | EQPTLOC |
|------|-------|-------|--------|---------|
|------|-------|-------|--------|---------|

Defined as:

UTMN — Unit type member number.

Bits 0-6 = member number, in octal  
Bits 7-13 = octal unit type code

SUTMN — Subunit type member number.

Bits 0-6 = member number, in octal  
Bits 7-16 = octal subunit type code

TRNUM — Trouble report number, in octal

TLPPOS — Position of pack on TLP pack list, in octal

EQPTLOC — Equipment location.

Bits 23-12 — frame and horizontal location, in octal  
Bits 11-0 — vertical location, in octal

Example: 00120014 means location 010-12

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TABLE 3

SAWSBKFL DATA BLOCK

| REC<br>HDR | SREC<br>HDR0 | BINK<br>ADR | SAWS<br>ADR | HA | SH |
|------------|--------------|-------------|-------------|----|----|
|------------|--------------|-------------|-------------|----|----|

CODE FAILURE DATADATA

MISMATCH SUBRECORDS

Defined as:

RECHDR — Standard System Audit of Writable Stores (SAWS) record header

SRECHDR0 — Standard SAWS subrecord header

BINKADR — Failing BINK address

SAWSADR — Internal error point address

#### 4. ACTION TO BE TAKEN

If the input message processed to a successful end, this output message is informational only. Any action taken must be based on the specific information printed and the technical impact of that data.

If the input message was not successfully processed, one of two courses of action is required. If the input message was entered incorrectly, correct and reenter it. If the processing was aborted, an Input/Output (I/O) system audit will be requested and should be performed.

#### 5. REFERENCES

PIDENTs  
ERAP  
ERIF

Practice 254-200-215, *Error Analysis Program Application*  
Practice 254-280-320, *Error Analysis Program*

PA-4A002-01, 4ESS<sup>TM</sup> *User's Manual*

Input Messages  
IN:ERAPDATA  
OP:ERAPDATA  
OP:ERAPSRES

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Output Messages  
ANALY: TLPF-SUM  
AUD: 0  
OP: ERAPSRES  
OP: PHSEHST  
REPT: 0  
REPT: CC  
TEST: CC

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ID ..... OP:ERAPDATA-AB  
WORK CENTER.. MOC  
GENERIC ..... 4E19 and later  
APPLICATION .. 4E,1B  
TYPE ..... Output

## 1. FORMAT

OP:ERAPDATA ABORTED

## 2. REASON FOR OUTPUT

To report that error analysis program (ERAP) has failed in an attempt to issue a print call. The message will ordinarily be accompanied by an input/output (I/O) system trouble audit message.

## 3. VARIABLE FIELD DEFINITIONS

None.

## 4. ACTION TO BE TAKEN

Reenter the original input message that failed to produce the desired output after taking any action required by the I/O system trouble audit message.

## 5. REFERENCES

PIDENTs  
ERAP  
ERIF

Practice 254-200-215, *Error Analysis Program Application*  
Practice 254-280-320, *Error Analysis Program*

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ID ..... OP:ERAPSRES  
WORK CENTER.. MOC  
GENERIC ..... 4E19 and later  
APPLICATION .. 4E,1B  
TYPE ..... Output

## 1. FORMAT

```
OP:ERAPSRES a b,c
INPUT SRES: d
NUM FILES=e MFNUM RANGE: f THROUGH g
 h i j k l m
 .
 .
 .
 h i j k l m
```

## 2. REASON FOR OUTPUT

To output a list of file numbers contained in specified search results (SRES) in response to an OP:ERAPSRES input message.

## 3. VARIABLE FIELD DEFINITIONS

|                  |                                                                                                         |
|------------------|---------------------------------------------------------------------------------------------------------|
| a                | Disposition of the input request:                                                                       |
|                  | COMPLETED — The input message was successfully processed.                                               |
|                  | MSG COMPL — Last segment of partitioned message.                                                        |
|                  | MSG IP — Partitioned output message is proceeding.                                                      |
|                  | MSG STARTED — First segment of partitioned message.                                                     |
|                  | STOPPED — A problem was encountered in processing the input message.                                    |
| b, c             | Failure indication if a is stopped as follows:                                                          |
|                  | ?I, INC DATA — A SRES number used as an input is invalid (the SRES named is not stored in disk memory). |
|                  | ?I, RANGE ERR — A range error was made in the input SRES (valid range is 0 - 11).                       |
| d                | List of input search result numbers.                                                                    |
| e                | Total number of files contained in the input search results.                                            |
| f                | Smallest maintenance file number (MFNUM) of the files contained in the input search results.            |
| g                | Largest MFNUM of the files contained in the input search results.                                       |
| h, i, j, k, l, m | Maintenance file numbers of the files contained in the input search results.                            |

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**NOTE:** When two or more input SRES numbers are used (ie, when d lists two or more numbers), the file numbers h i j k l ... printed out consist of those file numbers contained in one or more of the input SRES. In other words, a logical union of the input SRES is done.

#### 4. ACTION TO BE TAKEN

If a is STOPPED, use the input message OP:ERAPSRES;SUM to identify which search results are currently retained in disk memory.

#### 5. REFERENCES

PIDENTs  
ERAP  
ERIF

Practice 254-200-215, *Error Analysis Program Application*  
Practice 254-280-320, *Error Analysis Program*

Input Message  
OP:ERAPSRES

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ID ..... OP:ERAPSRES-CO  
WORK CENTER.. MOC  
GENERIC ..... 4E19 and later  
APPLICATION .. 4E,1B  
TYPE ..... Output

## 1. FORMAT

OP:ERAPSRES:COND a [b,c]  
SRES d DATE=e NUM FILES=f  
INPUT COND: g  
INPUT SRES: h

## 2. REASON FOR OUTPUT

To report the results of an OP:ERAPSRES:COND input message requesting a search through the error analysis data base for data satisfying certain input conditions.

## 3. VARIABLE FIELD DEFINITIONS

- a Disposition of the input request:
- COMPLETED — The input message was successfully processed, and the search was done.
  - STOPPED — A problem was encountered in processing the input message, and the search was not done.
- b, c Failure indication if a is stopped:
- ?E, INV DATA — The search failed for one of the following reasons:
    - (1) Some input conditions refer invalidly to different file types.
    - (2) One of the input conditions pertains to a group of subrecords.
    - (3) One of the conditions pertains to an entire file (DATA1 is a file), but operand 2 is not a value.
    - (4) Operand 2 of some condition pertains to an entire file (DATA2 is a file).
    - (5) One of the input conditions refers to an invalid date.
    - (6) One file is excessively large.
  - ?I, INC DATA — The search has failed for one of the following reasons:
    - (1) An SRES number used as an input is invalid (SRES name is not stored in memory).

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(2) A condition name used as an input is invalid (the condition named is not stored in disk memory).

?I, RANGE ERR — A range error was made in the input SRES (valid range is 0-11).

FULL — The disk space allocated for storing search results (SRES) is full.

SRES MEMORY — The disk space allocated for storing.

- d Identifying number of the set of search results obtained from this search and now stored in disk memory.
- e Date of the search.
- f Number of files found to meet the input conditions.
- g List of names of the input conditions.
- h List of identifying numbers of the input search results, if any. If there were input search results, f equals the number of files contained among these input search results which met conditions g.

#### 4. ACTION TO BE TAKEN

If a is stopped and b,c = SRES MEMORY FULL, clear out some stored search results with a CLR:ERAPSRES input message. Use the input message OP:ERAPSRES;SUM for summarizing the search results currently retained in disk memory. Use the input messages OP:ERAPSRES;SUM and OP:ERAPCOND to identify the specific error resulting in other failure indications.

#### 5. REFERENCES

PIDENTs  
ERAP  
ERIF

Practice 254-200-215, *Error Analysis Program Application*  
Practice 254-280-320, *Error Analysis Program*

Input Messages  
CLR:ERAPSRES  
OP:ERAPCOND  
OP:ERAPSRES

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ID ..... OP:ERAPSRES-SM  
WORK CENTER.. MOC  
GENERIC ..... 4E19 and later  
APPLICATION .. 4E,1B  
TYPE ..... Output

## 1. FORMAT

OP:ERAPSRES;SUM COMPLETED NUM SRES=a  
SRES d DATE=e NUM FILES=f  
INPUT COND:g  
INPUT SRES:h  
.  
.  
.

## 2. REASON FOR OUTPUT

To output a summary of all of the error analysis search results (SRES) currently retained in disk memory in response to an OP:ERAPSRES;SUM input message.

## 3. VARIABLE FIELD DEFINITIONS

a Total number of sets of search results currently retained in disk memory.  
d Identifying number of the set of search results obtained from this search and now stored in disk memory.  
e Date of search.  
f Number of files found to meet the input conditions.  
g List of names of the input conditions.  
h List of identifying numbers of the input search results, if any. If there were input search results, f equals the number of files contained among these input search results which met conditions g.

**NOTE:** There is one summary block output for each set of search results in memory.

## 4. ACTION TO BE TAKEN

None.

## 5. REFERENCES

PIDENTs  
ERAP  
ERIF

Practice 254-200-215, *Error Analysis Program Application*  
Practice 254-280-320, *Error Analysis Program*

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**4ESS**  
**OM-4B000-01**

**OP:ERAPSRES;SUM**

Input Message  
OP:ERAPSRES

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**OP:ERAPSRES-SM-2**

**Issue 1.8**  
**September 2001**



ID ..... OP:ERAPSUM  
WORK CENTER.. MOC  
GENERIC ..... 4E19 and later  
APPLICATION .. 4E,1B  
TYPE ..... Output

## 1. FORMAT

OP:ERAPSUM COMPLETED  
DATE RANGE: a THROUGH b  
NUM FILES=c MFNUM RANGE: d THROUGH e  
NUM RECORDS=f NUM WORDS=g  
NUM RECORDS AND WORDS MARKED FOR DELETION=h AND i  
NUM FILE STORE WORDS UNUSED=j

## 2. REASON FOR OUTPUT

To give a summary of the contents of the error analysis data base on file store.

## 3. VARIABLE FIELD DEFINITIONS

The complete format prints out only if the input message format OP:ERAPSUM! is used. The last two lines of the output message format do not print if any other OP:ERAPSUM input message format is used.

- |   |                                                                                                                             |
|---|-----------------------------------------------------------------------------------------------------------------------------|
| a | Earliest file date of the data being summarized.                                                                            |
| b | Latest file date.                                                                                                           |
| c | Total number of files counted in the summary.                                                                               |
| d | Smallest maintenance file number (MFNUM) of these files.                                                                    |
| e | Largest MFNUM.                                                                                                              |
| f | Total number of records counted in the summary.                                                                             |
| g | Total number of words comprising these records.                                                                             |
| h | Number of records in the data base which have been marked for deletion (logically cleared); see input message CLR:ERAPDATA. |
| i | Number of words comprising those deleted records.                                                                           |
| j | Number of words currently available for storing new data.                                                                   |

## 4. ACTION TO BE TAKEN

None.

## 5. REFERENCES

PIDENTs  
ERAP  
ERIF

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Practice 254-200-215, *Error Analysis Program Application*  
Practice 254-280-230, *Diagnostic Results Post - Processing Program*

Input Messages

CLR:ERAPDATA

OP:ERAPSRES

OP:ERAPSUM

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ID ..... OP:ERAPSUM-DETL  
WORK CENTER.. MOC  
GENERIC ..... 4E19 and later  
APPLICATION .. 4E,1B  
TYPE ..... Output

## 1. FORMAT

OP:ERAPSUM;DETL a

DATA RANGE: b THROUGH c  
NUM FILES=d MFNUM RANGE: e THROUGH f  
NUM RECORDS=g NUM WORDS=h

FILE TYPE=i MFNUM=j  
NUM RECORDS=k NUM WORDS=l DATE=m  
MRNUM NUM WORDS RECORD TYPE  
n o p  
. . .  
. . .  
. . .  
n o p

## 2. REASON FOR OUTPUT

To respond to an OP:ERAPSUM;DETL input message requesting a detailed summary of specified files in the error analysis data base. For each file covered by the summary, the message gives a list of all of the records comprising the file.

## 3. VARIABLE FIELD DEFINITIONS

a Status of request. May have one of the following forms:  
COMPLETED — Entire data set follows.  
MSG COMPL — Final partition. Message is complete.  
MSG IP — Following partitions.  
MSG STARTED — First of several portions required to print data set.

Summary of field data variables:

b Earliest file date of the files being summarized.  
c Latest file date.  
d Total number of files covered by the summary.  
e Smallest maintenance file number (MFNUM) of these files.  
f Largest MFNUM.

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- g                      Number of records comprising the files.
- h                      Total number of words comprising these records.

Block data printout for each file covered in the summary:

- i                      Maintenance file type (e.g., MLFILE).
- j                      Maintenance file number of the file.
- k                      Number of records comprising the file.
- l                      Number of words comprising the records of the file.
- m                      Date the file was created.

Following this summary a table is output, containing a one-line record for each record type:

- n                      Maintenance record number (MRNUM) of the record.
- o                      Number of words comprising the record.
- p                      Record type (e.g., MLHIST).

#### 4. ACTION TO BE TAKEN

None.

#### 5. REFERENCES

PIDENTs  
ERAP  
ERIF

Practice 254-200-215, *Error Analysis Program Application*  
Practice 254-280-320, *Error Analysis Program*

Input Messages  
OP:ERAPDATA  
OP:ERAPSUM

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ID ..... OP:FERAHIST  
WORK CENTER.. MOC  
GENERIC ..... 4E19 and later  
APPLICATION .. 4E  
TYPE ..... Output

## 1. FORMAT

OP:FERAHIST, {ALL|UTMN a, SUTMN b}!

## 2. REASON FOR OUTPUT

To output either all failure error analysis (FERA) history data file(s) or the history data file(s) of a specific unit.

## 3. VARIABLE FIELD DEFINITIONS

a                      Unit member number.  
b                      Subunit member number.

## 4. ACTION TO BE TAKEN

None.

## 5. REFERENCES

PIDENT  
FERAMANC

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ID ..... OP:FHCSTAT  
WORK CENTER.. MOC, TOC  
GENERIC ..... 4E19 and later  
APPLICATION .. 4E  
TYPE ..... Output

## 1. FORMAT

```
OP:FHCSTAT, TRAPN a [ACT] b
FHC COUNT FHC COUNT FHC COUNT FHC COUNT
c d c d c d c d
e
```

## 2. REASON FOR OUTPUT

To output the contents of the office final handling code counting trap.

## 3. VARIABLE FIELD DEFINITIONS

|     |                                                                                 |
|-----|---------------------------------------------------------------------------------|
| a   | Trap number (32-35).                                                            |
| b   | Partitioned message header:<br>COMPL<br>COMPLETED<br>IN PROGRESS<br>MSG STARTED |
| c   | Final handling code (FHC).                                                      |
| d   | Count of FHCs.                                                                  |
| e   | Text indicating no trunk maintenance register (TMR) available; repeat later.    |
| ACT | The FHC count block is currently being used by an office FHC counting trap.     |

## 4. ACTION TO BE TAKEN

None.

## 5. REFERENCES

PIDENT  
TMADTRAP

Practice 234-103-018, *Trunk Operations Center (TOC) - Call Irregularity Raw Data Trap*

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Input Messages

ALW:IAOFC

INH:IAOFC

MON:IAOFCNT

OP:FHCSTAT

STOP:MON-IAOFCNT

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ID ..... OP:IFBSTAT  
WORK CENTER.. MOC  
GENERIC ..... 4E19 and later  
APPLICATION .. 4E,1B  
TYPE ..... Output

## 1. FORMAT

OP:IFBSTAT - IFB SUBSYSTEM STATUS

IFB 0 - a

IFB 1 - b

RAW STATUS - c

| TYPE | MEMN | STATUS | RAW | STATUS |
|------|------|--------|-----|--------|
| d    | e    | f [g]  |     | h      |
| .    | .    | .      | .   | .      |
| .    | .    | .      | .   | .      |
| .    | .    | .      | .   | .      |
| d    | e    | f [g]  |     | h      |

## 2. REASON FOR OUTPUT

To report the status of the interface bus (IFB) subsystem.

## 3. VARIABLE FIELD DEFINITIONS

a Status of IFB 0:

ACT — Active.

OOS — Out of service.

SBY — Standby.

b Status of IFB 1:

ACT — Active.

OOS — Out of service.

SBY — Standby.

c Status indicators for the IFBs:

| Bit | Meaning                                        |
|-----|------------------------------------------------|
| 0   | (IFBC) activity in active central control (CC) |
| 1   | IFB 0 trouble set in active CC                 |
| 2   | IFB 1 trouble set in active CC                 |
| 3   | IFBC activity in standby CC                    |
| 4   | IFB 0 trouble set in standby CC                |
| 5   | IFB 2 trouble set in standby CC                |
| 8   | IFB subsystem is stopped                       |
| 9   | Do not restore IFB                             |

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- d                   Type of IFB clients:
- AUI   —    Auxiliary unit interface.
- MUP   —    Master control complex (MCC) and utility processor.
- SSD   —    Scan and signal distributor.
- e                   Member number of the IFB client (0 or 1).
- f                   Status:
- ACT   —    Active.
- OOS   —    Out of service.
- SBY   —    Standby.
- g                   Status for certain clients:
- DPLXFL —       Duplex failed (applies to duplex clients only).
- FORCED —       The unit is forced.
- h                   Status indicators for the IFB clients:
- | Bit | Meaning                      |
|-----|------------------------------|
| 0   | IFB client is out of service |
| 1   | IFB client is stopped        |
| 3   | IFB client is active         |
| 4   | IFB client is standby        |
| 5   | IFB client is forced         |
| 6   | Request DGN for IFB client   |
| 8   | IFB client is being restored |
| 9   | Do not restore IFB client    |

#### 4. ACTION TO BE TAKEN

None.

#### 5. REFERENCES

PIDENT  
IFFRBASE

Input Message  
OP: IFBSTAT

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ID ..... OP:INHINT  
WORK CENTER.. MOC  
GENERIC ..... 4E19 and later  
APPLICATION .. 4E,1B  
TYPE ..... Output

## 1. FORMAT

OP:INHINT a  
b  
.  
.  
.

## 2. REASON FOR OUTPUT

To print a list of maintenance interrupt and interject inhibits that are in a nonnormal state, i.e., inhibited. It is printed hourly, in response to an OP:INHINT input message request, or a master control complex (MCC) request.

## 3. VARIABLE FIELD DEFINITIONS

- a NONE - If present, no interrupts or interjects are inhibited.  
b Interrupt level followed by interrupt sources that are inhibited.

| LEVEL | POSSIBLE SOURCES                 |
|-------|----------------------------------|
| BLEV  | PSBS                             |
| DLEV  | SCDS, PADS, AUDS, CSDS, ORDS     |
| ELEV  | ES                               |
| FLEV  | APUFS, PUFS, SCUFS, ASWEP, WEIPU |
| KLEV  | KL1S, KL2S, KL3S, KL0S           |
| INJ   | VMM, MRQ0, MRQ1, APUT, MINJ      |
| WPAD  | Write Protect                    |

## 4. ACTION TO BE TAKEN

Verify the non-normal inhibits for correctness. If incorrect, take action to restore the inhibits to normal. (see ALW:0 input message)

## 5. REFERENCES

PIDENTs  
MACPROUT  
WPADCNTL

Practice 254-280-210, *Maintenance Control Program*

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Input Messages  
ALW:0  
INH:0  
OP:INHINT

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ID ..... OP:IODSC  
WORK CENTER.. MAC, MOC, NMOC, TEC,  
                  TOC  
GENERIC ..... 4E19 and later  
APPLICATION .. 4E,1B  
TYPE ..... Output

## 1. FORMAT

[1]     OP:IODSC  
        IO CHANNELS DISCONNECTED:  
        NONE

[2]     OP:IODSC  
        IO CHANNELS DISCONNECTED:  
        IOUS a   IOUC b

## 2. REASON FOR OUTPUT

To print a list of input/output (I/O) channels currently in the disconnect state.

Format [1] is printed to indicate that no channels are in the disconnect state.

Format [2] is printed to indicate which I/O channels are currently in the disconnect state.

## 3. VARIABLE FIELD DEFINITIONS

a                   I/O selector member number (0-15)  
b                   I/O channel number (0-15)

## 4. ACTION TO BE TAKEN

Initiate actions to establish connections with destination if required.

## 5. REFERENCES

PIDENT  
IOCPREA1

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ID ..... OP:LCHAN  
WORK CENTER.. MAC, MOC  
GENERIC ..... 4E19 and later  
APPLICATION .. 4E  
TYPE ..... Output

## 1. FORMAT

OP:LCHAN

| CHAN | NAME | STATUS |
|------|------|--------|
| a    | b    | c      |
| .    | .    | .      |
| .    | .    | .      |
| .    | .    | .      |

## 2. REASON FOR OUTPUT

This message is printed in response to the OP:LCHAN input message in order to report the status of all eligible logical channels. A channel is considered eligible if the value of the translation item OD1IOCMTHG is set to a value of 5.

## 3. VARIABLE FIELD DEFINITIONS

- |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| a | The logical channel number in octal.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| b | The channel name.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| c | <p>The channel status which may be one of the following:</p> <p>ACTIVE — The channel is allowed and active in an external user session.</p> <p>ALLOWED — The channel is available for logical channel work.</p> <p>ELIGIBLE — The channel is defined as eligible but has no assigned channel memory block. The channel is not usable in this state.</p> <p>INHIBITED — The channel is eligible for logical channel operation but is currently inhibited from operation by a craft initiated inhibit.</p> <p>INVALID — The channel state is invalid. This is an illegal error condition.</p> <p>OUTPUT — This shows the channel is active and currently outputting data to the APS.</p> <p>WAITING FOR ACK — The channel is active and waiting for an input message acknowledgement.</p> <p>WAITING FOR INPUT — The channel is active and waiting for input data via DMA.</p> |

SEE PROPRIETARY NOTICE ON COVER PAGE

#### 4. ACTION TO BE TAKEN

ACTIVE, ALLOWED, OUTPUT, WAITING FOR INPUT, and WAITING FOR ACK are normal operating conditions.

INHIBITED and INVALID can be changed to allowed using the ALW:LCHAN input message.

ELIGIBLE means that the channel has no assigned channel memory block. The status should change to ALLOWED after one is assigned and the ALW:LCHAN input message is entered.

#### 5. REFERENCES

PIDENT  
IOCPMACC

Input Message  
OP:LCHAN

SEE PROPRIETARY NOTICE ON COVER PAGE



ID ..... OP:LIBSTAT  
WORK CENTER.. MOC  
GENERIC ..... 4E22 and later  
APPLICATION .. 4E,1B  
TYPE ..... Output

## 1. FORMAT

```
[1] OP:LIBSTAT a
 LBKC PKGNAME: b ISSUE: c
 LBKC PROGRAMS ACTIVE d
 e f g
 .
 .
 .
 e f g
 PAGED PROGRAMS ACTIVE h
 i j k
 .
 .
 .
 i j k

[2] OP:LIBSTAT a
 FS LIBRARY DIRECTORY

 PKGNAME ISSUE ADDRESS LENGTH PGMNAME(S)
 l c m n o
 .
 .
 .
 l c m n o
 AVAILABLE STORAGE p WORDS
```

## 2. REASON FOR OUTPUT

To display library program information in response to an OP:LIBSTAT input message.

Format [1] displays the identity of all active library programs.

Format [2] displays the directory for the library file store area.

## 3. VARIABLE FIELD DEFINITIONS

a                      Disposition of the request:

ABORTED                — An interrupt has occurred while processing,  
causing the request to be aborted. Resubmit the  
input message.

SEE PROPRIETARY NOTICE ON COVER PAGE

- COMPLETED — Request is completed and the requested information is output.
- STOPPED ERROR ON FS OPERATION — Read of the library disk area failed. Resubmit input message; if failures continue, verify ID2FS maps for 1DKLIBRARY.
- STOPPED FS AREA NOT DEFINED — No library file store area is defined for storing library packages. OP:LIBSTAT, FS input message cannot be used.
- STOPPED SOFT ERROR — Library control status words were zeroed before Maintenance Control Program (MACP) began the execution of the OP:LIBSTAT program. Resubmit input message.
- b Package name of the package loaded OR NONE - If a library package is not loaded in LBKC.
- c Package issue number.
- d NONE - If no LBKC library programs are active.
- e Name of the LBKC package containing program.
- f Name of an active LBKC program.
- g Task number within the library program.
- h NONE - If no paged library programs are active.
- i Name of the package containing program.
- j Name of an active-paged library program.
- k Task number within the library program.
- l Package name of a package loaded in the FS area. OR EMPTY - If no packages are presently loaded in the FS area.
- m Absolute FS start address of library package.
- n Size in octal of library package.
- o A list from library programs contained within the package.
- p Total number of words in decimal available in the library FS area.

#### 4. ACTION TO BE TAKEN

If the desired output was not completed, see Variable Field Definitions for the appropriate action to be taken for each failure.

#### 5. REFERENCES

PIDENT  
LIBRLOAD

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**4ESS**  
**OM-4B000-01**

**OP:LIBSTAT**

Input Message  
OP:LIBSTAT

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**OP:LIBSTAT-3**

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ID ..... OP:MACLI  
WORK CENTER.. MOC, TOC, TEC, TAC,  
                  NMOC  
GENERIC ..... 4E20 and later  
APPLICATION .. 4E,1B  
TYPE ..... Output

## 1. FORMAT

```
OP:MACLI
CLASS a SUBCLASS b c [d e f g h
iiiiiii iiii iiii iiii iiii iiii
.
.
.]
```

## 2. REASON FOR OUTPUT

To print information about the active maintenance control program (MACP) client(s) in response to a request via the OP:MACLI input message.

## 3. VARIABLE FIELD DEFINITIONS

- |   |                                                                                                                                                                                                                                             |
|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| a | Class name, eg., ADMIN, GUTL, LIBU, or MTCE.                                                                                                                                                                                                |
| b | Subclass number (0-7).                                                                                                                                                                                                                      |
| c | None (if c is none, d-i will not appear). Client job type number. Job type numbers are defined on COMPOOL as symbols of the form nMA:class:type, where n = the appropriate COMPOOL prefix and class is the class to which the type belongs. |
| d | Client program number. Program numbers are defined on COMPOOL as symbols of the form nMA:class:program.                                                                                                                                     |
| e | Client task number. Task numbers correspond to a vector table of start address generated by a TASKID macro call in the client program.                                                                                                      |
| f | Client next segment address or ALLOCATED. If ALLOCATED then variables c, d, e, g, and h will contain the client program data to which the subclass is allocated.                                                                            |
| g | Unit type.                                                                                                                                                                                                                                  |
| h | Member number.                                                                                                                                                                                                                              |
| i | Octal contents of MACP control block for this class.                                                                                                                                                                                        |

## 4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

## 5. REFERENCES

PIDENT  
MACPROUT

Practice 254-280-210, *Maintenance Control Program*

COMPOOL Libraries  
MAC1SYM  
MACP4SM

Input Message  
OP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID ..... OP:MEASREPT  
WORK CENTER.. MAC  
GENERIC ..... 4E19 and later  
APPLICATION .. 4E  
TYPE ..... Output

## 1. FORMAT

```
OP:MEASREPT:aaa b b b b
MEASREPT 2 2 2 2 1 1 1 1 1 1 1 1 1 1 1
 3 2 1 0 9 8 7 6 5 4 3 2 1 0 9 8 7 6 5 4 3 2 1 0
DAY TIME
cde ff gg h i j k l m n o p q r s t u v w x y z a1 b1 c1 d1 e1
•
•
•
```

## 2. REASON FOR OUTPUT

To respond to an OP:MEASREPT input message requesting the contents of the report time tables. This message is one partition of a message which outputs the measurement report time tables. If no output or accumulation is scheduled for a given day and time, the corresponding time table entry is not output.

## 3. VARIABLE FIELD DEFINITIONS

|                  |                                                                                                                                                                                                                                                                             |
|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| a                | Time table:<br><br>ATT — Accumulation time table.<br><br>OTT — Output time table.                                                                                                                                                                                           |
| b                | Partitioned message header:<br><br>MSG COMPL<br>MSG IP<br>MSG START<br><br>Disposition of input message processing:<br><br>ABORTED — Processing is not completed; no memory has been updated.<br><br>NOT STARTED — Processing is not completed; no memory has been updated. |
| cde              | Day of the week.                                                                                                                                                                                                                                                            |
| ff gg            | Time; where ff is hours (00 through 23), and gg is minutes (00, 15, 30, or 45).                                                                                                                                                                                             |
| h-e <sup>1</sup> | Time table. A 1 indicates the corresponding measurement report is acted upon for the day and time at the left.                                                                                                                                                              |

SEE PROPRIETARY NOTICE ON COVER PAGE

#### 4. ACTION TO BE TAKEN

None.

#### 5. REFERENCES

PIDENT  
TRAFMSG

Practice 234-100-045, *Plant Measurements and Machine Performance Report Description*

*Translation Guide, 4ESS<sup>TM</sup>*, TG-4, Division 10, Section 3d

Input Message  
OP:MEASREPT

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ID ..... OP:MEASREPT-MS  
WORK CENTER.. MAC  
GENERIC ..... 4E19 and later  
APPLICATION .. 4E  
TYPE ..... Output

## 1. FORMAT

```
OP:MEASREPT aa:MSCOMS b b b b
MSC OMS MSC OMS MSC OMS MSC OMS
cc dddd ee ffff gg hhhh ii jjjj
•
•
•
```

## 2. REASON FOR OUTPUT

To print in response to an OP:MEASREPT input message requesting the list of MSCOMS on a report. This message is one partition of the message which outputs the list of measurement subclasses and output measurement sets for a measurement report. It reflects the current assignment of non-trunk subgroup (TSG) measurements on a report.

## 3. VARIABLE FIELD DEFINITIONS

|            |                                                                                                                                                                                                                                                                                                                                                                                          |
|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| a          | Measurement report number (1 - 23).                                                                                                                                                                                                                                                                                                                                                      |
| b          | Partitioned message header:<br><br>MSG COMPL<br><br>MSG IP<br><br>MSG START<br><br>Disposition of input message processing:<br><br>ABORTED — Processing is not completed; no memory has been updated.<br><br>NOT STARTED — Processing is not completed; no memory has been updated.<br><br>NOT STARTED MEASREPT UNAS — Processing cannot continue; the measurement report is unassigned. |
| c, e, g, i | Measurement subclass (0-12, 14-63).                                                                                                                                                                                                                                                                                                                                                      |
| d, f, h, j | Output measurement set (0-2047).                                                                                                                                                                                                                                                                                                                                                         |

## 4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

## 5. REFERENCES

PIDENT  
TRAFMSGs

Practice 234-100-045, *Plant Measurements and Machine Performance Report Description*

*Translation Guide, 4ESS<sup>TM</sup>*, TG-4, Division 10, Section 3c

Input Message  
OP:MEASREPT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID ..... OP:MEASREPT-SP  
WORK CENTER.. MAC  
GENERIC ..... 4E19 and later  
APPLICATION .. 4E  
TYPE ..... Output

## 1. FORMAT

OP:MEASREPT:SPAREMEM a a a a  
ENGMEM SCHEDULE ACTIVITY TABLES  
bbbbbb cccccc

## 2. REASON FOR OUTPUT

To respond to an OP:MEASREPT input message requesting: the amount of engineered file store memory available to report accumulation of data, and, the amount of engineered file store memory available to store report-related information (e.g., a list of trunk subgroups to be output on a report).

## 3. VARIABLE FIELD DEFINITIONS

- a The disposition of input message processing:
- ABORTED — Processing is not completed; no memory has been updated.
- COMPLETED — Processing is completed.
- NOT STARTED — Processing is not completed; no memory has been updated.
- b The amount of engineered memory available for reports that require extended interval accumulation, i.e., accumulation of greater than one hour, though it is not restricted to such reports.
- c Amount of engineered memory available for report-related information. All reports require schedule activity tables.

## 4. ACTION TO BE TAKEN

None.

## 5. REFERENCES

PIDENT  
TRAFMSGs

Practice 234-100-045, *Plant Measurements and Machine Performance Report Description*

*Translation Guide, 4ESS<sup>TM</sup>*, TG-4, Division 10, Section 3f

Input Message  
OP:MEASREPT

SEE PROPRIETARY NOTICE ON COVER PAGE



ID ..... OP:MEASREPT-TS  
WORK CENTER.. MAC  
GENERIC ..... 4E19 and later  
APPLICATION .. 4E  
TYPE ..... Output

## 1. FORMAT

```
OP:MEASREPT aa:TSG b b b b
 CIN SIZE CIN SIZE
ccccddd dd dd ddd ddd eeee ffffgggg gg gg ggg ggg hhhh
•
•
•
```

## 2. REASON FOR OUTPUT

To respond to an OP:MEASREPT input message requesting the list of trunk subgroups (TSGs) on a measurement report. This message is one partition of a message which outputs the trunk subgroups associated with a measurement report.

## 3. VARIABLE FIELD DEFINITIONS

- a Measurement report number (1 - 23).
- b Partitioned message header:
  - MSG COMPL
  - MSG IP
  - MSG START

Disposition of input message processing:

  - ABORTED — Processing is not completed; no memory has been updated.
  - NOT STARTED — Processing is not completed; no memory has been updated.
  - NOT STARTED MEASREPT UNAS — Processing cannot continue; the measurement report is unassigned.
- c, f Base traffic number for a trunk subgroup.
- d, g Circuit identification number (CIN) of the trunk subgroup.
- e, h Size of the trunk subgroup.

## 4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

## 5. REFERENCES

PIDENT  
TRAFMSGs

Practice 234-100-045, *Plant Measurements and Machine Performance Report Description*

*Translation Guide, 4ESS<sup>TM</sup>*, TG-4, Division 10, Section 3e

Input Message  
OP:MEASREPT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID ..... OP:MEASTSI  
WORK CENTER.. MAC  
GENERIC ..... 4E19 and later  
APPLICATION .. 4E  
TYPE ..... Output

## 1. FORMAT

OP:MEASTSI a a a a  
TSI SPC TSI SPC TSI SPC TSI SPC  
bb c dd e ff g hh i  
bb c dd e ff g hh i

## 2. REASON FOR OUTPUT

To print in response to an OP:MEASTSI input message requesting the list of time slot interchanges (TSIs) scanned for usage by traffic measurements.

## 3. VARIABLE FIELD DEFINITIONS

a The disposition of input message processing:  
ABORTED — Processing is not completed; no memory has been updated.  
COMPLETED — Processing is completed.  
NO TSI SPC ASN — No TSI switching and permuting controllers (SPCs) are on the list.  
NOT STARTED — Processing is not completed; no memory has been updated.  
b, d, f, h TSI frame (00-63).  
c, e, g, i Switching and permuting controller (0,1).

## 4. ACTION TO BE TAKEN

None.

## 5. REFERENCES

PIDENT  
TRAFMSGGS

*Translation Guide, 4ESS<sup>TM</sup>*, TG-4, Division 10  
Section 2a, ALW:USGMEAS:TSI a,SPC b!  
Section 2b, INH:USGMEAS:TSI a,SPC b!  
Section 3g

Input Message  
OP:MEASTSI

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ID ..... OP:MNMC  
WORK CENTER.. MOC  
GENERIC ..... 4E19 and later  
APPLICATION .. 4E  
TYPE ..... Output

## 1. FORMAT

OP:MANUAL NETWORK MANAGEMENT CONTROLS IN EFFECT  
a CODE BLOCKS  
b ROUTE CONTROLS  
c REROUTE CONTROLS

## 2. REASON FOR OUTPUT

To indicate which manual network management controls are in effect at the present time.

## 3. VARIABLE FIELD DEFINITIONS

- a The number of code blocks in effect.
- b The number of route controls (trunk subgroup controls) in effect.
- c The number of reroute controls in effect.

**NOTE:** The count in c pertains to the number of hierarchical reroutes in effect. The number of dynamic non-hierarchical routing (DNHR) reroutes is not included in this count.

## 4. ACTION TO BE TAKEN

None.

## 5. REFERENCES

PIDENT  
NMGTDEN

SEE PROPRIETARY NOTICE ON COVER PAGE



ID ..... OP:MONTAB  
WORK CENTER.. TOC  
GENERIC ..... 4E19 and later  
APPLICATION .. 4E  
TYPE ..... Output

## 1. FORMAT

OP:MONTAB

| TP | TAT | DIRECTED TRUNK | CONNECTED TRUNK |
|----|-----|----------------|-----------------|
| ab | c   | d              | e               |
| .  | .   | .              | .               |
| .  | .   | .              | .               |
| .  | .   | .              | .               |

## 2. REASON FOR OUTPUT

To respond to an OP:MONTAB input message. The output lists all current monitor connections.

## 3. VARIABLE FIELD DEFINITIONS

- a The test position group number (i.e., trunk control area [TCA] number 0-9).
- b The test position number (0-9).
- ab Connection is to a digital trunk-under-test. Digital test access trunk (DTAT) (0-127).
- c This indicates to which trunk access test (TAT) (0 or 1) the directed trunk is connected.
- d Circuit identification number (CIN) for the directed trunk specified in the monitor connection setup.
- e Circuit identification number for the connected trunk that is connected to the directed trunk.

## 4. ACTION TO BE TAKEN

None.

## 5. REFERENCES

PIDENT  
TACCTABL

Practice 234-120-000, *Test Position and Control Area Common Equipment Frame - General Description*  
Practice 234-120-001, *Test Position Operation*  
Practice 234-180-243, *Test Access Trunk Control Program - Description*

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**4ESS**  
**OM-4B000-01**

**OP:MONTAB**

Input Message  
OP:MONTAB

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**OP:MONTAB-2**

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ID ..... OP:MONTAB-EMPT  
WORK CENTER.. TOC  
GENERIC ..... 4E19 and later  
APPLICATION .. 4E  
TYPE ..... Output

## 1. FORMAT

OP:MONTAB  
ALL MONITOR TABLES EMPTY

## 2. REASON FOR OUTPUT

To respond to an OP:MONTAB input. The output indicates that no trunks are set up in a monitor connection.

## 3. VARIABLE FIELD DEFINITIONS

None.

## 4. ACTION TO BE TAKEN

None.

## 5. REFERENCES

PIDENT  
TACCTABL

Practice 234-120-000, *Test Position and Control Area Common Equipment Frame - General Description*

Practice 234-120-001, *Test Position Operation*

Practice 234-180-243, *Test Access Trunk Control Program - Description*

Input Message  
OP:MONTAB

SEE PROPRIETARY NOTICE ON COVER PAGE



ID ..... OP:MSGRCD  
WORK CENTER.. MOC  
GENERIC ..... 4E19 and later  
APPLICATION .. 4E,1B  
TYPE ..... Output

## 1. FORMAT

OP:MSGRCD,FS    a

## 2. REASON FOR OUTPUT

To mark the start or termination of a dump of the output messages saved on the file store during a phase.

## 3. VARIABLE FIELD DEFINITIONS

a                      Indication of the progress of the dump:

COMPL    —    Indicates the successful completion of the output of all messages.

COMPL SOME MESSAGES LOST — Indicates the successful completion of the output of all saved messages. Some messages were not saved because of problems during the saving process or a lack of space on file store.

START    —    Indicates the start of a message dump.

STOPPED SYSTEM TROUBLE — Indicates a problem was encountered which prevented further output of saved messages. The problem was encountered when reading from disk or trying to load output messages.

## 4. ACTION TO BE TAKEN

None, unless a is STOPPED. In that case, no further messages will be printed, and the message record area will not be cleared. Request the output again with an OP:MSGRCD input message, or clear the data area with a CLR:MSGRCD input message.

## 5. REFERENCES

PIDENT  
IOCPMSR1

Input Messages  
CLR:MSGRCD  
OP:MSGRCD

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ID ..... OP:MSGRCD-FS  
WORK CENTER.. MOC  
GENERIC ..... 4E19 and later  
APPLICATION .. 4E,1B  
TYPE ..... Output

## 1. FORMAT

OP:MSGRCD,FS MSG IP

a

## 2. REASON FOR OUTPUT

To output a single message which was recorded on the file system during a phase. Output of the messages can be stopped at any time with the STOP:OP-MSGRCD input message.

## 3. VARIABLE FIELD DEFINITIONS

a                      The body of the original message that was retrieved from the message record area on the file system. The sequence number, if printed, is the original sequence number of the message.

## 4. ACTION TO BE TAKEN

The messages retrieved from the file system message record area are those messages saved during a particular phase of initialization. They may contain data that was relevant to the cause of the phase request. No more messages may be saved until all messages on the file system are printed or the area is cleared.

## 5. REFERENCES

PIDENT  
IOCPMSR1

Input Messages  
CLR:MSGRCD  
OP:MSGRCD  
STOP:OP-MSGRCD

SEE PROPRIETARY NOTICE ON COVER PAGE



ID ..... OP:MUPAUD  
WORK CENTER.. MOC  
GENERIC ..... 4E19 and later  
APPLICATION .. 4E,1B  
TYPE ..... Output

## 1. FORMAT

[1] OP:MUPAUD MUP a - AUDIT INHIBIT STATUS

| BANK | AUD INH STATUS |
|------|----------------|
| 0    | b'b0           |
| 1    | b'b1           |
| 2    | b'b2           |
| 3    | b'b3           |

[2] OP:MUPAUD MUP a STOPPED c

## 2. REASON FOR OUTPUT

To report the inhibit status of both MUPs and/or any errors that were found during the execution of the OP:MUPAUD input command.

**NOTE:** The MUP audit data structure consists of four audit banks and each audit bank has 32 audits. Currently, only seven audits in audit bank 0 have been implemented:

BANK 0, NUM 1 — Dual Asynchronous Receiver Transmitter (DUART) counter and timer audits.

BANK 0, NUM 2 — User stack list audits.

BANK 0, NUM 3 — Memory management structure audits.

BANK 0, NUM 4 — Memory parity audits.

BANK 0, NUM 5 — MCC matrix data structure audit.

BANK 0, NUM 6 — Three phase audit of internal page translation tables for correct data and verifies that cross-referencing is correct.

BANK 0, NUM 7 — General MCC global variables audit.

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If both Master Control Complex (MCC) And Utility Processors (MUPs) are in service and audits 1 and 3 are inhibited, the output will look like following:

[illegible][illegible]

**NOTE:** In both MUP 0 outputs, bit 7 to bit 31 in BANK 0 and all bits in BANK 1, 2, and 3 will always be 1 since the corresponding audits are not implemented.

|    |                                                    |
|----|----------------------------------------------------|
| a  | Member number of the MUP (0 or 1).                 |
| b0 | Audit inhibit status bit map for bank 0 in binary. |
| b1 | Audit inhibit status bit map for bank 1 in binary. |
| b2 | Audit inhibit status bit map for bank 2 in binary. |

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b3                      Audit inhibit status bit map for bank 3 in binary.

**NOTE:** Inhibit status is printed in terms of a 32 bit binary bit map where the 0 bit (right most bit) indicates the inhibit status of audit #1 of the corresponding bank, and the 1st bit indicates the inhibit status of audit #2 of the the corresponding bank and so on.

For each bit set, the corresponding audit is inhibited. For example, if audits #2 and #3 are inhibited (assume others are not inhibited), then the output bit map will be as follows:

111111111111111111111111111111110000110

c                      Possible reason for stop:  
MUP OOS — MUP is out of service.

#### 4. ACTION TO BE TAKEN

None.

#### 5. REFERENCES

Input Messages  
ALW:MUPAUD  
INH:MUPAUD  
OP:MUPAUD  
STOP:MUPAUD  
TEST:MUPAUD

SEE PROPRIETARY NOTICE ON COVER PAGE



ID ..... OP:MUPSTAT  
WORK CENTER.. MOC  
GENERIC ..... 4E20 and later  
APPLICATION .. 4E,1B  
TYPE ..... Output

## 1. FORMAT

OP:MUPSTAT  
MUP 0 - a [b] STATUS - c [d DAY(S) LEFT TO SOAK]  
MUP 1 - a [b] STATUS - c [d DAY(S) LEFT TO SOAK]  
ETHERNET - e  
RS-232 PORTS    0 - f    1 - f    2 - f  
                  3 - f

## 2. REASON FOR OUTPUT

To give the status of the master control complex (MCC) and utility processors (MUPs).

## 3. VARIABLE FIELD DEFINITIONS

- a                    State of the MUP on the interface bus (IFB).
- ACT                    — Active and in service.
- INVALID                — Status not available.
- NON-OPER UNIT        — Unit unequipped.
- OOS                    — Out of service.
- SBY                    — Standby and in service.
- b                    Additional status information.
- (FORCED) — Indicates if the MUPs are forced.
- UNKNOWN — Both MUPs are out of service.
- c                    Provides the contents of the MUP status word IF1RSTAT.
- The operational status of the MUP is identified by the bits set in the printed 8-digit octal number. For example, if c is (00000010), then the operational status of the MUP is represented by bit 3 or MUP is active unit.

The contents are as follows:

| Bit | Meaning                                                 |
|-----|---------------------------------------------------------|
| 0   | MUP is out-of-service.                                  |
| 1   | General purpose MUP direct memory access (DMA) stopped. |

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| Bit | Meaning                         |
|-----|---------------------------------|
| 3   | MUP is active unit.             |
| 4   | MUP is standby unit.            |
| 5   | MUP is FORCED.                  |
| 9   | DO NOT RESTORE bit set for MUP. |

d                      Number of soak days remaining.

**NOTE:** If variable d and its corresponding message is blank then no soak is in progress.

e                      Indicates the state of the Ethernet® channel.

INVALID              — Status not available.

UNKNOWN             — MUP duplex failed.

UTILITY SYSTEM AVAILABLE

UTILITY SYSTEM UNAVAILABLE

f                      State of the MUP's RS-232 ports.

ACTIVE TERMINAL    — An active terminal is connected to this port.

INACTIVE PORT       — The port is not being used.

INVALID              — Status not available.

UNKNOWN             — MUP duplex failed.

VTP PRIMARY         — The primary virtual terminal protocol (VTP) terminal.

VTP SECONDARY      — The secondary virtual terminal protocol terminal.

#### 4. ACTION TO BE TAKEN

None.

#### 5. REFERENCES

PIDENT  
MCFRBASE

Input Message  
OP:MUPSTAT

SEE PROPRIETARY NOTICE ON COVER PAGE



ID ..... OP:NCATANOM  
WORK CENTER.. MOC, TOC  
GENERIC ..... 4E19 and later  
APPLICATION .. 4E  
TYPE ..... Output

## 1. FORMAT

OP:NCATANOM TRAP STATUS, TRAPN a  
IDLE

OP:NCATANOM TRAP STATUS, TRAPN a  
NACC:b  
{TIMEON=c {TIMEOFF=d [RPT] | COUT}|NO SCHEDULE}  
[TRAP INHIBITED]  
TTYCHAN=e

## 2. REASON FOR OUTPUT

To dump the status of all non-call associated temporary signaling connection (NCAT) anomaly traps, whether they are idle, in use, or scheduled for use.

## 3. VARIABLE FIELD DEFINITIONS

- a NCAT anomaly trap, either 0 or 1.
- b NCAT anomaly code categories (NACCs) being trapped. Three-letter abbreviation (see MON:NCATANOM input message for a list of valid NACCs).
- ALL — Means all NACCs are being trapped.
- c Time trap is turned on.
- d Time trap is turned off.
- e Teletypewriter (TTY) channel on which the trap data is being output.

## 4. ACTION TO BE TAKEN

None.

## 5. REFERENCES

PIDENT  
NCATFH

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Messages  
ALW:NCATANOM  
INH:NCATANOM  
MON:NCATANOM  
OP:NCATANOM  
STOP:MON-NCATANOM

SEE PROPRIETARY NOTICE ON COVER PAGE

ID ..... OP:NCSU-AARSBO  
WORK CENTER.. MOC  
GENERIC ..... 4E19 and later  
APPLICATION .. 4E  
TYPE ..... Output

### 1. FORMAT

OP:NCSU 0: ALTERNATE IS ACTIVE REGULAR IS STANDBY AND HAS  
AN OUTAGE

### 2. REASON FOR OUTPUT

Results from a master control complex (MCC) request for reference status. (Requested by depressing the "REFSTAT" key.) This message indicates that a reference switch has been executed and the regular reference has a temporary interruption. The network clock synchronization unit (NCSU) is not free running in this case.

### 3. VARIABLE FIELD DEFINITIONS

None.

### 4. ACTION TO BE TAKEN

Use task oriented practices (TOP) procedure to repair regular reference.

### 5. REFERENCES

PIDENT  
CLFRMISC

SEE PROPRIETARY NOTICE ON COVER PAGE



ID ..... OP:NCSU-AIA  
WORK CENTER.. MOC  
GENERIC ..... 4E19 and later  
APPLICATION .. 4E  
TYPE ..... Output

**1. FORMAT**

OP:NCSU 0: ALTERNATE IS ACTIVE

**2. REASON FOR OUTPUT**

Results from a master control complex (MCC) request for reference status. (Requested by depressing the "REFSTAT" key.) This message indicates that a manual teletypewriter (TTY) switch of references has been executed.

**3. VARIABLE FIELD DEFINITIONS**

None.

**4. ACTION TO BE TAKEN**

Determine reason for operating on the alternate and switch back as soon as feasible.

**5. REFERENCES**

PIDENT  
CLFRMISC

SEE PROPRIETARY NOTICE ON COVER PAGE



ID ..... OP:NCSU-ALTOUT  
WORK CENTER.. MOC  
GENERIC ..... 4E19 and later  
APPLICATION .. 4E  
TYPE ..... Output

### 1. FORMAT

OP:NCSU 0: ALTERNATE IS ACTIVE AND HAS AN OUTAGE

### 2. REASON FOR OUTPUT

Results from a master control complex (MCC) request for reference status. (Requested by depressing the "REFSTAT" key.) This message indicates that a manual switch of the reference has been executed. The alternate reference has a temporary interruption. The network clock synchronization unit (NCSU) will also freerun in this case.

### 3. VARIABLE FIELD DEFINITIONS

None.

### 4. ACTION TO BE TAKEN

Determine reason for operating on alternate and use task oriented practices (TOP) procedure to repair the alternate.

### 5. REFERENCES

PIDENT  
CLFRMISC

SEE PROPRIETARY NOTICE ON COVER PAGE





ID ..... OP:NCSU-NRE  
WORK CENTER.. MOC  
GENERIC ..... 4E19 and later  
APPLICATION .. 4E  
TYPE ..... Output

### 1. FORMAT

OP:NCSU 0: NO REFERENCES EQUIPPED

### 2. REASON FOR OUTPUT

Results from a master control complex (MCC) request for reference status. (Requested by depressing the "REFSTAT" key.) This message indicates the the network clock synchronization unit (NCSU) is equipped but no references are equipped.

### 3. VARIABLE FIELD DEFINITIONS

None.

### 4. ACTION TO BE TAKEN

Determine whether this could be a problem in the NCSU firmware or the office data (ODA) may be incorrect.

### 5. REFERENCES

PIDENT  
CLFRMISC

SEE PROPRIETARY NOTICE ON COVER PAGE



ID ..... OP:NCSU-RAASBO  
WORK CENTER.. MOC  
GENERIC ..... 4E19 and later  
APPLICATION .. 4E  
TYPE ..... Output

### 1. FORMAT

OP:NCSU 0: REGULAR IS ACTIVE ALTERNATE IS STANDBY AND  
HAS AN OUTAGE

### 2. REASON FOR OUTPUT

Results from a master control complex (MCC) request for reference status. (Requested by depressing the "REFSTAT" key.) The reference configuration is normal, but the alternate reference has a temporary interruption. The network clock synchronization unit (NCSU) is not free running in this case.

### 3. VARIABLE FIELD DEFINITIONS

None.

### 4. ACTION TO BE TAKEN

Use task oriented practices (TOP) procedure to repair the alternate reference.

### 5. REFERENCES

PIDENT  
CLFRMISC

SEE PROPRIETARY NOTICE ON COVER PAGE



ID ..... OP:NCSU-REGOUT  
WORK CENTER.. MOC  
GENERIC ..... 4E19 and later  
APPLICATION .. 4E  
TYPE ..... Output

### 1. FORMAT

OP:NCSU 0: REGULAR IS ACTIVE AND HAS AN OUTAGE

### 2. REASON FOR OUTPUT

Results from a master control complex (MCC) request for reference status. (Requested by depressing the "REFSTAT" key.) This message indicates that a temporary interruption of the regular reference has occurred. The network clock synchronization unit (NCSU) will also freerun in this case.

### 3. VARIABLE FIELD DEFINITIONS

None.

### 4. ACTION TO BE TAKEN

Possibly switch to alternate and use task oriented practices (TOP) procedure to repair the regular reference.

### 5. REFERENCES

PIDENT  
CLFRMISC

SEE PROPRIETARY NOTICE ON COVER PAGE



ID ..... OP:NCSU-ROASBY  
WORK CENTER.. MOC  
GENERIC ..... 4E19 and later  
APPLICATION .. 4E  
TYPE ..... Output

### 1. FORMAT

OP:NCSU 0: REGULAR IS ACTIVE AND HAS AN OUTAGE  
ALTERNATE IS STANDBY AND HAS AN OUTAGE

### 2. REASON FOR OUTPUT

Results from a master control complex (MCC) request for reference status. (Requested by depressing the "REFSTAT" key.) This message indicates that the reference configuration is normal. Both references have temporary interruptions. The network clock synchronization unit (NCSU) will freerun in this case.

### 3. VARIABLE FIELD DEFINITIONS

None.

### 4. ACTION TO BE TAKEN

Use task oriented practices (TOP) procedure to repair both references.

### 5. REFERENCES

PIDENT  
CLFRMISC

SEE PROPRIETARY NOTICE ON COVER PAGE





ID ..... OP:NCSU-RSOAAO  
WORK CENTER.. MOC  
GENERIC ..... 4E19 and later  
APPLICATION .. 4E  
TYPE ..... Output

### 1. FORMAT

OP:NCSU 0: REGULAR IS STANDBY AND HAS AN OUTAGE  
ALTERNATE IS ACTIVE AND HAS AN OUTAGE

### 2. REASON FOR OUTPUT

Results from a master control complex (MCC) request for reference status. (Requested by depressing the "REFSTAT" key.) A manual reference switch has been executed and both references have temporary interruptions. The network clock synchronization unit (NCSU) will freerun in this case.

### 3. VARIABLE FIELD DEFINITIONS

None.

### 4. ACTION TO BE TAKEN

Determine reason for switch to alternate and use task oriented practices (TOP) procedure to repair both references.

### 5. REFERENCES

PIDENT  
CLFRMISC

SEE PROPRIETARY NOTICE ON COVER PAGE



ID ..... OP:NCSU-STNORM  
WORK CENTER.. MOC  
GENERIC ..... 4E19 and later  
APPLICATION .. 4E  
TYPE ..... Output

**1. FORMAT**

OP:NCSU 0: STATUS IS NORMAL

**2. REASON FOR OUTPUT**

Results from a master control complex (MCC) request for reference status. (Requested by depressing the "REFSTAT" key.) No abnormal conditions exist relating to network clock synchronization unit (NCSU) references.

**3. VARIABLE FIELD DEFINITIONS**

None.

**4. ACTION TO BE TAKEN**

None.

**5. REFERENCES**

PIDENT  
CLFRMISC

SEE PROPRIETARY NOTICE ON COVER PAGE



ID ..... OP:NCSU-UNEQPT  
WORK CENTER.. MOC  
GENERIC ..... 4E19 and later  
APPLICATION .. 4E  
TYPE ..... Output

### 1. FORMAT

OP:NCSU 0: NCSU UNEQUIPPED

### 2. REASON FOR OUTPUT

Results from a master control complex (MCC) request for reference status. (Requested by depressing the "REFSTAT" key.) This message indicates that the network clock synchronization unit (NCSU) is not operational in this office.

### 3. VARIABLE FIELD DEFINITIONS

None.

### 4. ACTION TO BE TAKEN

Determine whether a possible software problem exists. An unequipped NCSU should not report problems.

### 5. REFERENCES

PIDENT  
CLFRMISC

SEE PROPRIETARY NOTICE ON COVER PAGE



ID ..... OP:NTWKTAB  
WORK CENTER.. TOC  
GENERIC ..... 4E19 and later  
APPLICATION .. 4E  
TYPE ..... Output

## 1. FORMAT

| OP:NTWKTAB<br>FUNCTION | TIMEOUT | CIN |
|------------------------|---------|-----|
| a                      | b       | c   |
| .                      | .       | .   |
| .                      | .       | .   |
| .                      | .       | .   |

## 2. REASON FOR OUTPUT

To respond to an OP:NTWKTAB request. The output lists current network functions.

## 3. VARIABLE FIELD DEFINITIONS

- a                      Function:
- DLLOOP     — Digital loop function.
  - DLLOOPTEC — Overlapping digital loop function.
  - MW         — Trunk connected to office milliwatt (MW) supply.
  - MW10       — Trunk connected to milliwatt 10 supply.
  - MW10TEC   — Overlapping MW10 function.
  - MWTEC     — Overlapping MW function.
  - TEC        — Outpulsed function.
  - TECOP     — Outpulsing function.
- b                      Time remaining for function (in seconds). The maximum time limit is 30 minutes.
- c                      Circuit identification number (CIN) of trunk involved in the function.

## 4. ACTION TO BE TAKEN

None.

## 5. REFERENCES

PIDENT  
VIFOPCTL

SEE PROPRIETARY NOTICE ON COVER PAGE

**4ESS**  
**OM-4B000-01**

**OP:NTWKTAB**

Input Message  
OP:NTWKTAB

Output Message  
ORD:0

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**OP:NTWKTAB-2**

**Issue 1.8**  
**September 2001**



ID ..... OP:OA  
WORK CENTER.. MOC, TEC, TOC  
GENERIC ..... 4E19 and later  
APPLICATION .. 4E  
TYPE ..... Output

## 1. FORMAT

OP:OA a b c, FLOOR d e

## 2. REASON FOR OUTPUT

To display the office-dependent active alarms.

## 3. VARIABLE FIELD DEFINITIONS

- a Number of alarm.
- b Twelve descriptive American Standard Code for Information Interchange (ASCII) characters
- c Text phrases ALM, STAT, SUM, meaning the Office Alarm (OA) is off normal.
- d Floor number.
- e
  - MSG COMPL — Message is completed.
  - MSG IP — Message is in progress.
  - MSG STARTED — Message is started.

## 4. ACTION TO BE TAKEN

None.

## 5. REFERENCES

PIDENT  
MCFWJOCF

Practice 234-180-253, *Master Control Complex (MCC) Program - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE



ID ..... OP:OOSUNITS  
WORK CENTER.. MAC, MOC, NMOC, TEC,  
                  TOC  
GENERIC ..... 4E19 Rel. 3 and later  
APPLICATION .. 4E,1A  
TYPE ..... Output

## 1. FORMAT

OP:OOSUNITS [a]  
[b]  
[c    d [e] [f]  
  .    .    .    .  
  .    .    .    .  
  .    .    .    .  
  c    d [e] [f]]

## 2. REASON FOR OUTPUT

To output a list of units that are out-of-service. It is printed hourly, in response to an OP:OOSUNITS input message or a Master Control Complex (MCC) request.

## 3. VARIABLE FIELD DEFINITIONS

- |   |                                                                                                                                                             |
|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| a | Unit type (e.g., CC, PS) if report is for a single unit type only.                                                                                          |
| b | Status:<br><br>BUFFER OVERFLOW— If more units are out-of-service than can be printed.<br><br>NONE               — If no units are out-of-service.           |
| c | Unit type that is out-of-service.                                                                                                                           |
| d | Member number of the unit type.                                                                                                                             |
| e | The subunit type that is out-of-service. A protection switched subunit is listed prior to other out-of-service submembers, which appear in numerical order. |
| f | The subunit member number.                                                                                                                                  |

## 4. ACTION TO BE TAKEN

Initiate actions to restore the units to service. (See RST:[unit] input messages.)

## 5. REFERENCES

PIDENT  
MACPROUT

Practice 254-280-210, *Maintenance Control Program*

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Messages  
OP:OOSUNITS  
RST:[unit]

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ID ..... OP:ORNU-COMPLET  
WORK CENTER.. MAC, MOC  
GENERIC ..... 4E19 and later  
APPLICATION .. 4E  
TYPE ..... Output

### 1. FORMAT

OP:ORNU COMPLETED  
RECENT CHANGE ORDER NUMBER aaaaaa IS IN THE PROCESS OF BEING ACTIVATED.

### 2. REASON FOR OUTPUT

To print in response to an OP:ORNU input message requesting the return order number of a recent change form that is in the process of being activated.

### 3. VARIABLE FIELD DEFINITIONS

a                      Order number.

### 4. ACTION TO BE TAKEN

None.

### 5. REFERENCES

PIDENT  
RCMAMAIN

*Translation Guide, 4ESS<sup>TM</sup>*, TG-4, Division 7, Section 10a

Input Message  
OP:ORNU

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ID ..... OP:OVERLOAD  
WORK CENTER.. MAC, MOC, NMOC, TEC,  
TOC  
GENERIC ..... 4E19 and later  
APPLICATION .. 4E  
TYPE ..... Output

## 1. FORMAT

### OP:OVERLOAD CONTROLS IN EFFECT

|                     |          |
|---------------------|----------|
| AUTOMATIC MODE      | a        |
| DEFERRED SCHEDULER  | b        |
| SEGMENT RESTR       | c        |
| ACCESS CHARGE VER   | d        |
| CANCEL OGT RETRIES  | e        |
| CALLING STATION REQ | f        |
| INTL CALL DETL REC  | g        |
| LOAD LEVEL          | h        |
| TOTAL DOC           | i        |
| MF DOC              | j        |
| DP DOC              | k        |
| CCIS DOC            | l        |
| ISUP DOC            | m        |
| INUP DOC            | n        |
| PEAK SEC SZ ACC A   | o        |
| TIME ACC A CHANGED  | pp:qq:rr |
| PEAK SEC SZ ACC B   | s        |
| TIME ACC B CHANGED  | pp:qq:rr |

## 2. REASON FOR OUTPUT

To give the status of the overload controls in response to operation of the overload-controls-in-effect key on the Master Control Complex (MCC) or when there has been a change in one of the controls.

## 3. VARIABLE FIELD DEFINITIONS

|   |                                |
|---|--------------------------------|
| a | Automatic mode indication:     |
|   | N — No.                        |
|   | Y — Yes.                       |
| b | Deferred scheduler indication: |
|   | N — No.                        |
|   | Y — Yes.                       |

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|   |                                                                                                          |
|---|----------------------------------------------------------------------------------------------------------|
| c | Segment restriction indication:<br>1 — One.<br>2 — Two.<br>1/3 — One third.                              |
| d | Access charge verification indication:<br>50% — Fifty percent.<br>100% — One hundred percent.<br>N — No. |
| e | Cancel outgoing retries indication:<br>50% — Fifty percent.<br>100% — One hundred percent.<br>N — No.    |
| f | Calling station request indication:<br>N — No.<br>Y — Yes.                                               |
| g | International call detail recording:<br>N — No.<br>Y — Yes.                                              |
| h | Load level active (0, 1, 2, or 3).                                                                       |
| i | Total Dynamic Overload Control (DOC) (0-3).                                                              |
| j | Multi-Frequency (MF) DOC (0-3).                                                                          |
| k | Dial Pulse (DP) DOC (0-3).                                                                               |
| l | Common Channel Interoffice Signaling (CCIS) DOC (0-3).                                                   |
| m | Integrated Services Digital Network (ISDN) User Part (ISUP) DOC (0-3).                                   |
| n | International ISDN User Part (INUP) DOC (0-3).                                                           |
| o | History count of second highest one second seizure accumulator.                                          |
| p | Hour.                                                                                                    |
| q | Minute.                                                                                                  |
| r | Second.                                                                                                  |
| s | History count of highest one second seizure accumulator.                                                 |

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**4. ACTION TO BE TAKEN**

None.

**5. REFERENCES**

PIDENT  
OVLDPGM

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ID ..... OP:PERIFINH  
WORK CENTER.. MOC, TEC  
GENERIC ..... 4E22 and later  
APPLICATION .. 4E  
TYPE ..... Output

## 1. FORMAT

- [1] OP:PERIFINH a  
NONE
- [2] OP:PERIFINH a  
SP b, CONTR c, PEST d
- [3] OP:PERIFINH a  
{TSI e, CONTR f | TSI e, SPC g, PORT h}
- [4] OP:PERIFINH a  
XTSI e, {APUT|APUF|BLM|CIA}
- [5] OP:PERIFINH a  
XTSI e, D3U i
- [6] OP:PERIFINH a  
XTSI e, SPU j
- [7] OP:PERIFINH a  
TMSP k, CONTR l
- [8] OP:PERIFINH a  
NCLK 0, CHAIN m
- [9] OP:PERIFINH a  
ASW  
SCLK 0, CONTR n, ABM
- [10] OP:PERIFINH a  
{TGR o, CONTR p | TGR o, TER q}
- [11] OP:PERIFINH a  
IFL0  
IFL1  
VIF r, IPUT0  
IPUT1  
BASM
- [12] OP:PERIFINH a  
{DT s | DT s, DTU t}

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- [13] OP:PERIFINH a  
u v, KCODE
- [14] OP:PERIFINH a  
[ APUF  
EST w, APUT]  
[EST w, ESU x]
- [15] OP:PERIFINH a  
DIF y, APUT  
APUF  
BLM  
DBOV  
APUB
- [16] OP:PERIFINH a  
DIF y, DIU z
- [17] OP:PERIFINH a  
DIF y, DIU z, DG a1
- [18] OP:PERIFINH a  
SCS b1, {APUT|APUF|BLM|CIA}
- [19] OP:PERIFINH a  
SCS b1, SCU c1
- [20] OP:PERIFINH a  
ASW  
NCSU 0, SCLK 0, CONTR l, BLM

## 2. REASON FOR OUTPUT

To print a list of all active peripheral unit pests on in-service frames. The message is stimulated by the associated input message, routinely, or by pressing the interrupts inhibited switch on the Master Control Complex (MCC).

Format [1] prints when no pests are set for any peripheral units.

Format [2] prints when the peripheral unit is a Signaling Processor (SP).

Format [3] prints when the peripheral unit is a Time Slot Interchange Frame (TSIF).

Format [4] prints when the peripheral unit is an Expanded Time Slot Interchange (XTSI) and to indicated that the specified pests are set in the controller(s) of the XTSI.

Format [5] prints when the peripheral unit is a XTSI and the pest is set in a Digital Signal Level 3 Unit (D3U).

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Format [6] prints when the peripheral unit is a XTSI and the pest is set in a Signal Processing Unit (SPU).

Format [7] prints when the peripheral unit is a Time Multiplexed Switch (TMS).

Format [8] prints when the peripheral unit is a Network Clock (NCLK).

Format [9] prints when the peripheral unit is a System Clock (SCLK).

Format [10] prints when the peripheral unit is a Terminal Access Controller (TAC).

Format [11] prints when the peripheral unit is a Voiceband Interface Frame (VIF).

Format [12] prints when the peripheral unit is a Digroup Terminal (DT).

Format [13] prints when the peripheral unit is a KCODE pest.

Format [14] prints when the peripheral unit is a Echo Suppressor Terminal (EST).

Format [15] prints when the peripheral unit is a Digital Interface Frame (DIF) and to indicate that the specified pests are set in the controller(s) of the DIF.

Format [16] prints when the peripheral unit is a DIF and to indicate that the pest is set in the DIU.

Format [17] prints when the peripheral unit is a DIF and to indicate that the pest is set in the DG.

Format [18] prints when the peripheral unit is a Service Circuit System (SCS). This message indicates that the specified pests are set in the controller(s) of the SCS

Format [19] prints when the peripheral unit is a SCS and to indicate pests are set on a Service Circuit Unit (SCU).

Format [20] prints when the peripheral unit is a System Clock (SCLK).

### 3. VARIABLE FIELD DEFINITIONS

|      |                                            |
|------|--------------------------------------------|
| a    | Partitioned message header:                |
|      | MSG COMPL — Message is completed.          |
|      | MSG IP — Message is in progress.           |
|      | MSG STARTED — Message is started.          |
| NONE | No pests are set for any peripheral units. |
| b    | SP member number.                          |
| c    | SP controller number.                      |

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|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| d    | <p>Pest number in SP pest register.</p> <p>There are 8 pests (0-7) recorded for all signal processors. However, SP1 has only 6 pests (0-5) and SP2 has only 7 pests (0-6).</p> <p>If pest 6 is set in SP1, it is written in the hardware, but has no effect.</p> <p>Pest 7 is not controllable by input messages. It reflects the state on the matrix limit switch on SP. If the switch is "OFF-NORMAL", then pest 7 is recorded as set.</p> <p>Pest 7 is not written directly into the hardware, it is ORed with the state of pest 2 and the result is written into pest 2 of the hardware.</p> <p>Note that the orange light on the matrix limit switch is controlled by the pest state. If either pest 2 or pest 7 is recorded for the in-service controller, then the light is on.</p> |
| e    | TSI or XTSI member number.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| f    | TSI or XTSI controller number.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| g    | Switching And Permuted Controller (SPC) number.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| h    | Port number.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| APUF | Autonomous F-levels pestered.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| APUF | Autonomous Peripheral Failure.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| APUT | Autonomous interjects pestered.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| APUT | Autonomous Peripheral Trouble.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| BLM  | Base Level Maintenance.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| CIA  | Control Bus and Image Administration (CIA) summary error.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| i    | D3U number.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| j    | SPU number.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| k    | TMSP member number.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| l    | TMSP controller number.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| m    | Chain number.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| n    | SCLK controller half.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| ASW  | All-seems-well pest.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| ABM  | Mismatch pest.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| NCSU | Synchronous unit pest.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| o    | TGR member number.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

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|        |                                                                                                                                                                        |
|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| p      | TGR controller number.                                                                                                                                                 |
| q      | Terminal number.                                                                                                                                                       |
| r      | VIF member number.                                                                                                                                                     |
| IFL0   | F-level controller 0.                                                                                                                                                  |
| IFL1   | F-level controller 1.                                                                                                                                                  |
| INPUT0 | Base level controller 0.                                                                                                                                               |
| INPUT1 | Base level controller 1.                                                                                                                                               |
| BASM   | Voiceband Interface Unit (VIU) pest.                                                                                                                                   |
| s      | DT member number.                                                                                                                                                      |
| t      | DTU number.                                                                                                                                                            |
| u      | Unit type.                                                                                                                                                             |
| v      | Member number.                                                                                                                                                         |
| w      | EST member number.                                                                                                                                                     |
| x      | Echo Suppressor Unit (ESU) number.                                                                                                                                     |
| y      | DIF member number.                                                                                                                                                     |
| z      | Digital interface unit.                                                                                                                                                |
| a1     | Digital group number.                                                                                                                                                  |
| DBOV   | Digital Buffer Overflow.                                                                                                                                               |
| APUB   | Autonomous peripheral unit base. This pest will only be printed with the UCL option and is not used by the DIF. Therefore, the setting of this pest should be ignored. |
| b1     | SCS member number.                                                                                                                                                     |
| c1     | SCU number.                                                                                                                                                            |

#### 4. ACTION TO BE TAKEN

If this response came as a result of the input message OP:PERIFINH with the UCL option, then there is no action to take because this is a debugging aid for Bell Telephone Laboratories (BTL) use only.

If this response did not come as a result of the message, then pests that cannot be accounted for because of fault recovery actions, growth procedures, or repair procedures, should be removed via an ALW:0 input message.

#### 5. REFERENCES

PIDENT  
ERATPEST

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Input Messages  
ALW: 0  
OP: PERIFINH

SEE PROPRIETARY NOTICE ON COVER PAGE



ID ..... OP:PHSEHST  
WORK CENTER.. MOC, TEC, TOC  
GENERIC ..... 4E19 and later  
APPLICATION .. 4E  
TYPE ..... Output

### 1. FORMAT

OP:PHSEHST, a  
ERROR HISTORY ENTRIES:  
ENTRY1:  
bbbbbbbbb cccccccc dddddddd eeeeeeee ffffffff gggggggg  
hh:hh:hh ii/ii/ii  
•  
•  
•  
ENTRY16:  
bbbbbbbbb cccccccc dddddddd eeeeeeee ffffffff gggggggg  
hh:hh:hh ii/ii/ii

### 2. REASON FOR OUTPUT

To print the response to an OP:PHSEHST input request to dump SICOPRGM core or disk error history. This message will display a dump of 16 records from the file requested. The contents dumped are the error history records that SICO uses for escalation.

### 3. VARIABLE FIELD DEFINITIONS

- a CORE-entries are the core error history records that are most recent. FS entries are the oldest file store (FS) error history records.
- b An octal word, whose bit positions identify raw data from an entry in an error history record.
- Bits 00-06 — Source that requested the action:
- Bit 00 — Software integrity control (SIC) program.
  - Bit 01 — Overload (OVL) control.
  - Bit 02 — System integrity monitor (SIM) program.
  - Bit 03 — System integrity monitor on base level (SIMB) program.
  - Bit 04 — Operational (OPER).
  - Bit 05 — Maintenance (MAINT) program.
  - Bit 06 — Manual (MAN) request.
- Bits 07-10 — Multiple or redundant request (MORR) code.  
(See output message REPT:PHASE-INF, Tables 1, 2, and 3.)

SEE PROPRIETARY NOTICE ON COVER PAGE

- Bits 12-23 — Original phase trigger in octal if trigger (variable f) equals 39.
- c An octal word, the same as b . . . b, whose bit positions 00-23 display the contents of CAR, from the audit auxiliary (AUX) address or the internal fail address when it would appear on the REPT:PHASE-INF output message.
- d An octal word, the same as b . . . b, whose contents identify the action requested by the user and the actual action taken by the system.
- Bits 00-11 — The action requested by the user. This number will be either 1-4 or some value over 115. If its value is over octal 115, subtract octal 115 from the number to obtain the audit number (e.g., if the value is octal 124, subtract octal 115 to obtain an audit number of octal 7).
- Bits 12-23 — The level of system recovery action taken by the system, which may vary from the action requested by the user. This value will be a number from 1 to 4.
- e Octal word, the same as b, whose contents are defined in COMPOOL.
- Unit type and member number of a trigger 37 phase encoded in bits 0-13.
- Bits 00-11 — See symbol AS4SAB\_AII
- Bits 12-23 — See symbol AS4SAB\_ECI
- f An octal word, the same as b...b, whose contents identify the trigger.
- Bits 00-11 — The trigger in decimal. See Table 2, in the REPT:PHASE-INF output message.
- Bits 12-23 — Unused.
- g Maintenance file number (MFNUM) of this phase entry.
- h Time of error for this entry.
- i Date of entry.

**NOTE:** If any entry has a nonformatted time and date, the phase represented by the entry was not completed or was interrupted by the phase represented by the following entry.

#### 4. ACTION TO BE TAKEN

This output message is informational. Any action taken must be based on the specific information printed and the technical impact of that data.

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## 5. REFERENCES

PIDENT  
SICOPRGM

Practice 234-180-210, *Software Integrity - Monitor and Control Programs - Description*

Input Messages  
OP:ERAPDATA  
OP:PHSEHST

Output Message  
REPT:PHASE - INF

SEE PROPRIETARY NOTICE ON COVER PAGE



ID ..... OP:PMOS  
WORK CENTER.. MOC, TEC  
GENERIC ..... 4E24 Rel. 2 and later  
APPLICATION .. 4E  
TYPE ..... Output

## 1. FORMAT

- [1] OP:PMOS; {TCB|TRC|CHAIN}
- [2] OP:PMOS; TCB a  
TASK CONTROL CLOCK  
TCB NUMBER TASK ID TASK NAME TASK UTMN  
b c {d|e} f  
. . .  
. . .  
. . .
- [3] OP:PMOS; TRC a  
TIMED ROUTINE COORDINATOR  
TRC NUMBER TASK ID TASK NAME TASK UTMN  
g c {d|e} f  
. . .  
. . .  
. . .
- [4] OP:PMOS; CHAIN a  
TASKS IN CHAIN  
TCB NUMBER TASK ID TASK NAME PARENT TASK CHILD TASK  
b c {d|e} h i  
. . .  
. . .  
. . .

## 2. REASON FOR OUTPUT

Dumps the task-related information from the Task Control Block (TCB) or the Timed Routine Coordinator (TRC). It also outputs information on linked tasks. Each message line contains the TCB number, task Identification (ID), task name, task Unit Type And Member Number (UTMN), task held by number, or task holds number. Fifteen lines are printed out at one time. The stage of the output is indicated by the a value.

**NOTE:** Only one type of information is received per output message, that is, only the TCB, TRC, or CHAIN information block(s) prints out in one message.

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### 3. VARIABLE FIELD DEFINITIONS

|   |                                                                                                                                                                                                                                                                                                                                                                                                   |
|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| a | Output indicator:<br><br>MSG COMPLETED — Message completed. Printed at the last block of a multiple-block message or printed at the block of a single-block message.<br><br>MSG IP — Message in progress. Printed at the second block through the second to last block of a multiple block message.<br><br>MSG STARTED — Message started. Printed at the first block of a multiple-block message. |
| b | TCB number in octal form.                                                                                                                                                                                                                                                                                                                                                                         |
| d | Task ID value in octal form. Refer to Table 1 for definition of task ID.                                                                                                                                                                                                                                                                                                                          |
| e | Task ID name.                                                                                                                                                                                                                                                                                                                                                                                     |
| f | Task unit type and member number in octal form.                                                                                                                                                                                                                                                                                                                                                   |
| g | TRC number in octal form.                                                                                                                                                                                                                                                                                                                                                                         |
| h | TCB number of the parent task (the task that it is linked from).                                                                                                                                                                                                                                                                                                                                  |
| i | TCB number of the child task (the task that it is linked to).                                                                                                                                                                                                                                                                                                                                     |

### 4. ACTION TO BE TAKEN

None.

### 5. REFERENCES

PIDENTs  
PMOSIOHN  
PMOSMAIN

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TABLE 1

| DEFINITIONS OF TASK ID |                   |                                                                                                          |
|------------------------|-------------------|----------------------------------------------------------------------------------------------------------|
| Number                 | Task ID           | Definition                                                                                               |
| 0                      | PUFR              | Peripheral unit fault recovery.                                                                          |
| 1                      | TNFR_ISOL         | Cost reduced Time Slot Interchange (TSI) fault isolation task ID.                                        |
| 2                      | SYNC_ISOL         | Clock Synchronous (SYNC) unit fault isolation task ID.                                                   |
| 3                      | DIFR_ISOL         | Digital Interface Frame (DIF) / Digital Interface Frame-Export 1 (DIF-E1) frame fault isolation task ID. |
| 4                      | SCSFR_ISOL        | Service Circuit System (SCS) frame fault isolation task ID.                                              |
| 5                      | FRDIMREQ          | Frame Request And Diagnostic Interface (FRDI) manual request task ID.                                    |
| 6                      | FRDILAUD          | FRDI lamp audit interface.                                                                               |
| 7                      | FRDILAMP          | FRDI lamp control task ID.                                                                               |
| 10                     | FRDIPCSC          | FRDI power control switch task ID.                                                                       |
| 11                     | XTSI_PSC_FRDIPCSC | Expanded Time Slot Interchange (XTSI) Power Control Switch task ID                                       |
| 12                     | FRDIPRE           | FRDI pre-diagnostic task ID.                                                                             |
| 13                     | FRDIPOST          | FRDI post diagnostic task ID.                                                                            |
| 14                     | FRDISWCH          | FRDI switch task ID.                                                                                     |
| 15                     | TOPIC             | Toll Peripheral Configuration Program (TOPIC) control task ID.                                           |
| 16                     | FERA_FREQ         | Failure Error Analysis (FERA) FREQ task ID.                                                              |
| 17                     | FERA_ROUTINE      | FERA routine task analysis task ID.                                                                      |
| 20*                    | FERA_DF_AUDIT     | FERA data file audit task ID.                                                                            |
| 21*                    | FERA_TST_RTN      | FERA timed states task ID.                                                                               |
| 22*                    | FERA_DF_TIMEOUT   | FERA data file timeout task ID.                                                                          |
| 23                     | BOOTCNTL          | Bootstrap control task ID.                                                                               |
| 24                     | DIF_BOOTSTRAP     | DIF or DIF-E1 bootstrap task ID.                                                                         |
| 25                     | SCS_BOOTSTRAP     | Service Circuit System (SCS) bootstrap task ID.                                                          |
| 26                     | DIF_PEST_UPDATE   | Digital Interface Frame (DIF) pest update task ID.                                                       |
| 27                     | SCS_PEST_UPDATE   | SCS pest update task ID.                                                                                 |
| 30*                    | DIFR_TIMED_AUDIT  | DIF timed audit task ID.                                                                                 |
| 31*                    | SCS_TIMED_AUDIT   | SCS timed audit task ID.                                                                                 |

**NOTE:** An asterisk (\*) beside a task ID indicates a timed entry that the Peripheral Maintenance Operating System (PMOS) timed routine coordinator has scheduled to run routinely.

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TABLE 1 (continued)

| DEFINITIONS OF TASK ID |                  |                                                                                                       |
|------------------------|------------------|-------------------------------------------------------------------------------------------------------|
| Number                 | Task ID          | Definition                                                                                            |
| 32                     | CLK_SWIP         | Establish clock switch in progress task ID. (Applies only to DIF frames.)                             |
| 33                     | RUN_ESTAB_CLK    | Run establish clock task ID. (Applies only to DIF frames.)                                            |
| 34*                    | AUTON_MESSDISP   | Autonomous message dispenser task ID.                                                                 |
| 35                     | MESSDISP_POLLING | Directed macro polling message dispenser task ID.                                                     |
| 36                     | PMOS_TTY         | Peripheral Maintenance Operating System (PMOS) Teletypewriter (TTY) input and output message task ID. |
| 37                     | MEDIC_AUDIT      | Message dispenser audit task ID.                                                                      |
| 40                     | TIMED_ENTRY      | PMOS timed routine coordinator task ID.                                                               |
| 41                     | DIF_PEST_APUFS   | Task ID for pesting all Autonomous Peripheral Unit Failure (APUF) in all DIF frames.                  |
| 42                     | DIF_PST_CLEANUP  | Task ID for cleaning up pests in all DIF frames.                                                      |
| 43                     | SCS_PST_CLEANUP  | Task ID for cleaning up pests in all SCS frames.                                                      |
| 44                     | SCS_PEST_APUFS   | Task ID for pesting APUFs in all SCS frames.                                                          |
| 45                     | DIF_UNPEST_BOVFL | Task ID for unpestering DIF buffer overflow.                                                          |
| 46                     | SCS_UNPEST_BOVFL | Task ID for unpestering SCS buffer overflow.                                                          |
| 47                     | DIFEPUMP         | Task ID for pumping the DIF frames from 3B disk.                                                      |
| 50*                    | UTIL_AUDIT       | PMOS utilities audit task ID.                                                                         |
| 51                     | PREDFN_OD_ALARMS | FRDI pre-defined office-dependent alarm audit task ID.                                                |

**NOTE:** An asterisk (\*) beside a task ID indicates a timed entry that the Peripheral Maintenance Operating System (PMOS) timed routine coordinator has scheduled to run routinely.

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TABLE 1 (continued)

| DEFINITIONS OF TASK ID |                        |                                                                                                                               |
|------------------------|------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Number                 | Task ID                | Definition                                                                                                                    |
| 52                     | PARALLEL_DIF_POLLING   | Task ID for parallel polling all Maintenance Buffer (MB) responses from DIF frames that resulted from sending a single macro. |
| 53                     | PARALLEL_SCS_POLLING   | Task ID for parallel polling all MB responses from SCS frames that resulted from sending a single macro.                      |
| 54                     | SCS_ANN_UPD_RESP_HNDLR | Task ID of the SCS announcement update autonomous message dispenser response handler.                                         |
| 55                     | SCS_COPY_RESP_HNDLR    | Task ID of the SCS disk copy utility autonomous message dispenser response handler.                                           |
| 56                     | SCS_FORMAT_RESP_HNDLR  | Task ID for the SCS disk format utility autonomous message dispenser response handler.                                        |
| 57                     | SCS_DISK_COPY          | Task ID for the SCS disk format utility Input / Output (I/O) interface.                                                       |
| 60                     | SCS_DISK_FORMAT        | Task ID for the SCS disk copy utility I/O interface.                                                                          |
| 61                     | SCS_DISK_LOAD          | Task ID for the SCS disk load utility I/O interface.                                                                          |
| 62                     | SCS_DISK_DUMP          | Task ID for the SCS disk load utility I/O interface.                                                                          |
| 63                     | SCS_START_3B_COPY      | Task ID for the SCS start disk copy from 3B disk.                                                                             |
| 64                     | COPY3B_SCS_FILES       | Task ID for the SCS copy from a 3B disk file to SCU disks.                                                                    |
| 65                     | SCS_CONTR_GEN_UPD      | Task ID for the SCS controller generic update.                                                                                |
| 66                     | FERA_UNPEST_APUT       | Task ID for unpestering Autonomous Peripheral Unit Trouble (APUT) in DIF and SCS frames.                                      |
| 67                     | SCS_BP_MEM_UTIL        | Task ID for the SCS breakpoint and memory utility.                                                                            |

**NOTE:** An asterisk (\*) beside a task ID indicates a timed entry that the Peripheral Maintenance Operating System (PMOS) timed routine coordinator has scheduled to run routinely.

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TABLE 1 (continued)

| DEFINITIONS OF TASK ID |                           |                                                                                                           |
|------------------------|---------------------------|-----------------------------------------------------------------------------------------------------------|
| Number                 | Task ID                   | Definition                                                                                                |
| 70                     | SCS_BP_RESP_HNDLR         | Task ID for the SCS breakpoint autonomous message dispenser response handler.                             |
| 71                     | XTSI_BOOTCNTL             | Task ID for XTSI bootstrap control.                                                                       |
| 72                     | XTSI_BOOTSTRAP            | XTSI bootstrap task ID.                                                                                   |
| 73                     | XTSI_PEST_UPDATE          | XTSI pest update task ID.                                                                                 |
| 74                     | PARALLEL_XTSI_POLLING     | Task ID for parallel polling all MB responses from XTSI frames that resulted from sending a single macro. |
| 75                     | XTSI_DISK_COPY            | Task ID for XTSI disk copy I/O utility interface.                                                         |
| 76                     | XTSI_DISK_DUMP            | Task ID for XTSI disk dump I/O utility interface.                                                         |
| 77                     | XTSI_DISK_LOAD            | Task ID for XTSI disk load I/O utility interface.                                                         |
| 100                    | XTSI_START_3B_COPY        | Task ID for the XTSI start copy from the 3B disk.                                                         |
| 101                    | COPY3B_XTSI_FILES         | Task ID for the XTSI copy from a 3B disk file to flash memory.                                            |
| 102                    | XTSI_START_GEN_UPD        | Task ID for XTSI start generic update.                                                                    |
| 103                    | XTSI_READ_CONTR_MEM_UTIL  | Task ID for XTSI read controller memory I/O utility.                                                      |
| 104                    | XTSI_WRITE_CONTR_MEM_UTIL | Task ID for XTSI write controller memory I/O utility.                                                     |
| 105                    | XTSI_READ_PSC_MEM_UTIL    | Task ID for XTSI read (PSC) (D3U, SPU, IBU subunit) memory I/O utility.                                   |
| 106                    | XTSI_WRITE_PSC_MEM_UTIL   | Task ID for XTSI write PSC (D3U, SPU, IBU subunit) memory I/O utility.                                    |
| 107                    | XTSI_BP_UTIL              | Task ID for XTSI breakpoints utility.                                                                     |
| 110                    | XTSI_ORD_LPBK             | Task ID for XTSI DS1/DS3 loopback utility.                                                                |
| 111*                   | XTSI_AUDIT_LPBK           | Task ID for XTSI timed audit loopback.                                                                    |
| 112                    | XTSI_DIAG_REQ             | Task ID for XTSI diagnostic request.                                                                      |
| 113                    | DIF_INITDG                | Task ID for initializing digroups on a DIF.                                                               |

**NOTE:** An asterisk (\*) beside a task ID indicates a timed entry that the Peripheral Maintenance Operating System (PMOS) timed routine coordinator has scheduled to run routinely.

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TABLE 1 (continued)

| DEFINITIONS OF TASK ID |                                               |                                                                       |
|------------------------|-----------------------------------------------|-----------------------------------------------------------------------|
| Number                 | Task ID                                       | Definition                                                            |
| 114                    | XTSI_FILE_COPY                                | Task ID for XTSI file copy.                                           |
| 115                    | XTSI_FILE_DUMP                                | Task ID for XTSI file dump.                                           |
| 116                    | XTSI_FILE_LOAD                                | Task ID for XTSI file load.                                           |
| 117                    | XTSI_PEST_APUFS                               | Task ID for updating APUF pests for all XTSI frames.                  |
| 120                    | XTSI_PST_CLEANUP                              | Task ID for the cleanup of APUF pests for all XTSIs.                  |
| 121                    | Internal PMOS task ID (not available for use) | Task ID designated as a spare task by the PMOS task table program.    |
| 122                    | Spare TASK ID                                 | Spare PMOS task ID slot available for future use.                     |
| 123                    | Spare TASK ID                                 | Spare PMOS task ID slot available for future use.                     |
| 124                    | XTSI_SPU_MULTI_RRES                           | TASK ID for multiple re-restore of SPUs (updating configuration data) |
| 125                    | Spare TASK ID                                 | Spare PMOS task ID slot available for future use.                     |
| 126                    | Spare TASK ID                                 | Spare PMOS task ID slot available for future use.                     |
| 127                    | XTSI_UPDATE_PSC_PARMS                         | XTSI update PSC parameters request task ID                            |
| 130                    | XTSI_PM_24HR_SYNC                             | XTSI PM 24HR synchronize request task ID                              |
| 131                    | XTSI_SU_ODA_AUD                               | XTSI subunit Office Data Administration (ODA) audit task ID           |
| 132*                   | XTSI_SCHED_SU_ODA_AUD                         | XTSI schedule subunit ODA audit task ID                               |
| 133                    | XTSI_UNPEST_APUT                              | Task ID for unpesteing APUT in XTSI frames.                           |

**NOTE:** An asterisk (\*) beside a task ID indicates a timed entry that the Peripheral Maintenance Operating System (PMOS) timed routine coordinator has scheduled to run routinely.

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ID ..... OP:PMSTAT  
WORK CENTER.. MOC, TEC, TOC  
GENERIC ..... 4E22 and later  
APPLICATION .. 4E  
TYPE ..... Output

## 1. FORMAT

OP:PMSTAT,{OTAN a|TAN b|CIN c|TSN d|XTSI e,D3U f,DG g},NUM h [i] SEG j

|     |      |      |       |       |        |       |       |
|-----|------|------|-------|-------|--------|-------|-------|
| BIN | CV-P | ES-P | SES-P | SAS-P | AISS-P | CSS-P | UAS-P |
| k   | l    | m    | n     | o     | p      | q     | r     |

s

## 2. REASON FOR OUTPUT

To output the status of the Digital Signal Level 1 (DS1) Performance Measurement registers in Digital Signal Level 3's (DS3s), either a DS1s or multiple DS1s, in which case more than one of these messages will be outputted, or, to give the reason for rejection of the input message.

## 3. VARIABLE FIELD DEFINITIONS

- a Octal Trunk Appearance Number (OTAN) of any trunk in the DS1.
- b TSI-SPC-PORT-CHANNEL Trunk Appearance Number (TAN) of any trunk in the DS1:
- |           |                                                                                |
|-----------|--------------------------------------------------------------------------------|
| TSI —     | A 2-digit decimal number indicating the TSI member number (00-63).             |
| SPC —     | A 1-digit decimal number indicating Signaling Processor (SP) of TSI (0-1).     |
| PORT      | A 1-digit decimal number indicating port of Time Slot Interchange (TSI) (0-7). |
| CHANNEL — | A 3-digit decimal number indicating channel (0-127).                           |
- c Circuit Identification Name (CIN) of any trunk in the DS1.
- d A Trunk Scanner Number (TSN) is broken down into SP-ROW-POINT:
- |         |                                                                   |
|---------|-------------------------------------------------------------------|
| SP —    | A 2-digit decimal number indicating the pseudo SP number (00-31). |
| ROW —   | A 3-digit decimal number indicating the row in the SP (000-255).  |
| POINT — | A 2-digit decimal number indicating the point in the row (00-15). |

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- e Expanded Time Slot Interchange (XTSI) number (0-63).
- f Digital Signal Level 3 Unit (D3U) (0-5).
- g Digroup (DG) (1-28).
- h Number of consecutive DS1s requested.
- i Status of request:  
MSG COMPL — Request was honored.  
MSG IP — Request in progress.  
MSG START — Request was started.  
REJECTED NO XTSIS — Request denied, no XTSIs.  
REJECTED NOT ON XTSE — Request denied, input trunk not on XTSE.  
STOPPED ABORTED — Switch in overload.  
STOPPED INTERNAL ERROR — Terminated due to receipt of mismatched data.  
STOPPED MAN — Terminated output.
- j Message segment number.
- k Impairment register set:  
0 — Register 0 contains the impairment count for the parameter during current 15 minute interval.  
1-31 — The register numbered (1 - 31) shall contain the impairment count during the 15 minute interval immediately preceding the 15 minute of register minus one.  
32 — Contains the impairment count for the parameter during the 15 minute interval immediately preceding the 15 minute interval of register 31.  
33 — This register contains the impairment count for the parameter during the current 24-hour interval, which will nominally begin at midnight to 0200 most of the time.  
34 — This register contains the impairment count for the 24-hour interval immediately preceding the 24-hour interval of register 33 (i.e. yesterday).  
35 — Contains the impairment count for the parameter during the 24-hour interval immediately preceding the 24-hour interval of register 34.
- NOTE:** A maximum of nine impairment register sets will be printed per segment.

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**NOTE:** NVD, Non-Valid Data, may appear as output in place of numerical values for any of the registers, variables *l* through *r*. If large numbers of NVDs are in evidence, reschedule the PM register request; this is because there is a remote possibility that some of the registers may contain old data whereas others may contain updated data.

**NOTE:** The value 16434824 (0(76543210)) in a register reflects a failure condition:

1. Non-XTSI frame requested.
2. Inputs passed in are invalid or out of range:
  1. non-D3U
  2. D3U > 5
  3. Digroup Number > 28
  4. Register Number > 35
3. Duplex-failed XTSI frame.
4. D3U is not operational.
5. D3U is not In-Service or (D3U is OOS and NOT Protection Switched.)
6. Request for Performance Measurement (PM) data from XTSI frame has failed.

|          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>l</i> | Coding Violations from DS1 superframe format frame synchronization bit errors or extended superframe format CRC-6 errors.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <i>m</i> | Errored Seconds - Path. A measure of the number of one-second intervals where events such as frame synchronization errors, CRC-6 errors, Severely Errored Frame (SEF) defects, Alarm Indication Signals (AIS) or controlled slips occurred.                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <i>n</i> | Severely Errored Seconds - Path. A measure of the number of one-second intervals where any of the following occur: <ol style="list-style-type: none"><li>1. DS1 superframe format with F(t) bit errors being measured, that four or more frame synchronization bit errors occurred.</li><li>2. DS1 superframe format with both F(t) and F(s) bit errors that four or more frame synchronization bit errors occurred. being measured, eight or more frame synchronization bit errors occurred.</li><li>3. DS1 extended superframe format with 320 or more CRC-6 errors.</li><li>4. One or more Severely Errored Frame defects.</li><li>5. One or more Alarm Indication Signals.</li></ol> |

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- o SEF/AIS Seconds - Path. A measure of the number of one second intervals where Severely Errored Frame or Alarm Indication Signal defects occur.
- p AIS Seconds - Path. A measure of the number of one second intervals where Alarm Indication Signals occur.
- q Controlled Slip Seconds - Path. A measure of the number of one second intervals where one or more controlled slips occurred.
- r Unavailable Seconds - Path. A measure of the number of one second intervals in which the DS1 path is unavailable i.e. at the onset of 10 contiguous SESs. The 10 contiguous SESs are included in the unavailable time.
- s Time of day.

#### **4. ACTION TO BE TAKEN**

None.

#### **5. REFERENCES**

PIDENTs  
TMTCXTSI

Input Message  
OP:PMSTAT

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ID ..... OP:PSSTATUS  
WORK CENTER.. MOC  
GENERIC ..... 4E21 and later  
APPLICATION .. 4E,1B  
TYPE ..... Output

## 1. FORMAT

```
[1] OP:PSSTATUS
 PROGRAM STORE STATUS
 ACTIVE CC IS a, STANDBY CC IS bbb
 ACTIVE BUS IS c, STANDBY BUS IS ddd
 MEMN MCODE STATUS SUSP FF [SOAK DAYS]
 e f g [h] i [j]

 e f g [h] i [.]
```

```
[2] OP:PSSTATUS k
```

## 2. REASON FOR OUTPUT

There are two possible formats for this message:

Format [1] prints the current program store (PS) MCODE status of the system.

Format [2] reports acceptance or denial of a master control complex (MCC) request to print the status of the PS community. If the request has been accepted, a format [1] message reporting the status of the PS community will print later.

## 3. VARIABLE FIELD DEFINITIONS

- a                Number of the active central control (CC) (0 - 1).
- b                Status of the standby CC:  
                   INS — In service.  
                   OOS — Out-of-service.
- c                Program store (PS) bus used by the active CC (0 - 1).
- d                Status of the standby PS bus:  
                   INS — In service.  
                   OOS — Out-of-service.
- e                Member number (MEMN) (0 - 13).
- f                MCODE for the given member number (772, 773, or 777).

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- g Status of the member number:
- ACT DUPLEX — Active and duplex.
  - ACT SIMPLEX — Active and simplex.
  - FRZ — Frozen state.
  - OOS — Out-of-service.
  - OOS GROWTH — Growth state, out-of-service.
  - OOS SGROWTH — Special growth, out-of-service.
  - OOS UPDATE — Update mode, out-of-service.
  - SBY — Standby.
- h Suspect member number (1, 2, or blank).
- i Flip-flop number, indicating the states of the RO, RS1, and RS0 flip-flops. Octal (0-7), represents 3 binary bits indicating the states of the RO,S1,S0 where RO is the most significant bit, S1 is the second to most significant bit and S0 is the least significant bit.
- ( for example: if i= octal 5, i.e binary 1 0 1 )
- ```

      ---
      | | |
      | | | S0
      | | |
      | | | S1
      | | |
      | | | RO
  
```
- States for RO:
- 0 — This MEMN is receiving on PS BUS 0
 - 1 — This MEMN is receiving on PS BUS 1
- States for S0:
- 0 — This MEMN is NOT sending on PS BUS 0
 - 1 — This MEMN is sending on PS BUS 0
- States for S1:
- 0 — This MEMN is NOT sending on PS BUS 1
 - 1 — This MEMN is sending on PS BUS 1
- j Soak days remaining. A store is placed on the soak list when it is first grown to the operational (OPER) equipage state. A store can also be placed on the soak list manually by use of the SET:SOAK command. A store on the soak list is not considered to be soaking unless it is in service.
- The soak days value is decremented for each soaking store at the beginning of the routine exercise (REX) period. Soak days will not be decremented for stores that are out-of-service (OOS) at the start of their respective REX period.

SEE PROPRIETARY NOTICE ON COVER PAGE

NOTE: The SOAK DAYS column heading will print only when there are stores on the soak list.

k

The MCC request disposition:

REQUEST ACCEPTED — The MCC request has been accepted and the maintenance job has been scheduled.

REQUEST DENIED - FAC BUSY RETRY LATER — The MCC request has been denied because the job queue was full.

4. ACTION TO BE TAKEN

If the output is a current status output, then no action is required.

If the output is the result of an MCC request to print the status of the PS community:

REQUEST ACCEPTED — Wait for current status message.

REQUEST DENIED - FAC BUSY RETRY LATER — Try again later.

5. REFERENCES

PIDENTs
MIRA
PSFRBSLV
XAPP

Practice 254-280-210, *Maintenance Control Program*
Practice 254-280-310, *Fault Recovery Program*

Input Message
OP:PSSTATUS
RMV:PS
RST:PS
SET:PS
SET:SOAK

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:RASTAT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

```
OP:RASTAT a RACHAN b c MATE d
          RACHAN e f MATE g
          .
          .
          .
          RACHAN e f MATE g
```

2. REASON FOR OUTPUT

To verify the state of each channel in a recorded announcement machine. This message is stimulated either via input message OP:RASTAT or by depressing the recorded announcement button at the master control complex (MCC).

3. VARIABLE FIELD DEFINITIONS

a	Announcement machine number.
b, e	Channel number.
c, f	State of the announcement channel: ACT — Channel is active. GTH — Channel is in growth. OOS — Channel is out-of-service. SBY — Channel is standby. UNAS — Channel is unassigned (it is not equipped in the frame).
d, g	State of the mate announcement channel.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
SVCTRAMP

SEE PROPRIETARY NOTICE ON COVER PAGE

Practice 201-520-101, *Common Systems Recorded Announcement Frame (CSRAF) - Description*
Practice 201-520-301, *Common Systems Recorded Announcement Frame (CSRAF) - Operating Procedures*
Practice 201-520-501, *Common Systems Recorded Announcement Frame (CSRAF) - Tests and Trouble Analysis*
Practice 201-520-701, *Common Systems Recorded Announcement Frame (CSRAF) - Requirements and Adjusting Procedures*
Practice 234-110-090, *Recorded Announcement Frame - Description*
Practice 234-110-091, *Recorded Announcement Frame - Theory*
Practice 234-180-242, *Service Circuit Test Program (SVCT) - Description*

Input Message
OP:RASTAT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:RCBORNU
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

OP:RCBORNU a

BUFFER CONTAINS THE FOLLOWING ORNU:

[b]

cccccc dddddd eeeeeee fffffff gggggg hhhhhh iiiiii jjjjjj kkkkkk llllll

•
•
•

cccccc dddddd eeeeeee fffffff gggggg hhhhhh iiiiii jjjjjj kkkkkk llllll

2. REASON FOR OUTPUT

To report the order numbers of recent change messages that are in the recent change (RC) buffer in response to an OP:RCBORNU input message.

3. VARIABLE FIELD DEFINITIONS

- a Partitioned message header:
- MSG COMPL — Final partition. Message is complete.
- MSG IP — Following partitions.
- MSG STARTED — First of several partitions required to print the data set.
- b NONE — Buffer is empty.
- c-l List of order numbers that are in the buffer.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
RCMAMAIN

Input Message
OP:RCBORNU

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:RCBSPACE
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

OP:RCBSPACE COMPLETED
a BLOCKS REMAINING IN BUFFER

2. REASON FOR OUTPUT

To report the available storage space in the recent change disk message buffer in response to an OP:RCBSPACE input message.

3. VARIABLE FIELD DEFINITIONS

a Number of 32-word blocks remaining in the disk message buffer.
 (Maximum is 767 blocks. Blocks are not necessarily contiguous.
 Maximum number of orders that can simultaneously reside in the
 buffer is 511.)

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
RCMAMAIN

Input Message
OP:RCBSPACE

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:RCRORNU
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

OP:RCRORNU MSG STOPPED
ERROR a, ADDRESS bbbbbbbb,
c

2. REASON FOR OUTPUT

To print when an error is detected in processing an OP:RCRORNU input message.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | Decimal number used for error identification (numbers defined as states for the data pool item RC4ERRNUM). |
| b | Program address associated with the problem. |
| c | Description of the problem encountered. |

4. ACTION TO BE TAKEN

Investigate the problem using the information given and retry the message.

5. REFERENCES

PIDENT
RCMU00

Input Message
OP:RCRORNU

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:RCRORNU-ROL
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

OP:RCRORNU a
ROLLBACK AREA ORNU b THE LATEST TAPE:
ORNU FORM ORNU FORM ORNU FORM ORNU FORM
[cccccc ddd ccccc ddd ccccc ddd ccccc ddd]
•
•
•

2. REASON FOR OUTPUT

To print a list of recent change order numbers contained in the rollback area. It also gives the operation or form number associated with each block in the rollback area.

NOTE: If no entries are printed this does not always mean that no entries exist, e.g., no entries print in response to a OP:RCRORMU, LAST 0! input message, even though entries do exist.

3. VARIABLE FIELD DEFINITIONS

- a Partitioned message header:
- MSG COMPL — Message is completed.
 - MSG IP — Message is in progress.
 - MSG STARTED — Message is started.
- b Defines when the entries were made in the rollback area:
- BEFORE — Identifies entries made before the latest tape dump.
 - SINCE — Identifies entries in the rollback area made since the latest translation tape dump was made.
- c The order numbers in the rollback area.
- d The form number associated with each order number.

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
RCMAMAIN
RCMU00

Input Message
OP:RCRORNU

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:RINGMNTR
WORK CENTER.. MAC, MOC, NMOC, TEC,
TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

OP:RINGMNTR

STREAM ACTIVE a NOTRKHUNT b RLCTO c
IAM MC3 d DCISRET e

TYPE	DPC	CIN	
MC3	fff ff f fff	gggg gggg gg gg ggg ggg	
TYPE	DPC	CIN	COUNT
RLCTO	hhh hh h hhh	iiii iiii ii ii iii iii	jjjjjjjj
DCISRET	kkkkkkkk	EXRLCTO llllllll	
	SENT	RCVD	
DCISMSG	mmmmmmmm	nnnnnnnn	
ISUPIAM	oooooooo	pppppppp	
ISUPMSG		qqqqqqqq	
DATA: RAW	COUNTS		
rrrrrrrr	ssssssss	tttttttt	
uuuuuuuu	vvvvvvvv	wwwwwww	
xxxxxxxx	yyyyyyyy	zzzzzzzz	

2. REASON FOR OUTPUT

To indicate the status as well as the traffic handling capabilities of the Ring. These indicators are monitored every second by the ring service monitor in the SIMRMNTR PIDENT. This message can be output for the following reasons:

- 1) OP:RINGMNTR input at the teletypewriter (TTY).
- 2) To sound a critical alarm when conditions indicate.
- 3) To sound a major clearing alarm when conditions indicate.
- 4) To sound a spurt of minor alarm when conditions indicate.

3. VARIABLE FIELD DEFINITIONS

a Activity of the stream:

N — No the stream is not active.

Y — Yes the stream is active.

SEE PROPRIETARY NOTICE ON COVER PAGE

- b Status of the no-trunk-hunt bit:
N — No it is not critical.
Y — Yes it is critical.
- c Release complete timeouts:
N — No they are not critical.
Y — Yes they are critical.
- d Initial address messages that result in activation of machine congestion level 3 (MC3):
N — No they are not critical.
Y — Yes they are critical.
- e Destination common channel signaling system (DCIS) returned messages for user or network failure:
N — No they are not critical.
Y — Yes they are critical.
- f Destination point code associated with the initial address message (IAM) MC3 return:
- g Circuit identification number associated with the trunk scanner number of the returned destination point code. This will be null if trunk scanner number (TSN) was invalid.
- h Destination point code associated with the release complete timeout.
- i Circuit identification number associated with the trunk scanner number of the returned destination point code. This will be null if the TSN was invalid.
- j The count of release complete timeouts that have occurred for this destination point code.
- k The number of DCIS messages that have been returned for user or network failure.
- l A count of the excessive release complete timeouts that have occurred. This count will only be incremented after three other release complete timeouts have occurred for three different destination point codes.
- m Count of DCIS messages sent.
- n Count of DCIS messages received.
- o Count of integrated services digital network (ISDN) user part (ISUP) IAM messages sent.
- p Count of ISUP IAM messages received.
- q Count of ISUP messages received.
- r Count of ISUP messages ignored.

SEE PROPRIETARY NOTICE ON COVER PAGE

s	Count of ISUP messages not implemented.
t	Count of all ISUP messages returned.
u	Count of ISUP messages received for out-of-range TSN.
v	Count of ISUP messages received for unassigned trunk.
w	Count of ISUP messages received for out-of-range TSN (not 0).
x	Count of ISUP messages received for TSN = 0.
y	Count of unknown ISUP message types.
z	Count of unknown ISUP message types returned.

4. ACTION TO BE TAKEN

This output message is informational. Any action must be taken on the specific information printed and the technical impact of the data.

5. REFERENCES

PIDENT
SIMRMNTR

Input Message
OP:RINGMNTR

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:RTSTAT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

OP:RTSTAT
RT SIDE 0 STATUS a [b]
20HZ GENERATOR IS c
RT SIDE 1 STATUS a [b]
20HZ GENERATOR IS c

2. REASON FOR OUTPUT

To output the status of each side of the ringing and tone. It is a response to either a OP:RTSTAT input message teletypewriter (TTY) request or a master control complex (MCC)

3. VARIABLE FIELD DEFINITIONS

- a Indication of present status of the designated side:
- | | |
|-----|--------------------------------|
| ACT | — In service, carrying a load. |
| OOS | — Out-of-service. |
| SBY | — In service, standing by. |
- b Indication of why side is OOS (output only on an OOS state):
- | | |
|----------|---------------|
| FUSE ALM | — Fuse alarm. |
| PWR OFF | — Power off. |
- c Indication of present status of the designated side:
- | | |
|-----|--------------------------------|
| ACT | — In service, carrying a load. |
| OOS | — Out-of-service. |

4. ACTION TO BE TAKEN

None - Message is informational.

5. REFERENCES

PIDENT
SVCTRTPP

Practice 234-180-242, *Service Circuit Test Program (SVCT) - Description*

Input Message
OP:RTSTAT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:CHAN
WORK CENTER.. MOC
GENERIC 4E19 Rel. 3 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

OP:CHAN;LINKSTAT

LINK	CHAN	NAME	MEMN	LINK STATE	GRO	NSN	DATA	TYPE
a	bb	cccccc	d,ee	ffffffffff	g	hhh	iiiiiiiiiiiiiiii	j

2. REASON FOR OUTPUT

This message prints in response to the OP:CHAN input message. It reports the status of input/output (I/O) signaling system links.

3. VARIABLE FIELD DEFINITIONS

- a Link number (0 - 7).
- b Channel number assigned to the link (84 - 91).
- c Name of the channel that is assigned to the link. The channel name indicates the assigned client.
- d Hardware unit number of the channel (0 - 7).
- e Hardware subunit number of the channel (8 - 15).
- f Link status:
 - CONNECTED — Link is available for use.
 - DGN OOS — Channel assigned to the link is out-of-service due to a hardware failure. The cause of the failure should be determined and the channel restored to service.
 - DISCONNECT — Channel assigned to the link is in-service but no communication exists with the far end. Expect the link to connect once the far end is restored to service.
 - INVALID — Link status is undetermined. This state should clear within 1 second and advance to a connected state.
 - LINK RESET — Channel has experienced transmission errors and is resetting. This state should clear within 30 seconds, and the link should advance to a connected state.
 - LINK TEST — Channel assigned to the link is in-service and the link is in a test state. This state should advance to the connect state.

SEE PROPRIETARY NOTICE ON COVER PAGE

MAN 00S — Channel assigned to the link has been removed from service by manual request.

OUTPUT — Link is waiting to accept data for transmission. This is an error condition — seek assistance.

REX 00S — Channel assigned to link has been removed from service for routine exerciser (REX).

UNEQUIPPED — Channel assigned to the link is hardware unequipped.

- g Link growth state indicator:
- N — Indicates the link is not in the growth state. The link is available for alternate signaling transport network (ASTN) traffic.
 - Y — Indicates the link is in the growth state. The link is not available for ASTN traffic.
- h If present, this is the national switch number assigned to the far end of the link.
- i For ASTN channels, this represents CLLI™ information for the far end switch.
- j Channel station type:
- C — DCE Station
 - T — DTE Station

4. ACTION TO BE TAKEN

Corrective actions are listed with the preceding state definitions. Assistance should be sought if states do not clear or advance as indicated.

5. REFERENCES

PIDENT
IOCPIOH4

Input Message
OP:CHAN

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:SCRN
WORK CENTER.. MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

OP:SCRN;DETL FINALCODE ;CMPL

FHC	THRESH	ALM	TYP	CHAN
a	b	c	d	e

2. REASON FOR OUTPUT

Response to the OP:SCRN input message for the final handling threshold.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | Final handling code. |
| b | Threshold (0-127). |
| c | Alarm type:
ACT — Action
INF — Informational
MAJ — Major
MIN — Minor |
| d | Type of thresholding:
D — Daily
H — Hourly |
| e | Channel for REPT:FHCTHRESH output message. |

4. ACTION TO BE TAKEN

None. These are informational messages.

5. REFERENCES

PIDENT
VRFYFHT

Input Message
OP:SCRN

Output Message
REPT:FHCTHRESH

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:SDC
WORK CENTER.. MOC, TEC, TOC
GENERIC 4E24 Rel. 2 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

[1] OP:SDC (DIF/XTSI SERVICE DEGRADING SUMMARY)
[a]
[DIF b c% (d/e DIU[S]) [--[f]g DUPLEX FAILED]
.
.
[XTSI h i% (j/k D3U[S]) [--XTSI DUPLEX FAILED]]
.
.
[XTSI h l% (m/n SPU[S]) [--XTSI DUPLEX FAILED]]
.
.
TOTAL = o% OFFICE DIUS SERVICE DEGRADED (p OUT OF q)
PLUS r% OFFICE D3US SERVICE DEGRADED (s OUT OF t)
AND u% OFFICE SPUS SERVICE DEGRADED (v OUT OF w)]

[2] OP:SDC (SERVICE DEGRADING CONDITIONS)
[a]
[x y z a1
.
.
.]

2. REASON FOR OUTPUT

To output the service degrading failures that could affect 120 or more trunks. It is printed hourly and can be requested manually via the OP:SDC input message or via the "SERVICE DEGRADING FAILURE" key at the Master Control Complex (MCC).

Format [1] prints a summary of the number of Digital Interface Units (DIUs) for each Digital Interface Frame (DIF). It also prints a summary of the number of Digital Signal Level 3 Units (D3Us) and Signal Processing Units (SPUs) for each Expanded Time Slot Interchange (XTSI) frame.

Format [2] has a list of each service degraded unit including a detailed list of each troubled unit on a DIF and/or a XTSI.

SEE PROPRIETARY NOTICE ON COVER PAGE

NOTE: Other DIFs not listed may also be in duplex failed due to associated hardware being out-of-service, i.e., Time Slot Interchanges (TSIs).

3. VARIABLE FIELD DEFINITIONS

a	Status: BUFFER OVERFLOW — If more units are service degrading than can be printed. NONE — If no service degrading conditions exist.
b	Member number of the DIF.
c	Percentage of DIUs for a given DIF in a service degraded condition.
d	Number of DIUs for a given DIF in a service degraded condition.
e	Total number of DIUs for a given DIF.
f	Number of DIF subunits.
g	Additional associated equipment causing DIU service degrading conditions.
DUPLEX FAILED	If number of subunits is equal to ALL the operational subunits on a given DIF/XTSI.
h	Member number of the XTSI.
i	Percentage of D3Us for a given XTSI in a service degraded condition.
j	Number of D3Us for a given XTSI in a service degraded condition.
k	Total number of D3Us for a given XTSI.
l	Percentage of SPUs for a given XTSI in a service degraded condition.
m	Number of SPUs for a given XTSI in a service degraded condition.
n	Total number of SPUs for a given XTSI.
o	Percentage of DIUs in a service degraded condition for a given office.
p	Total DIU(s) in service degrading condition.
q	Total number of DIUs for a given office.
r	Percentage of D3Us in a service degraded condition for a given office.
s	Total D3U(s) in service degrading condition.
t	Total number of D3Us for a given office.
u	Percentage of SPUs in a service degraded condition for a given office.
v	Total SPU(s) in service degrading condition.

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w	Total number of SPUs for a given office.
x	Type of unit being reported as service degrading.
y	Member number of unit being reported.
z	The type of subunit being reported as service degrading.
a1	The submember number of the subunit being reported as service degrading.

4. ACTION TO BE TAKEN

Since a loss of call handling capacity has occurred, repair listed units and restore to service as soon as possible.

5. REFERENCES

PIDENT
PUCNAUDS
SDEGRPRT

Input Message
OP:SDC

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:SDC-APS
WORK CENTER.. MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

OP:SDC (APS SERVICE DEGRADING CONDITIONS)

*****CNI STREAM STATUS*****

a

*****CNI RING NODE STATUS*****

b

[c] [d] [e]

2. REASON FOR OUTPUT

To output the service degrading failures that exist on the Common Network Interface (CNI) stream and CNI Ring. It is printed hourly and can be requested manually via the OP:SDC input message or via the "SERVICE DEGRADING FAILURE" key at the Master Control Complex (MCC). Additionally, the message is printed when a new service degrading condition occurs or a previous service degrading condition has been corrected on the CNI stream or CNI Ring.

3. VARIABLE FIELD DEFINITIONS

a

Disposition of the request:

COMMUNICATIONS INHIBITED DUE TO OD4CNISDEG — The feature bit is off (value=0). This means that no service degrading conditions concerning the APS will be reported. This bit should be set to 0 for offices not having an operational CNI Ring. To turn this feature bit on (value=1), contact field support personnel.

NONE — If no service degrading conditions exist on the CNI stream.

RING INITIALIZATION — CNI Ring is in initialization.

SEE PROPRIETARY NOTICE ON COVER PAGE

RING IN QUIET MODE — CNI Ring failed the initialization process and is in quiet mode or any combination of the following:

3B INCOMING STREAM

3B OUTGOING STREAM

4E INCOMING STREAM

4E OUTGOING STREAM

The corresponding stream listed is down.

- b Status:
- NONE — If no service degrading conditions exist on the CNI Ring.
- OVERFLOW — If more links are service degrading than can be printed.
- c LN — Represents the link referred to in d and e.
- d Group number of the link which is service degraded.
- e Node number of the link which is service degraded.

4. ACTION TO BE TAKEN

Since a loss of call handling capacity has occurred, repair listed links and restore to service as soon as possible.

5. REFERENCES

PIDENT
SDEGRPRT

Input Message
OP:SDC

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:SDEXMLST
WORK CENTER.. MAC, MOC, NMOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

OP:SDEXMLST COMPLETED

a

2. REASON FOR OUTPUT

To respond to an OP:SDEXMLST input message which requests that the contents of the Reduction of 800 Double Dip Exemption List be printed.

3. VARIABLE FIELD DEFINITIONS

a A list of up to sixteen 800 numbers which are contained on the exemption list. Exemption list numbers are considered invalid for the cache table.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
CCSDSDIW

Input Message
OP:SDEXMLST

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:SDLST
 WORK CENTER.. MAC, MOC, NMOC, TOC
 GENERIC 4E19 and later
 APPLICATION .. 4E
 TYPE Output

1. FORMAT

OP:SDLST a					
800 No.	NRN	800 No.	NRN	800 No.	NRN
b	c	b	c	b	c
.	.	.	.	.	.
.	.	.	.	.	.
.	.	.	.	.	.

2. REASON FOR OUTPUT

Response to an OP:SDLST input request prints a list of 800 numbers with their associated Network Routing Numbers (NRNs), which are currently active in the cache table.

3. VARIABLE FIELD DEFINITIONS

a	IN PROGRESS — This partition of the printout is not the final partition, more will follow.
	COMPLETED — This partition of the output is the final partition to be printed.
b	800 number.
c	Network routing number (NRN).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
CCSDSDIW

Input Message
OP:SDLST

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:SDYGRP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

OP:SDYGRP PARTITION a e
TOTAL NUMBER OF TRUNKS ON STUDY IS: b
LIST ACTIVITY STATE IS: c
CIN d CIN d
.
.
.

2. REASON FOR OUTPUT

To display the total number of trunks on the study list and the list activity state. Call details will be recorded for calls made on trunks contained in the study list while the list is in the allowed state.

3. VARIABLE FIELD DEFINITIONS

- a Partition number (1-8).
- b Decimal number of trunks on study.
- c List activity state:
ALW — List allowed.
INH — List inhibited.
- d Circuit identification number (CIN).
- e Message status:
COMPLETED — Message is completed in one segment.
MSG COMPL — Last segment of two or more output message segments.
MSG IP — Middle segment(s) of message.
MSG STARTED — First segment of two or more segments.

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENT
ICDRPRGM

Input Message
OP:SDYGRP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:SECTORS
WORK CENTER.. TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

OP:SECTORS, MASMEMN= a: {UNASSIGNED|SECTORS BUSY= b}

2. REASON FOR OUTPUT

Prints the number of mass announcement service (MAS) frame disk sectors busy for one or all MAS members in the office. Message repeats up to eight times for all MAS members.

3. VARIABLE FIELD DEFINITIONS

a	MAS member number (0-7).
b	Number of MAS disk sectors busy for this member.
UNASSIGNED	Unassigned MAS member.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
ANNHTTYM
TMAD0005

Input Message
OP:SECTORS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:SLCSTAT
WORK CENTER.. MOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

OP:SLCSTAT;SLC aaa

SLC	TYPE	STAT	PSLK	STAT	SSLK	STAT
aaa	b	c	d	e f	g	h i
.	.	.	.	.	.	.
.	.	.	.	.	.	.
.	.	.	.	.	.	.

2. REASON FOR OUTPUT

To respond to the OP:SLCSTAT input message. It gives the status of all the assigned complements in the office or the status of one complement in the office on only an international terminal.

3. VARIABLE FIELD DEFINITIONS

- a Signaling link complement number (0-255).
- b Complement type:
 - CCIS LOAD SHARED
 - CCITT6 LOAD SHARED
 - CCITT6 SYNC RESERVED
 - CCITT6 SIMPLEX
- c Complement status:
 - ER — Emergency restart.
 - ER SDC — Service degrading condition.
 - LOADED
- d Terminal number of the primary link.
- e Status of primary link:
 - INS — In service.
 - OOS — Out of service.

SEE PROPRIETARY NOTICE ON COVER PAGE

- f Supplementary primary link status:
- CON — Call processing congestion controls are in effect for the link.
 - RFE — Removed far end.
 - RNE — Removed near end.
- g Terminal number of the secondary link.
- h Status of secondary link:
- INS — In service.
 - OOS — Out of service.
- i Supplementary secondary link status:
- CON — Call processing congestion controls are in effect for the link.
 - RFE — Removed far end.
 - RNE — Removed near end.

4. ACTION TO BE TAKEN

Load complement so that all links are in service, unless routine maintenance is needed.

5. REFERENCES

PIDENTs
CCISIOPR
CCISMNAC
CCISSLCN

Input Message
OP:SLCSTAT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:SLKSTAT-1
WORK CENTER.. MOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

OP:SLKSTAT aabb [SLC ccc]

SLK	STATUS	SUBTYPE	TGR	TER	STATUS	VFL	STATUS
aabb	ddd	eee	ff	ggggggg	aa	bb	hhh
					iiiiiiiiiiiiiiiiiiii	jjj	[kkk]
						.	.
						.	.
						.	.

NOTE: The i, j and k variables are repeated as necessary for each voice frequency link (VFL).

2. REASON FOR OUTPUT

To print in response to an OP:SLKSTAT input message. This message gives the status of the signaling link (SLK), terminal, and voice frequency link (VFL) as well as identifying the frame and terminal and all VFLs associated with the terminal. The message is repeated as required for each SLK in complement.

3. VARIABLE FIELD DEFINITIONS

- a A terminal grouping (TGR) frame number (00-15).
- b A terminal subunit number within the frame (00-15).
- c International complement number if the terminal is international terminal.
- d Signaling link status:
 - ACT — In service, carrying a load.
 - ER — Emergency restart.
 - OOS — Out of service (not available for traffic).
 - UAV — Unavailable from system (in maintenance or 51A).
- e Signaling link out-of-service (OOS) and unavailable (UAV) substates:
 - AUT — Automatically removed.
 - MAN — Manually removed.

SEE PROPRIETARY NOTICE ON COVER PAGE

- f Signaling link manual (MAN) or automatic (AUT) substates:
 FE — Removed by far end.
 NE — Removed by near end.
- g The type of terminal (i.e., signaling link) in the complement:
 PRITERM — Primary.
 SECTERM — Secondary.
- h Terminal status:
 COS — Out of service.
 INS — In service.
- i Circuit identification number (CIN), repeated as required for each VFL.
- j VFL status:
 ACT — Carrying traffic.
 STBY — Could be made active if required (domestic only).
 UAV — Unavailable.
- k LKO — Lockout. The VFL is in a trunk maintenance state that will allow it to be taken by link security (if needed) when it is not actively being tested. To remove the LKO from a VFL, refer to the TEST:SIGLK input message. If it passes the test, the LKO will be removed.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
CCISCONT
CCISIOPR
CCISMNAC
CCISSLCN

Input Messages
OP:SLKSTAT
TEST:SIGLK

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:SLKSTAT-2
WORK CENTER.. MOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

```
OP:SLKSTAT;{SLK aabb|ALL|OOS|DS - c}
SLK  STAT      LS SLC TGR TER STAT DSM DSS VFL          STAT
aabb ddd[eee] ff  gg  aa  bb  hhh  ii  jj  kllll ll ll lll lll mmmm[nnn]
                                opppp pp pp ppp ppp qqqq[rrr]

aabb ddd[eee] ff  gg  aa  bb  hhh  ii  jj  kllll ll ll lll lll mmmm[nnn]
                                opppp pp pp ppp ppp qqqq[rrr]
```

2. REASON FOR OUTPUT

To respond to an OP:SLKSTAT input message and give a status report of a signal link (SLK), its mate, and voice frequency links (VFLs).

NOTE 1: Variables a through r are repeated for additional signaling links (SLKs) and voice frequency links (VFLs).

NOTE 2: The first 2 lines of printout apply to the SLK. The second two lines apply to its mate SLK.

NOTE 3: There are two VFLs per domestic link and one VFL per international link.

3. VARIABLE FIELD DEFINITIONS

- a Common channel interoffice signaling (CCIS) terminal frame number (00-15).
- b CCIS terminal subunit within the frame (00-15).
- ALL Status of all equipped SLKs are printed.
- OOS Status of all equipped out-of-service SLKs are printed.
- DS Status of all SLKs designated for carrying direct signaling traffic are printed.
- c Signaling transfer point (STP) network:
 - 1STP — The direct signaling SLKs belong to the 1STP network.
 - 2STP — The direct signaling SLKs belong to the 2STP network.
- d Link status:
 - INS — In-service, able to carry traffic.
 - OOS — Out-of-service, unavailable for traffic.

SEE PROPRIETARY NOTICE ON COVER PAGE

- e Supplementary link status:
- CON — Call processing congestion controls are in effect for the link.
 - RFE — Removed far end.
 - RNE — Removed near end.
- f State of the link:
- 1 — Removed near end.
 - 2 — Removed far end.
 - 3 — Awaiting changeover.
 - 4 — Awaiting signal unit transfer.
 - 5 — Awaiting synchronization.
 - 6 — Awaiting long synchronization.
 - 7 — Awaiting emergency restart prove-in.
 - 8 — Awaiting standard prove-in.
 - 9 — Awaiting link integrity check request exchange.
 - 10 — Awaiting emergency load transfer, load transfer acknowledgment exchange.
 - 11 — Awaiting load transfer request, load transfer acknowledgment exchange.
 - 12 — Awaiting standby ready, standby ready acknowledgment exchange.
 - 13 — Awaiting far-end processor outage recovery.
 - 14 — Awaiting band status update.
 - 15 — Loaded normal state.
 - 16 — Loaded awaiting manual changeover acknowledgment.
 - 17 — Loaded testing standby VFL.
 - 18 — Loaded transferring to standby VFL.
 - 19 — Loaded updating band status.
 - 20 — Loaded monitoring for emergency load transfers.
 - 21 — Synchronized reserved.
- g Signaling link complement number.

SEE PROPRIETARY NOTICE ON COVER PAGE

h	Terminal status: INS — In-service. OOS — Out-of-service.
i	Common channel interoffice signaling (CCIS) data set frame member number. Indicates which frame that the 2048A data set is in (only for 4800 BPS links).
j	CCIS data set submember number. Identifies the 2048A data set within a frame (only for 4800 BPS links).
k	Traffic number of first VFL.
l	Circuit identification number (CIN) of first VFL or that the link is self-looped.
m	Status of VFL: ACT — In service, carrying traffic. LOOP — Standby VFL test is in progress. Refer to TEST:SIGLK and CFR:SIGLK input messages. OOS — Out-of-service. STBY — Could be made active if required.
n	LKO (lockout). The VFL is in a trunk maintenance state that allows it to be taken by link security (if needed) when it is not actively tested at present. To remove the LKO from a VFL, refer to the input message TEST:SIGLK. If it passes the test, the LKO will be removed.
o	Traffic number of second VFL.
p	CIN of the second VFL or that the link is self-looped.
q	Status of second VFL: ACT — In service, carrying traffic. LOOP — Standby VFL test is in progress. Refer to TEST:SIGLK and CFR:SIGLK input messages. OOS — Out-of-service. STBY — Could be made active if required.
r	Second VFL lockout. LKO (lockout). The VFL is in a trunk maintenance state that allows it to be taken by link security (if needed) when it is not actively tested at present. To remove the LKO from a VFL, refer to the input message TEST:SIGLK. If it passes the test, the LKO will be removed.

4. ACTION TO BE TAKEN

Should be in ACT at all times (except for routine maintenance). SLK should be in service at all times (except for routine maintenance). VFLs should not be locked out.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
CCISIOPR
CCISMNAC
CCISSLCN

Input Messages
CFR:SIGLK
OP:SLKSTAT
TEST:SIGLK

SEE PROPRIETARY NOTICE ON COVER PAGE

1. FORMAT

2. REASON FOR OUTPUT

3. VARIABLE FIELD DEFINITIONS

4. ACTION TO BE TAKEN

5. REFERENCES

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:SSN-CBO
WORK CENTER.. MOC, NMOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

OP:SSN;OPT(MISC.STATUS) AT NSN a, REASON - CHANGEOVER BUFFER OVERFLOW

2. REASON FOR OUTPUT

Generated autonomously when a changeover buffer overflow has occurred. In addition this message indicates a possibility that some buffered link state packet (LSP) messages are discarded.

3. VARIABLE FIELD DEFINITIONS

a A one to three digit decimal network switch number (1 - 167), identifying the local switch on which the message was generated.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPPOM4
IOCPPSC4
IOCCPTX4
SSNMSGHL

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:SSN-DTI
WORK CENTER.. MOC, NMOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

OP:SSN;OPT(LINK STATUS) NSN ISOLATION DETECTED AT NSN a

NODE COUNT: b

INACCESSIBLE NSN(S)

NSN	NSN	NSN
---	---	---
c	[c]	[c]

2. REASON FOR OUTPUT

Generated autonomously in response to the detection of one or more isolated network switch numbers (NSNs). Shown is a report of NSNs recorded as isolated by execution of the last minimum-hop algorithm. The major alarm is also rung.

3. VARIABLE FIELD DEFINITIONS

- a A one to three digit decimal network switch number (1 - 167), identifying the local switch on which the message was generated.
- b A one to three digit decimal count representing the number of isolated switches.
- c A one to three digit decimal network switch number (1 - 167), that identifies the isolated switch.

NOTE: At the end of the NSN list there may be one or two pad values. They are indicated by the value 0 and should be ignored.

4. ACTION TO BE TAKEN

None immediately, however, if the isolation persists contact network administrators support services and provide isolated NSNs as data.

5. REFERENCES

PIDENTs
IOCPOM4
IOCPSC4
IOCCPTX4
SSNRTMGT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:SSN-ESM
WORK CENTER.. MOC, NMOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

OP:SSN;OPT(ROUTING STATUS) 5 SEC SINCE MINHOP EXECUTED AT NSN a

ACCESSIBLE NSN(S) -----	INACCESSIBLE NSN(S) -----	TOTAL HOP COUNT -----	HOP COUNT >4 -----
b	c	d	e

2. REASON FOR OUTPUT

Generated autonomously when 5 seconds have elapsed since the execution of the minimum-hop algorithm.

3. VARIABLE FIELD DEFINITIONS

- a A one to three digit decimal network switch number (1 - 167), identifying the local switch on which the message was generated.
- b A one to three digit decimal count range (0 - 167), that provides the count of switches connected from the local switch's network view.
- c A one to three digit decimal count range (0 - 167), that provides the count of switches inaccessible from the local switch's network view.
- d A one to eight digit decimal count range (0 - 16,777,215), totaling the count of minimum-hop counts currently residing in the routing table.
- e A one to three digit decimal count range (0 - 167), that provides the count of switches whose minimum-hop count exceeds 4.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPOM4
IOCPPSC4
IOCCPTX4
SSNRTMGT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:SSN-HCE
WORK CENTER.. MOC, NMOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

OP:SSN;OPT(ROUTING STATUS) HOP COUNT MAX EXCEEDED AT NSN a

ORIG.PC: b
DEST.PC: c
MSG.TYPE: d
SRC:SLK: e

2. REASON FOR OUTPUT

Generated autonomously when a signaling transfer point (STP) routed survivable signaling network (SSN) message has detected a message with a hop count value greater than the threshold maximum.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | A one to three digit decimal network switch number (1 - 167), identifying the local switch on which the message was generated. |
| b | A nine digit decimal origination point code (PC) copied from the message's message transfer point (MTP) header. |
| c | A nine digit decimal destination point code (PC) copied from the message's message transfer point (MTP) header. |
| d | A three to seven character string that identifies the message containing the invalid (origination or destination) point code value.

ISUP Integrated services digital network (ISDN) user part.
SCCP Signal connection control point.
STP Signaling transfer point.
UNKNOWN Message type could not be determined. |
| e | A one to two digit decimal S-link ID number (0 - 19). Identifies the S-link on which the message was received. |

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
IOCPOM4
IOCPPSC4
IOCCPTX4
SSNMSGHL

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:SSN-IPC
WORK CENTER.. MOC, NMOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

OP:SSN;OPT(ROUTING STATUS) MSG WITH INVALID {ORIG|DEST}
POINT CODE DETECTED AT NSN a

ORIG.PC: b
DEST.PC: c
MSG.TYPE: d

2. REASON FOR OUTPUT

Generated autonomously when either an invalid origination or destination point code has been detected by the survivable signaling network (SSN) message handlers.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---------|---|
| a | A one to three digit decimal network switch number (1 - 167), identifying the local switch on which the message was generated. |
| b | A nine digit decimal origination point code (PC) copied from the message's message transfer point (MTP) header. |
| c | A nine digit decimal destination point code (PC) copied from the message's message transfer point (MTP) header. |
| d | A three to seven character string that identifies the message containing the invalid (origination or destination) point code value. |
| ISUP | Integrated services digital network (ISDN) user part. |
| SCCP | Signal connection control point. |
| STP | Signaling transfer point. |
| UNKNOWN | Message type could not be determined. |

4. ACTION TO BE TAKEN

Call network support services.

5. REFERENCES

PIDENTs
IOCPPOM4
IOCPPSC4
IOCCPTX4
SSNMSGHL

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:SSN-ISN
WORK CENTER.. MOC, NMOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

OP:SSN;OPT(ROUTING STATUS) LSP WITH INVALID NSN DETECTED AT NSN a, SRC NSN b

2. REASON FOR OUTPUT

Generated autonomously when a link state packet (LSP) with an invalid source network switch number (NSN) has been detected by the survivable signaling network (SSN) message handlers.

3. VARIABLE FIELD DEFINITIONS

- a A one to three digit decimal network switch number (1 - 167), identifying the local switch on which the message was generated.
- b A one to three digit decimal network switch number (1 - 167), that is invalid. This value is copied from the LSP message.

4. ACTION TO BE TAKEN

Call network support services.

5. REFERENCES

PIDENTs
IOCPPOM4
IOCPPSC4
IOCCPTX4
SSNRTMGT

SEE PROPRIETARY NOTICE ON COVER PAGE

1. FORMAT

[illegible]

3. VARIABLE FIELD DEFINITIONS

- SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPOM4
IOCPPSC4
IOCCPTX4
SSNRTMGT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:SSN-LINKSTAT
WORK CENTER.. MOC, NMOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

OP:SSN;OPT(LINK STATUS) MSG COMPL AT NSN a

NSN	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19
---	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
b	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c

2. REASON FOR OUTPUT

Prints in response to the OP:SSN-LINKSTAT input message. The link status table configuration data is output for the single network switch number (NSN) requested or for the entire link status table's data content.

3. VARIABLE FIELD DEFINITIONS

- a A one to three digit decimal network switch number (1 - 167), identifying the local switch on which the message was generated.
- b A one to three digit decimal network switch number (1 - 167), identifies a switch in the local switch's view of the network.
- c A one character indicator showing the availability of the S-link specified in the header:

A	S-link is available.
U	S-link is unavailable.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPIMC4
IOCPPOM4
IOCPPSC4
IOCCPTX4
SSNOANM

Input Message
OP:SSN-LINKSTAT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:SSN-RT
WORK CENTER.. MOC, NMOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

OP:SSN;OPT(ROUTING STATUS) MSG COMPL AT NSN a

DST	ROUTING	HOP	PARENT
NSN	SLK	COUNT	NSN
---	-----	-----	-----
b	c	d	e

2. REASON FOR OUTPUT

Prints in response to the OP:SSN-RT input message. The routing status table configuration data is output for the single network switch number (NSN) requested or for the entire routing status table's data content. Data shown indicates the S-link to be used for routing a message from the local switch to a destination switch.

3. VARIABLE FIELD DEFINITIONS

- a A one to three digit decimal network switch number (1 - 167), identifying the local switch on which the message was generated.
- b A one to three digit decimal network switch number (1 - 167), identifies the destination switch (far-end).
- c A one to two digit decimal S-link identification number (0 - 19). Identifies the S-link used to route messages to the specified destination network switch number (NSN).

NOTE: An S-link identification number whose value is greater than 19 indicates a NSN that is isolated.

- d A one to three digit decimal hop count (0 - 255). A count indicating the hop count between the local NSN and the destination NSN.

NOTE: A hop count value of 265 indicates a NSN is isolated.

- e A one to three digit decimal network switch number (1 - 167). Identifies the last switch (NSN) transversed by a survivable signaling network (SSN) routed message before reaching the destination switch.

NOTE: A parent NSN value of 0 indicates that a NSN is isolated.

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
IOCPIMC4
IOCPPOM4
IOCPPSC4
IOCCPTX4
SSNOANM

Input Message
OP:SSN-RT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:SSN-RVT
WORK CENTER.. MOC, NMOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] OP:SSN;OPT(MHRVT) {FIRST|SECOND} TEST COMPL AT NSN a
- DST NSN : b
NODE COUNT: c
- INTERMEDIATED NSN(S)
- | NSN | NSN | NSN |
|-----|-----|-----|
| --- | --- | --- |
| [d] | [d] | [d] |
- [2] OP:SSN;OPT(MHRVT) FROM a TO NSN b {FIRST|SECOND} TEST FAILED e

2. REASON FOR OUTPUT

Generated in response to the MHRVT survivable signaling network (SSN) periodic test function executing. A periodic routing verification test is initiated every ten minutes to an automatically selected network switch number (NSN) destination. Shown is a report of NSNs transversed between the local and destination NSN. Each output message text shows whether this is the first or second attempt in verifying the route between the local switch and the destination switch. When the second attempt fails the major alarm is also rung. Format [1] prints if a successful completion. Format [2] prints if there is a test failure.

3. VARIABLE FIELD DEFINITIONS

- a A one to three digit decimal network switch number (1 - 167), identifying the local switch on which the message was generated.
- b A one to three digit decimal network switch number (1 - 167), identifies the destination switch.
- c A one to three digit decimal node count (0-165) totaling all switches the MHRVT message passed through on its way to the destination NSN.
- d A one to three digit decimal network switch number (1 - 167). Identifies an intermediate switch through which the MHRVT passed on its way to the destination NSN.

NOTE: At the end of the NSN list there may be one to three pad values. They are indicated by the value 0 and should be ignored.

SEE PROPRIETARY NOTICE ON COVER PAGE

e Character string denoting failure reason:
 RESPONSE TIMER EXPIRED

4. ACTION TO BE TAKEN

No action needed for Format [1]. For Format [2], upon second failure message, verify the connectivity between the local switch and the destination switch by contacting network support services.

5. REFERENCES

PIDENTs
IOCPIMC4
IOCPPOM4
IOCPPSC4
IOCCPTX4
SSNOANM

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:SSN-SAL
WORK CENTER.. MOC, NMOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

OP:SSN;OPT(SLINK STATUS) STATE CHANGE AT NSN a

SLK	STATE
-----	-----
b	c

2. REASON FOR OUTPUT

Generated autonomously in response to either a single or several S-links changing from one state to another. This message notifies of a S-link state change to the current state shown.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | A one to three digit decimal network switch number (1 - 167), identifying the local switch on which the message was generated. |
| b | A one to two digit decimal S-link identification number (0 - 19). |
| c | A 2 to 5 character string specifying the state of the S-link: |
| | FEPRO Far end processor outage. |
| | IS In service. |
| | MHIND Management hindered. |
| | OOS Out of service. |
| | TIS Transition to in-service. |

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPOM4
IOCPPSC4
IOCCPTX4
SSNRTMGT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:SSN-SAU
WORK CENTER.. MOC, NMOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

OP:SSN;OPT(SLINK STATUS) SLK AUTO UNHINDERED AT NSN a, SLK b

2. REASON FOR OUTPUT

Generated autonomously in response to the survivable signaling network (SSN) administrative processing automatically unhindering a S-link.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | A one to three digit decimal network switch number (1 - 167), identifying the local switch on which the message was generated. |
| b | A one to two digit decimal S-link identification number (0 - 19). Identifies the S-link that was automatically unhindered. |

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPPOM4
IOCPPSC4
IOCCPTX4
SSNCNTRL

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:SSN-SLKSTAT
WORK CENTER.. MOC, NMOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

OP:SSN;OPT(SLINK STATUS) MSG COMPL AT NSN a

SLK	FAR END NSN	STATE
---	-----	-----
b	c	d

2. REASON FOR OUTPUT

Printed in response to the OP:SSN-SLKSTAT input message. The link status register table configuration data is output for the single S-link requested or the for the entire link status register table's data content.

3. VARIABLE FIELD DEFINITIONS

- a A one to three digit decimal network switch number (1 - 167), identifying the local switch on which the message was generated.
- b A one to two digit decimal S-link identification number (0 - 19).
- c A one to three digit decimal network switch number (1-167), identifying the switch at the far end of the S-link. The local switch is at the near end.
- d A 2 to 5 character string specifying the state of the S-link:

FEPRO	Far end processor outage.
IS	In service.
MHIND	Management hindered.
OOS	Out of service.
TIS	Transition to in-service.

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
IOCPIMC4
IOCPPOM4
IOCPPSC4
IOCCPTX4
SSNOANM

Input Message
OP:SSN-SLKSTAT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:SSN-STAT
WORK CENTER.. MOC, NMOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

OP:SSN;OPT(LINK PKT) MSG COMPL AT NSN a

												1	1	1	1	1		1	1	1	1	1
NSN	AGE	SEQ. NO.	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9
---	---	-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
b	c	d						e	e	e	e	e	e	e	e	e	e	e	e	e	e	e

2. REASON FOR OUTPUT

Printed in response to the OP:SSN-STAT input message. The link status packet table data is output for the single network switch number (NSN) requested or for the entire link status packet table's data content.

3. VARIABLE FIELD DEFINITIONS

- a A one to three digit decimal network switch number (1 - 167), identifying the local switch on which the message was generated.
- b A one to three digit decimal network switch number (1 - 167), identifying the switch whose link status packet is being routed.
- c A one to three digit decimal packet age indicator (0 - 511). The local switch decrements this value. When the age becomes 0, then the link state packet (LSP) is considered expired.
- d A one to eight digit decimal packet sequence number (0 - 16,777,215), that singularly identifies this LSP message.
- e A one character indicator showing the availability of the S-link specified in the header:
 - A S-link is available.
 - U S-link is unavailable.

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
IOCPIMC4
IOCPPOM4
IOCPPSC4
IOCCPTX4
SSNOANM

Input Message
OP:SSN-STAT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:SSN-TST
WORK CENTER.. MOC, NMOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] OP:SSN;OPT(MHRVT) TEST COMPL AT NSN a
- DST NSN : b
NODE COUNT: c
- INTERMEDIATE NSN(S)
- | NSN | NSN | NSN |
|-----|-----|-----|
| --- | --- | --- |
| [d] | [d] | [d] |
- [2] OP:SSN;OPT(MHRVT) FROM a TO NSN b TEST FAILED e

2. REASON FOR OUTPUT

Generated in response to the MHRVT survivable signaling network (SSN) test
OP:SSN-TST input message being entered. Shown is a report of network switch numbers (NSNs) transversed between the local and destination NSN. Format [1] prints if a successful completion. Format [2] prints if there is a test failure.

3. VARIABLE FIELD DEFINITIONS

- a A one to three digit decimal network switch number (1 - 167), identifying the local switch on which the message was generated.
- b A one to three digit decimal network switch number (1 - 167), identifies the destination switch.
- c A one to three digit decimal node count (0-165) totaling all switches the MHRVT message passed through on its way to the destination NSN.
- d A one to three digit decimal network switch number (1 - 167). Identifies an intermediate switch through which the MHRVT passed on its way to the destination NSN.
- NOTE:** At the end of the NSN list there may be one to three pad values. They are indicated by the value 0 and should be ignored.
- e Character string denoting failure reason:
RESPONSE TIMER EXPIRED

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPIMC4
IOCPPOM4
IOCPPSC4
IOCCPTX4
SSNOANM

Input Message
OP:SSN-TST

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:SVCSTAT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

```
OP:SVCSTAT
ALARM    TSG          ME    NUM    NUM
          STAT        THLD   MB    ACT
[aa]     bbbbbbbbbbbbbbbbbbbb cccc  dddd  eeee
          .
          .
          .
```

2. REASON FOR OUTPUT

To respond to either a teletypewriter (TTY) request (input message OP:SVCSTAT) or a master control complex (MCC) key request. It gives a summary of the service status if the office is so equipped.

The variable field following the message heading allows the status report for each type of circuit to be reported on a separate line. If the office is not equipped with a service circuit type (SVCT), no status report will be given for that type of service circuit.

3. VARIABLE FIELD DEFINITIONS

- a Alarm status:
 - b lank — No alarm.
 - CR — Critical alarm.
 - MJ — Major alarm.
- b Circuit identification name code (CINC) SVCT trunk subgroup (TSG):
 - AINS
 - ATPT
 - DIRSERVDIALCAP
 - DMRV
 - DMXM
 - MFR
 - MFx
 - SCAN
 - SCNS

SEE PROPRIETARY NOTICE ON COVER PAGE

XCVR

NOTE: Announcement Set N circuits are reported as SCAN which will be the combined SCAN and SCBN numbers. If SVCT SCAN does not have a TSG assigned, SCBN CINC will be used if the TSG is assigned.

(SVCT AINS is LEC only.) (SVCT SCNS is AT&T only.)

AT&T only SVCT AT&T trigger platform (ATP) will be reported as the CINC of the first ATP TSG. The numbers will be the accumulation of all of the ATP TSGs.

- c Maintenance busy threshold number.
- d Numbers in TSG that are maintenance busy.
- e Numbers in TSG that are active (equipped, not maintenance busy [MB]).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
SVCTSTAT

Input Message
OP:SVCSTAT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:SYNCLIST
WORK CENTER.. MOC
GENERIC 4E20 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

[1] OP:SYNCLIST
MON REG ALT INH
a b c d

[2] OP:SYNCLIST
MON REG ALT INH
a b c d
REG e f g
ALT e f g

2. REASON FOR OUTPUT

To output in response to the OP:SYNCLIST input message and to output automatically at 7 a.m. daily. Format [2] output only appears when OP:SYNCLIST;DETL input message has been used.

3. VARIABLE FIELD DEFINITIONS

- a Number of Digroup Terminal (DT) or Digital Interface Frame (DIF) Digroups (DG) currently being monitored.
- b Status of the regular timing digroup:
N — A regular timing digroup is not specified.
Y — A regular timing digroup is specified.
- c Status of the alternate timing digroup:
N — An alternate timing digroup is not specified.
Y — An alternate timing digroup is specified.
- d Status of the synchronization list:
N — The synchronization list is not currently inhibited.
Y — The synchronization list is currently inhibited.
- e Frame number and identity:
DIF — Digital interface frame.
DT — Digroup terminal.

SEE PROPRIETARY NOTICE ON COVER PAGE

f	Unit number and identity:
	DIU — Digital interface frame.
	DTU — Digroup terminal.
g	Digroup number.
REG	Regular timing digroup.
ALT	Alternate timing digroup.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
DFRP

Input Messages
MON:DGSTAT
OP:SYNCLIST

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:TANTOTAN
WORK CENTER.. MAC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

OP:TANTOTAN a, [b]
[c,d,e]

2. REASON FOR OUTPUT

To print all trunk appearance number-to-trunk appearance number (TANTOTAN) connections found in the TANTOTAN nailup table. It responds to the input message OP:TANTOTAN.

3. VARIABLE FIELD DEFINITIONS

a	NONE — There are no entries of the type requested in the TANTOTAN nailup table.
b	SUPV — Entries with supervisory integrity.
c	Circuit identification number (CIN) of the first trunk.
d	CIN of the second trunk.
e	Text describing status of the TANTOTAN connection: CONNECTED NOT CONNECTED

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
TANTOTAN

Input Message
OP:TANTOTAN

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:TERAWTSG
WORK CENTER.. MOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] OP:TERAWTSG a
b
USE FAILURE COUNT TCA POS CIN TIME
c dddd ee ff gggghhhh hh hh hhh hhh ii:jj
•
•
•
- [2] OP:TERAWTSG a
THE WTSG LIST FOR TCA ee IS EMPTY

2. REASON FOR OUTPUT

To output the contents of the trunk error analysis worst trunk subgroup (TERAWTSG) list.

3. VARIABLE FIELD DEFINITIONS

- a Partitioned message header:
WORST TRUNK SUBGROUP LIST MSG START — First partition.
WORST TSGs MSG COMPL — Last partition.
WORST TSGs MSG IP — Intermediate partitions.
- b One of the following possible attempt ranges:
- | | | |
|-----------|-----------|-----------|
| 1-31 | 32-63 | 64-127 |
| 256-511 | 512-1023 | 1024-2047 |
| 2048-4095 | 4096-8191 | |
- These represent the number of attempts made on the TSG during the quarter-hour, ending two minutes prior to the time indicated.
- c Type of counts:
C — Outgoing counts.
I — Incoming counts.
- d Number of failures observed during indicated quarter-hour.
- e Trunk control area (TCA) number (0-9).
- f Test position number within the TCA (0-9).
- g Base traffic number of the trunk subgroup.

SEE PROPRIETARY NOTICE ON COVER PAGE

- h Circuit identification number (CIN) of the trunk subgroup.
- i, j Hours and minutes indicating the end of the quarter hour during
which the failure counts were observed.

4. ACTION TO BE TAKEN

See Practice 234-103-016 *Trunk Error Analysis (TERA)* on local plant practices.

5. REFERENCES

PIDENT
TERA00

Practice 234-100-050, *Error Analysis of Trunks and Trunk-Related Circuits - Description*
Practice 234-103-016, *Trunk Error Analysis (TERA)*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:TLPQUEUE
WORK CENTER.. MOC
GENERIC 4E22 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

```
[1]  OP:TLPQUEUE STATUS
      TLP QUEUE ERROR
      CODE a
      [TLPFILE b DELETED:MFNUM c]
      [TLPFILE b INVALID CURRENT TLP SEARCH ABORTED]
      DATA
      PD: d e f g h i

[2]  OP:TLPQUEUE STATUS
      [ALL PENDING TLP SEARCHES INHIBITED]
      [TLPFILE j IS INVALID]
      [EMPTY]
      ENTRY  TIME  TLPFILE  MFNUM  PRIORITY  USED  UTYMN

      k/l/m  n:o:p      q      r      s[*]      t      uv
      .      .      .      .      .      .      .
      .      .      .      .      .      .      .
      .      .      .      .      .      .      .

      DATA
      PD: d e f g h i
```

2. REASON FOR OUTPUT

To print status data of the Trouble Location Procedure Disk Queue (TLPQUEUE) in one of two output formats depending on what stimulated the output message.

Format [1] is printed if the TLPQUEUE verification program detects an error. A code is printed to indicate the type of error detected; and when the error requires that a TLPQUEUE file must be removed from the TLPQUEUE, the output indicates its disposition. Also if the TLPQUEUE file removed was currently being processed by the TLP search program, the output message indicates that the TLPQUEUE file is no longer valid and that the current TLP search will be aborted. Six octal status words are also printed.

Format [2] is printed in response to the OP:TLPQUEUE input message.

Besides printing the status for each TLPQUEUE file requested, the output message prints six octal status words and also indicates whenever the TLP search process is inhibited.

SEE PROPRIETARY NOTICE ON COVER PAGE

If the request was to output the status data of a particular TLPQUEUE file number, the output message will indicate if that file number is not currently a valid file number in the TLPQUEUE.

The output message will also indicate when the TLPQUEUE is empty.

3. VARIABLE FIELD DEFINITIONS

- a Decimal variable that indicates the type of error which has occurred:
- 1 — TLPQUEUE header error
 - 2 — TLPQUEUE data check error.
 - 3 — TLPQUEUE address check error.
 - 4 — TLP search data error.
 - 8 — TLP search control invalid (RESET)
 - 9 — TLP search control invalid (SET)
 - 10 — TLP search program active but sanity times not incrementing.
 - 11 — TLPQUEUE access denied.
 - 12 — TLPQUEUE access denied.
 - 13 — TLPQUEUE file currently being processed by TLP search program not found in TLPQUEUE.
- b TLPQUEUE file number (the TLP search process will be aborted for this TLPQUEUE file).
- c ERAP file number assigned to the summary data (see OP:ERAPDATA).
- d The octal status word, DG1A_ALWUTY, contains the inhibit bits which inhibit the queueing of the TLP summary data. The assignments are:
- | BIT | UNIT |
|-----|--------|
| 3 | — IOUS |
| 11 | — DIF |
| 12 | — SP |
| 13 | — NCLK |
| 14 | — SCLK |
| 15 | — TSI |
| 16 | — TMSP |
| 17 | — TGR |
| 18 | — TER |
| 19 | — PUB |
| 20 | — EST |

SEE PROPRIETARY NOTICE ON COVER PAGE

- 21 — ESU
- 22 — DT
- 23 — API

The unit is inhibited when the bit =1.

- e The status word, DG1A_OVLAP, contains the overall sanity timer for the TLP search program. If the TLP search program is currently processing a TLPQUEUE file, the left half of the word (bits 12 through 23) will be incrementing and status words DG1A-TSKADH, DG1A_TAKADL, and DG1A_TAPERR which follow will be valid.
- f The status word, DG1A_TSHADH, contains the last high priority address recorded by the TLP search program. The address will be a program location in PIDENT DRPSUPR.
- g The status word, DG1A-LOCTRL, contains the TLP search program control word. The significance of the control items is described in C.3 Trouble Location Procedure in PA-4A002-01.
- h The status word, DG1A_TSKADL, contains the last low priority address recorded by the TLP search program. The address indicates the last TLP operation performed. The address may be a program location in either the MAC paging area or in PIDENT DRPSUPR.
- i The status word, DG1A_TAPERR, contains the status of the last TLP tape operation. See C.3 Trouble Location Procedure in PA-4A002-01 for details.
- j The input message was OP:TLPQUEUE;TLPFILE j and not TLP disk queue file with file number equal to j was found.
- k/l/m n:o:p The date and time of day the TLP disk queue file was created and placed in the TLPQUEUE.
- q The TLPQUEUE file number.
- r Error Analysis Program (ERAP) file number assigned to the summary data (see OP:ERAPDATA).
- s[*] Priority level assigned to the TLPQUEUE file. The priority is used to select the next TLPQUEUE file to be processed by the TLP search program (high priority first, first-come-first-served for TLPQUEUE file having the same priority).

The [*] indicates that either the TLPQUEUE file:

- (a) is currently being processed by the TLP search program, or
- (b) was being processed by the TLP search program when the TLP search process was inhibited.

SEE PROPRIETARY NOTICE ON COVER PAGE

t	Indicates how much of the TLPQUEUE is required to contain the TLPQUEUE file.
u, v	The unit type and member number associated with the TLPQUEUE file.

4. ACTION TO BE TAKEN

Format [1]

The action required depends on the value of the CODE printed which indicates the type of error that was detected. The valid codes, reasons and required actions are outlined and are covered in more detail in *Section C.3 Trouble Location Procedure* in PA-4A0002-01.

- 1 — None.
- 2 — None.
- 3 — None.
- 4 — None. (TLP search is aborted.)
- 8 — None. (TLP search process automatically allowed.)
- 9 — None. (TLP search process automatically allowed.)
- 10 — TLP search process should be allowed using the ALW:TLP input message.
- 11 — None.
- 12 — TLP search process should be allowed using the ALW:TLP input message.
- 13 — The TLPQUEUE will be removed from the TLPQUEUE. The file must be regenerated to continue the repair process. May be done manually or by rerunning the diagnostic. If the TLP search program was currently processing the TLP disk queue file, the search will be abnormally terminated and the next file will be processed.

Format [2]

If the output message indicates that all pending TLP searches are inhibited, the TLP search process should be started using the ALW:TLP input message.

If the output message indicates that a specific TLPQUEUE file is invalid or that the TLPQUEUE is empty either:

- (a) the TLP search has successfully completed the processing of the file, or
- (b) the file has been removed due to an error.

In the latter case, the file must be regenerated, either manually or by requesting the diagnostic.

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If the TLP search is not inhibited and the TLPQUEUE is not empty, then the sanity time (the second octal data word) should change for two consecutive output messages. If not, the process can be restarted using the input message ALW:TLP. Note, this will cause the TLPQUEUE verification program to be executed which may cause Format [1] output messages.

If the first octal data word has any bits set, it should be determined why the associated unit is inhibited from generating TLP summary data. Each bit may be reset using the ALW:TLP input message.

If the input message requested a specific TLPQUEUE file number and the output message indicated the file number is invalid, the input message can be resubmitted after correcting the file number.

5. REFERENCES

PIDENTs
DRPPASUB
DRPSUPR

Practice 234-180-270, *Diagnostic Results Post-Processing Program - Description*
Practice 234-280-230, *Trouble Location Procedure Programs - Description*

PA-4A002-01, 4ESSTM User's Manual, Section C.3, Trouble Location Procedure

Input Messages
ALW:TLP
INH:TLP
OP:ERAPDATA
OP:TLPQUEUE

Output Message
OP:ERAPDATA

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:TONESTAT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

OP:TONESTAT a b CIN cdddd dd dd ddd ddd e COMPL

2. REASON FOR OUTPUT

To printout the state of one of the pair of duplicated tone trunks from the ringing and tone plant and milliwatt supply. This message is stimulated via the input message OP:TONESTAT.

3. VARIABLE FIELD DEFINITIONS

- a The tone trunk identity:
- AR — Audible ringing tone.
 - BT60 — Busy tone at 60 impulses per minute (IPM).
 - BT120 — Recorder tone at 120 IPM.
 - MW — Milliwatt tone.
 - TPT — Test progress tone.
- b Trunk of the pair (0 or 1).
- cd Circuit identification number (CIN) of the trunk.
- e Tone trunk state:
- ACT — Active.
 - OOS — Out-of-service.
 - SBY — Standby.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
SVCTRTPP

Practice 234-110-092, *820A (J87822) Ringing, Tone, and Interpreter Plant - Description*
Practice 234-110-093, *820A (J87822) Ringing, Tone, and Interpreter Plant - Theory*
Practice 234-180-242, *Service Circuit Test Program (SVCT) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Message
OP: TONESTAT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:TRAPSTAT
WORK CENTER.. MOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] OP:TRAPSTAT: a, [IATSGCNT|IAOFCNT] TRAPN b [THRU c]
IDLE
- [2] OP:TRAPSTAT: a, [IATSGCNT|IAOFCNT] TRAPN b
TSGS:
BTFN CIN d
. . .
BTFN CIN d
TANRNG:
[BTFN CIN e]
[BTFN CIN f]
TCA g
FHC: h [,SAMPLE RATE = i]
[j]
IA: k
[SAMPLE RATE = l]
m
[TRAP INHIBITED]
TTYCHAN = n

2. REASON FOR OUTPUT

To attempt dumping the call irregularity traps in use or scheduled for use.

Format [1] is used to indicate that no traps are in use or scheduled for use.

Format [2] is used to dump the traps in use or scheduled for use.

3. VARIABLE FIELD DEFINITIONS

- a IATSG.
IAOFC.
- b Trap number.
- c Last trap number of a range of traps that are idle.
- d Circuit identification number (CIN) of TSG being trapped (1-6 groups).
- e - f CIN of a range of TANs being trapped (this is an optional printout).

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g	Trunk control area (TCA) number.
h	Final handling code(s) (FHC) being trapped.
i	Sample rate for FHC.
j	"FHC COUNTS DUMPED HOURLY" option on the counting trap.
k	IA(s) being trapped with sample rate. If sample rate is omitted, then the rate is 100 percent. ALL - all IAs are being trapped xxxxxxx . . . xxxxxxx — list of IAs being trapped
m	TIMEON = a1 TIMEOFF = a2 [a3] a1 — Time trap is turned on a2 — Time trap is turned off a3 — COUT or RPT. No schedule.
n	Teletypewriter (TTY) channel on which trap is outputted.
l	Sample rate for trunk subgroup (TSG) trap.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPPOM4
TMAD0002

Practice 234-105-018, *Call Irregularity Raw Data Trap, Trunk Operations Center (TOC)*
Network Maintenance

Input Messages
OP: IA0FC
OP: IA0FCNT
OP: IATSG
OP: IATSGCNT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:TRKHOLD
WORK CENTER.. TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

OP:TRKHOLD a b
cdddd dd dd ddd ddd effff ff ff fff fff
•
•
•

2. REASON FOR OUTPUT

To output a list of those circuits in the office that are presently in a hold state.

3. VARIABLE FIELD DEFINITIONS

a	Total number of circuits being held.
b	NONE — No circuits are being held (a = 0).
c	Traffic number of a circuit being held.
d	Circuit identification number (CIN) of a circuit being held.
e	When printed, the traffic number of a circuit connected to cd.
f	When printed, the CIN of a circuit connected to circuit cd.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
TACCORG

SEE PROPRIETARY NOTICE ON COVER PAGE

1. FORMAT

- ## 2. REASON FOR OUTPUT

If the input request was for a single trunk, Format [1] through [5] may be printed.

3. VARIABLE FIELD DEFINITIONS

- a Maintenance status of the trunk. The possible states are:
- ACT — Trunk is active, i.e., no maintenance control.
- BLK — Out-of-band trunk is blocked, no other maintenance control.
- MC3 — ISUP only - Unable to signal to far end.
- MC3.BLK — ISUP only - Unable to signal to far end, also blocked.
- MTC — Maintenance.

OP:TRKSTAT-1

	RSF — Ring signaling failure.
	RSF.BLK — Out-of-band signaling trunk is blocked and a ring signaling failure is in effect.
	UNA — Trunk is unassigned.
CAD	Circuit administration.
BLK	Out of band trunk is blocked.
LKO	Lockout.
b	Trunk Register (TR) state code information. (See item TR4CODE on COMPOOL.) Values which correspond to exactly one TR state: - AUDLIST — Audit list. - AUDST — Audit state, trunk would not fit on audit list. - CDTSI — Connected to dedicated TSI: recorded announcement or tone, e.g., reorder or NCA. - HWL — Trunk is in the high and wet state. - HWT — High and wet timing - trunk is in the 2 to 3 minute timing interval prior to going high and wet. - IDLE — Idle. - OOSI — Trunk is in out-of-service ignore state (CAD.DSA or MTC.DSA). - TNUP — Trunk is used for large scale nailup. - UNA — Unassigned trunk. 2WOPB — 2-way operator trunk in busy to operator state.
c	Trunk Register (TR) state code information. (See item TR4CODE on COMPOOL.) Values which correspond to a group of TR states: *ICT* — Incoming trunk - trunk is associated with the incoming side of a call. The call may be in any one of a number of states. *MISC* — Miscellaneous trunk state. *OGT* — Outgoing trunk - trunk is associated with the outgoing side of a call. The call may be in any one of a number of states. *TEST* — Trunk is involved in some kind of a test. *UNDEF* — Undefined - trunk is in an illegal state.
d	Decimal value of the state code. For group type states, gives the exact state code value in decimal. See item TR4CODE on COMPOOL for definition.

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- e *MBT* if the trunk subgroup is at or beyond the maintenance busy threshold (magic number). Nothing is printed if the TSG is below the threshold.
- f Identity of the trunk for which the status is output. Circuit Identification Number (CIN), Trunk Appearance Number (TAN), Trunk (TRK), or Trunk Scanner Number (TSN) form of trunk identity is output using the same form as on the input message. If an ALL or TCA group type request was input, CIN is always output.
- g Lockout type:
 AUT — Automatic.
 MAN — Manual.
- DSA Disabled.
- h Out of service states:
 AUT — Automatic, e.g., error analysis, test failure.
 CAR — Carrier alarm.
 HAW — High and wet.
 MAN — Manual.
 NIU — Network interface unit failure, e.g., VIU, DTU, ESU or DIU, no protection switch done.
 RBA — Recent change roll-back.
 SCP — Scan pack matrix family disabled.
 SDM — Signal distributor matrix pack family disabled.
 SDP — Signal distributor relay pack family disabled.
 SPF — Signal processor failure.
 TL — Terminate and leave state operational.
 TSF — Total signaling feature.
 TSI — Duplex Time Slot Interchange (TSI) failure.
- i Trunk identity of the trunk which was input on the group OP:TRKSTAT input message, or TCA identity, or ALL if specified, plus additional information. The keywords which are present on the input message are output. Possible options are:
 CAR — All trunks in same carrier group as input trunk.
 NUM — Consecutive TSNs, TANs, or traffic numbers as specified on input message.
 SCP — All trunks on the same scan matrix circuit pack as the input trunk.
 SDP — All trunks on the SD relay circuit pack as the input trunk.

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SMD — All trunks on the same SD matrix circuit pack as the input trunk.

STAT — Only process trunks in state specified by STAT data on input message.

SUM — Summary request. Only completed message is output.

TSG — All trunks in trunk subgroup.

j

Information describing the disposition of the request:

COMPLETED — The group OP:TRKSTAT has normally completed. No further output will follow.

STOPPED, DISK READ FAILURE — A disk read request has failed. The disk program returned but indicated a failure.

STOPPED, DISK READ TIMEOUT — A disk read request was submitted, but no return was made.

STOPPED, FUNCTION UNAVAILABLE — The options requested on the input message are not available in current version of the 4ESSTM generic.

STOPPED, MAN — A manual request to stop the group OP:TRKSTAT has been processed.

STOPPED, NO CGA TRANSLATION — Carrier (CAR) group input option was requested on a trunk for which ESSTM has no carrier group translation data.

STOPPED, STATE CHANGE QUEUE FULL — The queue used to process the individual trunks in the group is full. Repeat later.

STOPPED, UNA — The input data used to identify the desired group contains unassigned data.

k

Number of trunks which were processed up to the point of the completed message. All of these trunks are in the group identified on the input message.

4. ACTION TO BE TAKEN

This output message is informational. Any action taken must be based on the specific information printed and the technical impact of that data.

5. REFERENCES

PIDENTs
TMAD0001
TMAD0005
TMAD0006

Practice 234-180-240, *Trunk Maintenance Administration Program Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Messages
OP: TRKSTAT
SET: TRKSTAT
STOP: OP-TRKSTA

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:TSGHC
WORK CENTER.. MOC, TEC, TOC
GENERIC 4E24 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

OP:TSGHC, CIN a

WORD	ADDRESS	CONTENTS	DATA
0	b	c	PM d DNH e SAT f FCN g TCN h TTD i DTD j FCTB k
1	l	m	RTOPG n LCTBN o
2	p	q	IDLCT r OUTPG s
3	t	u	CBKP v INCPG w
4	x	y	FAINX z ATRNG a ¹ OVFPg b ¹
5	c ¹	d ¹	ATSTC e ¹ EAC f ¹ MBCNT g ¹ ACTMB h ¹
6	i ¹	j ¹	EAIN k ¹ EAOUT l ¹
7	m ¹	n ¹	BBC o ¹ CNI p ¹ MTD q ¹ MEM r ¹ C5 s ¹ MFC t ¹ HNTT u ¹ INDX v ¹
8	w ¹	x ¹	y ¹
9	z ¹	a ²	NSN b ² OTACV c ² INACV d ²
10	e ²	f ²	RTNSNI g ² AR h ² AC i ² AO j ² AI k ² AG l ² H1IDL m ² H0IDL n ²
11	o ²	p ²	RAPC q ²
12	r ²	s ²	t ²
13	u ²	v ²	w ²

ADJUNCT TSGHC DATA

ADDRESS	CONTENTS
x ²	y ² z ² a ³ b ³
	c ³ d ³ e ³ f ³

2. REASON FOR OUTPUT

To output the address and the contents of the Trunk Subgroup (TSG) Head Cell (TSGHC) and the address and contents of the adjunct trunk subgroup cell, if present.

3. VARIABLE FIELD DEFINITIONS

a	Circuit identification name.
b	Address of TSGHC - word 0.
c	Contents of TSGHC - word 0.
d	Plant measurements and ineffective attempt trap index.
e	Dynamic Non-Hierarchical Routing (DNHR) indicator.
f	Satellite TSG indicator.
g	Network Management (NM) from control indicator.
h	NM to control indicator.

SEE PROPRIETARY NOTICE ON COVER PAGE

i	NM Dynamic Load Control (DLC) to Time Assigned Speech Interpolation (TASI) -E-DLC frame.
j	Data TASI DLC.
k	First choice trunk block number.
l	Address of TSGHC - word 1.
m	Contents of TSGHC - word 1.
n	Reroute to seizure peg counter.
o	Last choice trunk block number.
p	Address of TSGHC - word 2.
q	Contents of TSGHC - word 2.
r	Idle counter.
s	Outgoing seizure peg counter.
t	Address of TSGHC - word 3.
u	Contents of TSGHC - word 3.
v	Crankback peg count.
w	Incoming seizure peg counter.
x	Address of TSGHC - word 4.
y	Contents of TSGHC - word 4.
z	Failure index (Trunk Error Report Analysis [TERA]).
a ¹	Attempts range (TERA).
b ¹	Overflow peg counter.
c ¹	Address of TSGHC - word 5.
d ¹	Contents of TSGHC - word 5.
e ¹	Automatic test control.
f ¹	Error analysis control.
g ¹	Maintenance busy occupancy counter.
h ¹	Number of active and maintenance busy trunks.
i ¹	Address of TSGHC - word 6.
j ¹	Contents of TSGHC - word 6.
k ¹	Error analysis incoming peg counter.
l ¹	Error analysis outgoing peg counter.
m ¹	Address of TSGHC - word 7.

SEE PROPRIETARY NOTICE ON COVER PAGE

n ¹	Contents of TSGHC - word 7.
o ¹	Broadband capability.
p ¹	Indicates TSG requires Attached Processor Interface (API)/ Common Network Interface (CNI) ring signaling.
q ¹	MTD indicator: 0 — Index (INDX) is adjunct head cell index. 1 — INDX is modified TSG data index.
r ¹	Trunk hunt with memory.
s ¹	Common Channel Signaling System Number 5 (CCITT5) signaling indicator.
t ¹	MFWINK continuity check, if set suspend trunk hunt.
u ¹	Hunt type.
v ¹	MTD: 0 — Adjunct TSGHC index. 1 — Modified TSG data index.
w ¹	Address of TSGHC - word 8.
x ¹	Contents of TSGHC - word 8.
y ¹	Contents of TSGHC - word 8.
z ¹	Address of TSGHC - word 9.
a ²	Contents of TSGHC - word 9.
b ²	National switching number.
c ²	Outgoing access charge verification.
d ²	Incoming access charge verification.
e ²	Address of TSGHC - word 10.
f ²	Contents of TSGHC - word 10.
g ²	National Switch Number (NSN) indicator Real Time Network Routing (RTNR).
h ²	Adaptive hierarchical route indicator
i ²	ASTN-N1 congestion indicator (victim switch).
j ²	ASTN-N1 out of service indicator (victim switch).
k ²	ASTN-N1 IAM counter (victim switch).
l ²	ASTN-N1 gateway communication achieved (victim switch).
m ²	Number of H1 idle trunks.
n ²	Number of H0 idle trunks.

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o^2	Address of TSGHC - word 11.
p^2	Contents of TSGHC - word 11.
q^2	Route Advance (RA) TSG counter.
r^2	Address of TSGHC - word 12.
s^2	Contents of TSGHC - word 12.
t^2	Contents of TSGHC - word 12.
u^2	Address of TSGHC - word 13.
v^2	Contents of TSGHC - word 13.
w^2	Contents of TSGHC - word 13.
x^2	Address of TSGHC adjunct head cell.
y^2	Contents of adjunct TSG head cell.
z^2	Contents of adjunct TSG head cell.
a^3	Contents of adjunct TSG head cell.
b^3	Contents of adjunct TSG head cell.
c^3	Contents of adjunct TSG head cell.
d^3	Contents of adjunct TSG head cell.
e^3	Contents of adjunct TSG head cell.
f^3	Contents of adjunct TSG head cell.

4. ACTION TO BE TAKEN

This output data is informational.

5. REFERENCES

PIDENT
TMAD0007

Input Message
OP:TSGHC

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:TSGHC-LINK
WORK CENTER.. MAC, MOC, NMOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

[1] OP:TSGHC,CIN a;LINK

LINKED TRUNK BLOCKS

TBNØ'	TFN	IDLE	LAST	MEMN	SELECTED
b	c	d		e	
.	.	.		.	
.	.	.		.	
.	.	.		.	

[2] OP:TSGHC,CIN a;LINK

UNLINKED TRUNK BLOCKS

TBNØ'	TFN
f	g
.	.
.	.
.	.

2. REASON FOR OUTPUT

To output those trunk blocks that are preferred by trunk hunt as well as those trunk blocks that are non-preferred (unlinked).

3. VARIABLE FIELD DEFINITIONS

a	Circuit identification name.
b	Trunk block number.
c	Traffic number.
d	Number of idle trunks in this trunk block.
e	Last trunk by member number selected in this trunk block.
f	Trunk block number.
g	Traffic number.

4. ACTION TO BE TAKEN

This is an informational message.

SEE PROPRIETARY NOTICE ON COVER PAGE

4ESS
OM-4B000-01

OP:TSGHC,CIN a;LINK

5. REFERENCES

PIDENT
TMAD0007

Input Message
OP:TSGHC

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:TSGSTAT-DTL
WORK CENTER.. MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

This message has three formats.

[1] OP:TSGSTAT;DETL:a bc

TSG					TOTAL	MB	CAD	ATC	EAC	
dddd	eeee	ee	ee	eee	eee	ffff	ggggh	iiij	k	l
.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.

[2] OP:TSGSTAT;DETL:ISC m b c

TSG					TOTAL	DIG	PDIG	DPREF	PDP	TPREF	PTP	
dddd	eeee	ee	ee	eee	eee	ffff	nnnn	ooo	pppp	qqq	rrrr	sss
.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.	.	.

[3] OP:TSGSTAT;DETL:t MSG COMPL SEGMENT 1

TBN	O'	QTRK	VCR	PREF
u	v	w	x	
.	.	.	.	.
.	.	.	.	.
.	.	.	.	.

2. REASON FOR OUTPUT

- 1) To output trunk subgroup (TSG) status (TSGSTAT) information for the specified TSG or group of TSGs. This detailed (DETL) form of TSGSTAT output will contain one line of data per TSG requested, i.e., one data line if one TSG specified, or many lines if a group of TSGs specified (TCA or ALL). For groups of TSGs, the output will be divided into segments with 10 TSGs per segment (the last segment may have less than 10).
- 2) To provide digital trunk data and trunk hunt preferred information on a per TSG basis.
- 3) To provide, for the input TSG, the number of assigned digital trunks; the number of assigned analog trunks; the voice path assurance (VPA) cancellation rate for the assigned trunks; and the preferred or non-preferred trunk hunt status of each trunk block.

SEE PROPRIETARY NOTICE ON COVER PAGE

3. VARIABLE FIELD DEFINITIONS

- a Type of request:
- ALL — All TSGs in the office.
- CIN, TRK, TAN, OTAN, TSN — A single TSG.
- ISC o — All TSGs that possess input incoming signaling characteristic.
- OSC n — All TSGs that possess input outgoing signaling characteristic; or if OSC = 0, TSGs that are not down-chain routed.
- RSD — All TSGs that are ring signaling dependent.
- RSDI — All TSGs that are ISUP (CCS7).
- RSDQ — All TSGs that are Q931.
- RSDT — All TSGs that are TUP (INTNTL CCS7).
- TCA n — All TSGs in trunk control area n.
- b Information regarding type of segment, or other status information:
- MSG COMPL — This is the last segment, either for a group request or a single request.
- MSG IP — This is a subsequent segment of a group output (but not the last).
- MSG STARTED — This is first segment output of a group output.
- STOPPED — TSGSTAT output has stopped because of a manual request or abnormal situation. Variable C gives the reason.
- NOT STARTED — TSGSTAT output could not be started. Variable C gives the reason.
- c Additional information regarding segment or status of output:
- MAN — Manual request has stopped segmented output. See STOP:OP;TSGSTAT input message.
- REPEAT LATER — Request for TSGSTAT output cannot be processed at this time because of lack of trunk maintenance registers (TMRs).
- SEGMENT n — Number of segment being output.
- UNA — TSG or trunk control area (TCA) specified on input is unassigned.
- d Base traffic number of TSG.
- e Circuit identification number (CIN) of TSG.

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- f Total number of assigned, but not circuit administration (CAD), trunks in the TSG. Includes all ACTIVE and MTC trunks in the TSG.
- g Number of maintenance busy trunks in the TSG (CAD trunks are not maintenance busy).
- h (blank) — Maintenance busy (MB) count is not at 25 percent.
* — (Asterisk) — MB count for this TSG is at the 25 percent maintenance busy threshold (magic number).
- i Number of CAD trunks in the TSG (CAD trunks are not included in the TOTAL or MB counts).
- j (blank) — No trunks are in recent change rollback state.
** — ** (Asterisks) if any of the trunks in the TSG are in the recent change rollback state (CAD.DSA<RBA>). See OP:TRKSTAT input message for how to list the rolled-back trunks.
- k The automatic trunk test control state for the TSG:
INH — Inhibit automatic trunk testing on the TSG. This includes both routine tests and tests run as the result of call failures on the trunks in the TSG.
NORM — Allow automatic trunk tests on the TSG and remove failing trunks until the magic number is reached (25 percent).
NOLIMIT — Allow automatic trunk tests on the TSG and remove any failing trunks, even beyond the magic number. This has the effect of setting the magic number to 100 percent for this TSG as far as automatic test failures are concerned.
REPT — Allow automatic trunk tests to run but do not remove failing trunks from service, report only. This has the effect of setting the magic number to 0 percent for this TSG as far as automatic test failures are concerned.
- l The automatic trunk error analysis control state for the TSG:
INH — Inhibit the trunk error analysis for all trunks in the TSG. This means that trunk errors on trunks in the TSG will not be processed by trunk error analysis either for purposes of removing trunks from service or reporting suspected trunks. Any trunks already in error analysis when the INH control is set will continue to be processed, but will only be reported, not removed from service, if they fail error analysis.
- m 100, 101 type of request.
- n The number of active digital trunks in this TSG.

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o	The percentage of digital trunks in this TSG.
p	The number of active digital trunks that are preferred by trunk hunt.
q	The percentage of digital trunks in this TSG that are preferred.
r	The total number of active trunks in this TSG that are preferred by trunk hunt.
s	The percentage of trunks in this TSG that are preferred.
t	CIN, TRK, TAN, OTAN, TSN — Single TSG.
u	Trunk block number.
v	Number of consecutive trunks in trunk block having the same VPA cancellation rate.
w	VPA cancellation rate.
x	The preferred (P) or non-preferred (NP) trunk hunt status of each trunk block.

4. ACTION TO BE TAKEN

This output message is informational. Any action taken must be based on the specific information printed and the technical impact of that data.

5. REFERENCES

PIDENTs
TMAD0005
TMAD0007

Practice 234-180-240, *Trunk Maintenance Administration Program Description*

Input Messages
OP:TRKSTAT
OP:TSGSTAT
SET:TRKSTAT
SET:TSGATC
SET:TSGEAC
STOP:OP-TSGSTA

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:TSGSTAT-SUM
WORK CENTER.. MAC, MOC, NMOC, TEC,
TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

This message has two formats.

[1] OP:TSGSTAT;SUM:a b

	TOTAL	THRESHOLD	ROLLBACK	
S	cccc	dddd	eeee	
	TOTAL	MB	CAD	
TRUNKS	ffffff	gggggg	hhhhh	
	NORM	REPT	NOLIMIT	INH
TSGEAC	iiii	jjjj	kkkk	llll
TSGATC	mmmm	nnnn	oooo	pppp

[2] OP:TSGSTAT;SUM:q MSG COMPL SEGMENT

	TSG	TOTAL	DIG	PDIG	DPREF	PDP	TPREF	PTP
rrrr	ssss	ss ss	sss	sss	tttt	uuuu	vvv	www
					xxx	yyy	zzz	

2. REASON FOR OUTPUT

- 1) To print trunk subgroup status summary message for the group of trunk subgroups (TSGs) specified. Output consists of only one message which contains summary data for all TSGs in a TCA, or all TSGs in the office according to input request.
- 2) To provide digital trunk data and trunk hunt preferred information for the input TSG.

3. VARIABLE FIELD DEFINITIONS

a Type of group requested.

ALL — All TSGs in the office.

ISC s — All TSGs with input signaling characteristic.

OSC r — All TSGs with output signaling characteristic.

RSD — All TSGs that are ring signaling dependent.

RSDI — All TSGs that are ISUP (CCS7).

RSDQ — All TSGs that are Q931.

RSDT — All TSGs that are TUP (INTNTL CCS7).

TCA n — All TSGs in trunk control area (TCA) n.

TRK, TAN, OTAN, TSN — Single TSG.

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- b Optional item that prints if abnormal conditions prevented the complete message from being output. The information could be:
- NOT STARTED REPEAT LATER — No trunk maintenance register (TMR) available to process request.
- NOT STARTED UNA — Input TCA or trunk identity is unassigned.
- STOPPED MAN — Data collection was stopped via a manual request before the data was ready for output.
- c Total number of TSGs in the group specified, i.e., entire office (ALL) or TCA.
- d Number of TSGs which have reached the maintenance busy threshold (magic number).
- e Number of TSGs which have one or more trunks in the recent change roll-back state.
- f Total number of trunks in the entire office (ALL) or TCA. This does not include CAD trunks, i.e., only active and MB trunks are counted.
- g Total number of maintenance busy (MB) trunks.
- h Total number of circuit administration (CAD) trunks. Note that these trunks are not counted in the TOTAL count of trunks.
- If the OSC 0 request type was input, then CAD refers to the number of circuits assigned digital.
- i Number of TSGs with TSG error analysis control set to NORM. See TSG Control Definitions.
- j Number of TSGs with TSG error analysis control set to REPT. See TSG Control Definitions.
- k Number of TSGs with TSG error analysis control set to NOLIMIT. See TSG Control Definitions.
- l Number of TSGs with TSG error analysis control set to INH (inhibit). See TSG Control Definitions.
- m Number of TSGs with TSG automatic test control set to NORM. See TSG Control Definitions.
- n Number of TSGs with TSG automatic test control set to REPT. See TSG Control Definitions.
- o Number of TSGs with TSG automatic test control set to NOLIMIT. See TSG Control Definitions.
- p Number of TSGs with TSG automatic test control set to INH (inhibit). See TSG Control Definitions.

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q	Represents the desired trunk subgroup: CIN — Circuit identification number. OTAN — Octal trunk appearance number. TAN — Trunk appearance number. TSN — Trunk scanner number.
r	Base traffic number of TSG.
s	Circuit identification number (CIN) of TSG.
t	The total number of active trunks in this TSG.
u	The number of active digital trunks in this TSG.
v	The percentage of digital trunks in this TSG.
w	The number of active digital trunks that are preferred by trunk hunt.
x	The percentage of digital trunks in this TSG that are preferred.
y	The total number of active trunks in this TSG that are preferred by trunk hunt.
z	The percentage of trunks in this TSG that are preferred.

TSG Control Definitions

INH	Inhibit the trunk error analysis for all trunks in the TSG. This means that trunk errors on trunks in the TSG will not be processed by trunk error analysis either for purposes of removing trunks from service or reporting suspected trunks. Any trunks already in error analysis when the INH control is set will continue to be processed, but will only be reported, not removed from service, if they fail error analysis.
INH	Inhibit automatic trunk testing on the TSG. This includes both routine tests and tests run as the result of call failures on the trunks in the TSG.
NOLIMIT	Perform trunk error analysis and remove any trunks which fail, up to 100 percent of the trunks in the TSG. This is the default for trunk maintenance test circuits.
NOLIMIT	Allow automatic trunk tests on the TSG and remove any failing trunks, even beyond the magic number. NOTE: This has the effect of setting the magic number to 100 percent for this TSG as far as automatic test failures are concerned.
NORM	Perform trunk error analysis on trunks in the TSG and remove failing trunks from service, but do not exceed the office defined magic number (25 percent). After the magic number is reached failing trunks will still be reported. This is the "default" control for all trunks and service circuits except trunk maintenance test circuits, which default to NOLIMIT.

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NORM	Allow automatic trunk tests on the TSG and remove failing trunks until the magic number is reached (25 percent).
REPT	Perform trunk error analysis on trunks in TSG but only report failing trunks, do not remove them from service.
REPT	Allow automatic trunk tests to run but do not remove failing trunks from service, report only.
	NOTE: This has the effect of setting the magic number to 0 percent for this TSG as far as automatic test failures are concerned.
TSGATC	Trunk subgroup automatic testing control.
TSGEAC	Trunk subgroup error analysis control.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
TMAD0005
TMAD0007

Input Messages
OP:TRKSTAT
OP:TSGSTAT
SET:TRKSTAT
SET:TSGATC
SET:TSGEAC
STOP:OP-TSGSTA

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:TSIBP
WORK CENTER.. MOC
GENERIC 4E24 Rel. 2 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] OP:TSIBP XTSI a COMPLETE
NONE
- [2] OP:TSIBP XTSI a COMPLETE
CONTR b c
[d]
- [3] OP:TSIBP XTSI a e
- [4] OP:TSIBP XTSI a D3U f COMPLETE
NONE
- [5] OP:TSIBP XTSI a D3U f COMPLETE
b c
- [6] OP:TSIBP XTSI a D3U f g
- [7] OP:TSIBP XTSI a D3U f d
- [8] OP:TSIBP XTSI a SPU h COMPLETE
NONE
- [9] OP:TSIBP XTSI a SPU h COMPLETE
b c
- [10] OP:TSIBP XTSI a SPU h g
- [11] OP:TSIBP XTSI a SPU h d
- [12] OP:TSIBP XTSI a IBU 0 COMPLETE
NONE
- [13] OP:TSIBP XTSI a IBU 0 COMPLETE
b c
- [14] OP:TSIBP XTSI a IBU 0 g
- [15] OP:TSIBP XTSI a IBU 0 d
- [16] OP:TSIBP XTSI a ALL COMPLETE
NONE

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- [17] OP:TSIBP XTSI a ALL COMPLETE
[CONTR b c]
[CONTR d]
[CONTR e]
[D3U f b c] [SPU h b c] [IBU 0 b c]
[D3U f d] [SPU h d] [IBU 0 d]
[D3U f g] [SPU h g] [IBU 0 g]
- [18] OP:TSIBP XTSI a ALL e
- [19] OP:TSIBP XTSI a SUM COMPLETE
NONE
- [20] OP:TSIBP XTSI a SUM COMPLETE
[CONTR]
[D3U f]
[SPU h]
[IBU 0]
- [21] OP:TSIBP XTSI a SUM e

2. REASON FOR OUTPUT

This message prints in response to an OP:TSIBP input message.

Formats [1-3] is output if the input request specified that all breakpoints of a Expanded Time Slot Interchange (XTSI) simplex controller or duplex controllers be listed.

Formats [4-11] is output if the input request specified that all breakpoints of a Digital Signal Level 3 Unit (D3U) be listed.

Formats [8-11] is output if the input request specified that all breakpoints of a Signal Processing Unit (SPU) be listed.

Formats [12-15] is output if the input request specified that all breakpoints of a In-Band Unit (IBU) be listed.

Formats [16-18] is output if the input request specified that all breakpoints of an XTSI frame (controllers and D3Us) be listed.

Formats [1-18] give the instruction Random Access Memory (RAM) address and type for each breakpoint listed.

Formats [19-21] are output if the input request specified a summary breakpoint listing only. The summary only lists those units (including the controller) that have one or more breakpoints. May result in more than one output message depending on the amount of data to be printed.

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3. VARIABLE FIELD DEFINITIONS

- a XTSI member number in decimal.
- b The address of the breakpoint in hexadecimal.
- c Breakpoint type:
CUSTOM
FAST
NORMAL
- d Summary data fail code:
FAILED - INCONSISTENT DATA The controller summary data word is inconsistent with the breakpoint data from the hardware (controller, D3U, SPU or IBU). The summary data word indicates the unit has a breakpoint and no breakpoint data was reported by the unit. Because of the data inconsistency, the breakpoints listed are suspect. Contact the Technical Assistance Center for further information.
- e Controller request code:
ABORTED - FRAME ERROR —Request for the given XTSI was aborted because of an error returned from the frame. Contact the Technical Assistance Center for further information.
COMPLETE —All breakpoints have been removed from the controller.
DENIED - INV TSI TYPE OR UNEQ —Request denied because only an XTSI can be specified, or the frame is unequipped, in growth, or special growth state.
DENIED - ODD TSI MEMBER —Request denied because only the even member number can be specified.
DENIED - TSI DUPF —Request denied because the frame is duplex failed.
DENIED - TSI LOM —Request denied because the a frame controller is in Listen Only Mode (LOM). Retry later, as this condition should be cleared quickly.
- f D3U number in decimal.
- g D3U, SPU or IBU request status code:
ABORTED - MACRO ERROR —Request was aborted because the given D3U, SPU or IBU failed in processing the list command. Contact the Technical Assistance Center for further information.

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ABORTED - MACRO REJECTED — Request for the given D3U, SPU or IBU was aborted because the XTSI frame rejected the list command. Contact the Technical Assistance Center for further information.

ABORTED - MACRO TIMEOUT — Request for the given D3U, SPU or IBU was aborted because the XTSI frame did not reply to the list command within the allotted time limit. Contact the Technical Assistance Center for further information.

ABORTED - FRAME ERROR — Request for the given D3U, SPU or IBU was aborted because of an error returned from XTSI frame. Contact the Technical Assistance Center for further information.

COMPLETE — All breakpoints have been removed from the D3U, SPU or IBU.

DENIED - INV TSI TYPE OR UNEQ — Request denied because an XTSI was not specified, the frame or the D3U, SPU or IBU was unequipped, in growth, or special growth state.

DENIED - ODD TSI MEMBER — Request denied because only the even member number can be specified.

DENIED - SUBUNIT IS OOS — Request for the given D3U, SPU or IBU was denied because the D3U, SPU or IBU is out of service.

DENIED - TSI LOM — Request denied because the a frame controller is in listen-only mode. Retry later, as this condition should be cleared quickly.

DENIED - TSI DUPF — Request denied because the frame is duplex failed.

h SPU number in decimal.

4. REFERENCES

PIDENT
XTSIBKPT

Input Message
CLR: TSIBP
OP: TSIBP
SET: TSIBP

Output Message
CLR: TSIBP
REPT: TSIBP
SET: TSIBP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:UTILDS-1
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

OP:UTILDS a b
[c] [d]
.
.
.

2. REASON FOR OUTPUT

To output the statements contained in a utility data set in response to an OP:UTILDS input message. The statements that are printed are the commands comprising the named data set as they exist on file system.

3. VARIABLE FIELD DEFINITIONS

a Name of data set.
b Status of request. May have one of following forms:
COMPLETED — Entire data set follows.
MSG COMPL — Final partition. Message is not complete.
MSG IP — Following partitions.
MSG STARTED — First of several partitions required to print data set.
STOPPED — Print stopped because of error condition.

If b ≠ STOPPED, the following variable definitions apply:

c Line number associated with data set line.
d Data set line.

4. ACTION TO BE TAKEN

NOTE: The following coded responses are made to the STOPPED error condition:

CODE 160 File system queue full. Reenter when file system activity decreases.
CODE 161 Disk address (DKAD) reject main memory address out of range. Run system audit of writable stores (SAWS) or system audit of stores using tape (SAST).

SEE PROPRIETARY NOTICE ON COVER PAGE

CODE 162	DKAD reject file system mismatches identification (ID) tag. Run SAWS or SAST.
CODE 163	DKAD reject write request is not a multiple of 32 or not on sector boundary. Run SAWS or SAST.
CODE 164	DKAD reject size too large. Run SAWS or SAST.
CODE 165	DKAD reject file specifications out of range. Run SAWS or SAST.
CODE 166	DKAD reject blocked. Run SAWS or SAST.
CODE 167	DKAD reject write trouble to in service file. Run SAWS or SAST.
CODE 168	DKAD reject queue invalid for generic utility program (GULP). Run SAWS or SAST.
CODE 169	DKAD reject mutilated queue. Reenter; if same code appears, run SAWS or SAST.
CODE 170	DKAD reject no queue specified. Run SAWS or SAST.

5. REFERENCES

PIDENTs
GULPDSET
GULRUTCR

Practice 234-301-003, *1B Processor Generic Utility Program (GULP) Application - Description*

PA-4A002-01, *4ESSTM User's Manual*

Input Message
OP:UTILDS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:UTILDS-2
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

OP:UTILDS a

2. REASON FOR OUTPUT

To print the statements contained in a utility data set in response to an OP:UTILDS input message. Utility commands comprising the named data set as they exist on the disk file are printed.

3. VARIABLE FIELD DEFINITIONS

a Data set name followed by a list of the utility commands comprising the data set.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
GULPDSET
GULRUTCR

PA-4A002-01, 4ESSTM *User's Manual*

Input Message
OP:UTILDS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:UTILMTCH
WORK CENTER.. MOC
GENERIC 4E21 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

OP:UTILMTCH
MATCH CONDITION 0 a [b c d]
MATCH CONDITION 1 a [b c d]

2. REASON FOR OUTPUT

To report the status of the match conditions set up with the generic utility input message of the form: WHEN:ADR x; {R|W|RW} or WHEN:XADR x; {R|W|RW}.

3. VARIABLE FIELD DEFINITIONS

- a Status of the matcher:
- IDLE — The matcher is idle (items b - d will not be printed).
- SETUP — The matcher is set-up but not enabled.
- ENABLED — The matcher is enabled, and active.
- b Ten digit octal match address.
- c Matching on read and/or write:
- R — Read Only
- W — Write Only
- RW — Read or write
- d Utility matcher in use (1-12).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
GULRUTCR

Input Messages
OP:UTILMTCH
WHEN:ADR
WHEN:XADR

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:UTLDSTAB
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

OP:UTLDSTAB
aaaaaaaa bbbbbbbb c
•
•
•

2. REASON FOR OUTPUT

To output the contents of the generic utility data set reference table in response to an OP:UTLDSTAB input message.

3. VARIABLE FIELD DEFINITIONS

a	Data set name.
b	Disk start address of the data set (octal).
c	Number of words of disk required to store data set (decimal).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
GULPDSET
GULRUTCR

Practice 234-301-003, *1B Processor Generic Utility Program (GULP) Application - Description*

PA-4A002-01, *4ESSTM User's Manual*

Input Message
OP:UTLDSTAB

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:VCNT-THRESH
WORK CENTER.. MAC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

OP:VCNT;{PRE|CUR}, DAILY REPORT - CURRENT PARAMETERS,
COUNT AND INHIBITS

PARAMETERS:

INITIAL SCREENING THRESHOLD HIGH [NORMAL]: a
REPORT PRINTOUT HIGH: b TIMES THRESHOLD
EXCEEDED

INITIAL SCREENING THRESHOLD LOW [PROBLEM]: c
REPORT PRINTOUT LOW: d TIMES THRESHOLD
EXCEEDED

PERFORMANCE COUNTS:

NUMBER OF OCCURRENCES LOST : e
NUMBER OF OCCURRENCES INHIBITED : f
HIGH THRESHOLD OCCURRENCES : g
DELETED FROM FIRST FILE : h
THRESHOLD EXCEEDED : i
DELETED FROM LONG-TERM FILE : j
NUMBER OF EXCEP REPT PRINTOUTS : k

LOW THRESHOLD OCCURRENCES : l
DELETED FROM FIRST FILE : m
THRESHOLD EXCEEDED : n
DELETED FROM LONG-TERM FILE : o
NUMBER OF EXCEP REPT PRINTOUTS : p

INHIBITED:

[q]

2. REASON FOR OUTPUT

To print the second of two parts of the vacant code analysis daily report. It consists of the current thresholds, performance counts, and inhibits in effect. The vacant code analysis daily report can be requested manually for either the current data (OP:VCNT;CUR) or for the previous day's data (OP:VCNT;PRE).

3. VARIABLE FIELD DEFINITIONS

a Number of high-threshold reports in the threshold file required to cause an entry in the long-term file.

SEE PROPRIETARY NOTICE ON COVER PAGE

- b Number of high-threshold long-term file entries (with the same pattern) required to cause an exception report printout.
- c Number of low-threshold reports in the threshold file required to cause an entry in the long-term file.
- d Number of low-threshold long-term file entries (with the same pattern) required to cause an exception report printout.
- e Number vacant code occurrences lost due to an overflow in the initial vacant code analysis processing buffer.
- f Number of vacant code occurrences inhibited as a result of an input teletypewriter (TTY) message INH:VCNT.
- g Total number of vacant code occurrences in the high threshold category.
- h Number of high-threshold occurrences overwritten and lost in the threshold (first-stage file) file.
- i Number of high-threshold occurrences exceeding the threshold count and therefore promoted to the long-term file for further analysis.
- j Number of high-threshold occurrences overwritten and lost in the long-term file.
- k Number of high-threshold exception reports printed.
- l Total number of vacant code occurrences in the low-threshold category.
- m Number of low-threshold occurrences overwritten and lost in the threshold (first-stage file) file.
- n Number of low-threshold occurrences exceeding the threshold count and therefore promoted to the long-term file for further analysis.
- o Number of low-threshold occurrences overwritten and lost in the long-term file.
- p Number of low-threshold exception reports printed.
- q Inhibits currently in effect. Inhibits can be by vacant code class, trunk group, ABCDEF digits, or any combination of these. There can be up to 16 inhibits in effect at any time.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
VCNTANAL

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Messages
INH:VCNT
OP:VCNT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:VCNT-WORST
WORK CENTER.. MAC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

OP:VCNT; a, DAILY REPORT -TEN WORST VACANT CODE OCCURRENCES

2. REASON FOR OUTPUT

To print the first of two parts of the vacant code analysis daily report, which consists of the ten worst vacant code occurrences.

The vacant code analysis daily report can be requested manually for either the current data (OP:VCNT;CUR) or for the previous day's data (OP:VCNT;PRE).

3. VARIABLE FIELD DEFINITIONS

a Type of data:
 CUR – Current data.
 PRE – Previous day's data.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
VCNTANAL

Input Message
OP:VCNT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:XALM
WORK CENTER.. TOC
GENERIC 4E21 Rel. 4 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

[1] OP:XALM
OFFICE INHIBIT STATUS:
DS3 a DS1 b

XTSI	X/D3U/DS3	X/D3U/DS1
	543210	543210
c	d eeeee	f ggggg
.	.	.
.	.	.
.	.	.

[2] OP:XALM
OFFICE INHIBIT STATUS
DS3 a DS1 b

XTSI	D3U	X/D3U/DS3	X/D3U/DS1
c	h	d i	f j

2. REASON FOR OUTPUT

In response to the OP:XALM input command.

3. VARIABLE FIELD DEFINITIONS

- a Total office Digital Signal Level 3 (DS3) inhibit status:
- 0 — Printing of Expanded Time Slot Interchange (XTSI) facility alarm/alarm abatements at the DS3 level is allowed for the office.
 - 1 — Printing of XTSI facility alarm/alarm abatements at the DS3 level is not allowed for the office.
- b Total office Digital Signal Level 1 (DS1) inhibit status:
- 0 — Printing of XTSI facility alarm/alarm abatements at the DS1 level is allowed for the office.
 - 1 — Printing of XTSI facility alarm/alarm abatements at the DS1 level is not allowed for the office.
- c XTSI member number.

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- d Individual XTSI DS3 inhibit status:
- 0 — Printing of XTSI facility alarm/alarm abatements at the DS3 level is allowed for this XTSI.
 - 1 — Printing of XTSI facility alarm/alarm abatements at the DS3 level is not allowed for this XTSI.
- e Each bit represents the Digital Signal Level 3 Interface Unit (D3U) number noted. For example: the first bit represents D3U 5 and the last bit represents D3U 0:
- 0 — Printing of XTSI facility alarm/alarm abatements at the DS3 level is allowed for this XTSI, D3U.
 - 1 — Printing of XTSI facility alarm/alarm abatements at the DS3 level is not allowed for this XTSI, D3U.
- f Individual XTSI DS1 inhibit status:
- 0 — Printing of XTSI facility alarm/alarm abatements at the DS1 level is allowed for this XTSI.
 - 1 — Printing of XTSI facility alarm/alarm abatements at the DS1 level is not allowed for this XTSI.
- g Each bit represents the D3U number noted. For example: the first bit represents D3U 5 and the last bit represents D3U 0:
- 0 — Printing of XTSI facility alarm/alarm abatements at the DS1 level is allowed for this XTSI, D3U.
 - 1 — Printing of XTSI facility alarm/alarm abatements at the DS1 level is not allowed for this XTSI, D3U.
- h D3U unit number (0-5).
- i Individual XTSI D3U DS3 inhibit status:
- 0 — Printing of XTSI facility alarm/alarm abatements at the DS3 level is allowed for this XTSI, D3U.
 - 1 — Printing of XTSI facility alarm/alarm abatements at the DS3 level is not allowed for this XTSI, D3U.
- j Individual XTSI D3U DS1 inhibit status:
- 0 — Printing of XTSI facility alarm/alarm abatements at the DS1 level is allowed for this XTSI, D3U.
 - 1 — Printing of XTSI facility alarm/alarm abatements at the DS1 level is not allowed for this XTSI, D3U.

4. ACTION TO BE TAKEN

None. Informational only.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENT
TMTCTXMM
TMTCTXSI

Input Messages
ALW:XALM
INH:XALM
OP:XALM

SEE PROPRIETARY NOTICE ON COVER PAGE

ID OP:XPWRSTAT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

OP:XPWRSTAT (MISCELLANEOUS POWER UNIT SYSTEM STATUS)
XPWR 0: a b
FAULT STATUS:
c
XPWR 1: a d
FAULT STATUS:
c

2. REASON FOR OUTPUT

To report the status of both miscellaneous power (XPWR) units.

3. VARIABLE FIELD DEFINITIONS

- a Possible states and their definitions are as follows:
- ACT — Supplying power without any faulty components. Unable to pull out the pack.
- DGR — Supplying power with some faulty component(s). Unable to pull out the pack; need special checks/ actions prior to a removal.
- OOS — Can pull out the pack. (Note that the pack will supply power unless the pack is physically removed.)
- b The following text phrase will be printed only if scan and signal distributor (SSD) 0 is out-of-service (OOS):
SSD 0: OOS
- c One or more of the following faulty sources will be printed. (Note that if there is no fault, then only the key word NONE will be printed.)
- 24 V CONV — 24 V Converter is faulty.
- 5 V CONV FOR CSB 0 — 5 V converter for call store bus (CSB) 0 is faulty.
- 5 V CONV FOR CSB 1 — 5 V converter for CSB 1 is faulty.
- 5 V CONV FOR IFB 0 — 5 V converter for interface bus (IFB) 0 is faulty.
- 5 V CONV FOR IFB 1 — 5 V converter for IFB 1 is faulty.
- 5 V CONV FOR PSB 0 — 5 V converter for program store bus (PSB) 0 is faulty.

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5 V CONV FOR PSB 1 — 5 V converter for PSB 1 is faulty.

NONE — No faulty sources.

TERM VOLT OF CSB 0 — CSB 0 terminating voltage is abnormal.

TERM VOLT OF CSB 1 — CSB 1 terminating voltage is abnormal.

TERM VOLT OF IFB 0 — IFB 0 terminating voltage is abnormal.

TERM VOLT OF IFB 1 — IFB 1 terminating voltage is abnormal.

TERM VOLT OF PSB 0 — PSB 0 terminating voltage is abnormal.

TERM VOLT OF PSB 1 — PSB 1 terminating voltage is abnormal.

d The following text phrase will be printed only if SSD 1 is OOS:
SSD 1: OOS

NOTE: If a SSD board is out-of-service (OOS), then the status list kept by the software right before the SSD went into OOS will be printed because the current XPWR status cannot be determined without the SSD board. Therefore, the output list is for reference purpose only.

4. ACTION TO BE TAKEN

If SSD OOS, then repair SSD first.

5. REFERENCES

Input Messages
DGN:XPWR
EX:XPWR
OP:XPWRSTAT
RMV:XPWR
RST:XPWR

SEE PROPRIETARY NOTICE ON COVER PAGE

ID ORD:0
WORK CENTER.. TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

ORD:a;bc:dd,e

2. REASON FOR OUTPUT

To give the disposition of actions requested by an ORD:0 input message.

3. VARIABLE FIELD DEFINITIONS

- a One of the following functions:
- ALTIDMWF — Use voiceband interface frame/voiceband interface unit (VIF/VIU) to simultaneously apply an analog loop to the trunk at its input to VIU and to have digital milliwatt transmitted toward the facility side.
 - ALTIVU — Use VIF/VIU to have an analog loop applied to the trunk at its input to VIU.
 - DLOOP — Connect network digital loop to specified trunk.
 - DMWTF — Use VIF/VIU to have digital milliwatt transmitted on trunk toward its facility side.
 - MW — Connect identified trunk to office milliwatt supply.
- b Action requested:
- OPR — Operate or connect.
 - RLS — Release or undo function.
- c DURATION n — for MW or DLOOP;OPR only. Where n, is a number between 1 and 484, which indicates how long the connection will be maintained in seconds until an automatic release (if no release [RLS] message received).
- d The identity of the trunk.
- e Disposition of the input request:
- ABORTED — VIF function aborted automatically. VIF may have had an interrupt and is being diagnosed.
 - CIRCUIT ASSIGNED; or NONOPERATIONAL UNIT — Trunk is not usable until all units are in operational state and trunk translators exist.
 - COMPLETED — Action performed.

SEE PROPRIETARY NOTICE ON COVER PAGE

CIRCUIT BUSY; or NETWORK CONN FAILED — Try again later.

REJECTED, CKT MUST BE IN MTC — Take trunk out-of-service first (see the SET:TRKSTAT output message).

REJECTED — Only if RLS specified after a SET:CONN input message had been involved. TAT must be released.

REPEAT LATER — Storage areas are busy.

VIF/VIU BUSY — VIF or one of its VIUs is not in-service or diagnostics, or one of the functions is already set up in this VIF.

VIU UNASSIGNED — Voiceband interface unit unassigned.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
VIFOPCTL

Input Message
SET:CONN

Output Message
SET:TRKSTAT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID ORD:DS1LOOP
WORK CENTER.. TEC, TOC
GENERIC 4E22 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] ORD:DS1LOOP;a:XTSI b,D3U c,DS1 d!
 e

- [2] ORD:DS1LOOP;READ:{XTSI b,D3U c|XTSI b|ALL}!
 XTSI b,D3U c,DS1 d OPERATED
 .
 .
 .
 COMPLETED

- [3] ORD:DS1LOOP;READ:{XTSI b,D3U c|XTSI b|ALL}!
 COMPLETED

- [4] ORD:DS1LOOP;OPR:XTSI b,D3U c, DS1 d!
 OTAN f REJECTED TRUNK BUSY

- [5] ORD:DS1LOOP;{OPR|RLS}:XTSI b,D3U c,DS1 d!
 ABORTED INVALID DS1 LOOPBACK STATE, DS1 d WAS RELEASED

2. REASON FOR OUTPUT

Prints in response to an ORD:DS1LOOP input message.

Format [1] is a general response message.

Format [2] prints when the Digital Signal Level 1 (DS1) loopback is currently activated. This message is in response to the non-specific DS1 READ command on a timed or demand basis. Approximately every half hour, the message prints in response to an ORD:DS1LOOP;READ:ALL! command and is printed on the Read Only Printer (ROP) if any DS1 loopback is activated in the entire office.

Format [3] prints when no DS1 loopback is activated. This messages is in response to the non-specific DS1 READ command on a timed or demand basis. Approximately every half hour, the message prints in response to an ORD:DS1LOOP;READ:ALL! command and is printed on the ROP if no DS1 loopback is activated in the entire office.

Format [4] prints when the DS1 loopback is currently not activated. messages This message is in response to the OPR command. A rejection due to busy circuit identified by Octal Trunk Appearance Number (OTAN).

Format [5] prints when DS1 is in an invalid state.

SEE PROPRIETARY NOTICE ON COVER PAGE

3. VARIABLE FIELD DEFINITIONS

- a Connection request:
- | | |
|------|----------|
| OPR | Activate |
| RLS | Release |
| READ | Read |
- ALL All DS1s for the switch as a whole.
- b A 2-digit decimal number indicating the Expanded Time Slot Interchange (XTSI) member number (00-63), even member numbers only and has Digital Signal Level 3 Unit (D3U) terminating subunits for Digital Signal Level 3 (DS3) associated with it.
- c Member number of D3U (0-5).
- d Member number of DS1 (1-28).
- e Status explanation field:
- ABORTED DS1 OUT OF RANGE — An invalid DS1 number is entered to perform loopback action. DS1 number must be 1-28.
- ABORTED INVALID DS3 LOOPBACK STATE, DS1 IS PROVISIONED. DS3 WAS RELEASED — DS3 is in an invalid state. Possibly, DS1 is provisioned while DS3 has loopback in progress.
- ABORTED INVALID LOOPBACK STATE. RELEASED ALL LOOPBACKS — DS3 and DS1 all in invalid states. Possibly DS3 loopback and any DS1 loopback were in progress, or DS3 loopback was in progress with and invalid DS1 loopback.
- ABORTED TRANSLATION FAILURE — Trunk maintenance cannot identify the DS1. In response to the OPR command.
- COMPLETED — The DS1 loopback request has been successfully sent to D3U unit software to start loopback task.
- DENIED - INV TSI TYPE OR UNEQ — The input XTSI is not an Expanded Time Slot Interchange (XTSI) type of frame, or is not equipped.
- OPERATED — The DS1 loopback is currently activated. In response to the specific DS1 READ command.
- PMOS ERROR — Fail to schedule Peripheral Maintenance Operating System (PMOS) task possibly due to PMOS internal system error.
- REJECTED DS1 LOOPBACK IN PROGRESS — The DS1 loopback is currently activated. In response to the OPR command.
- REJECTED DS3 LOOPBACK IN PROGRESS — The DS3 loopback is currently activated.

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RELEASED — The DS1 loopback is not currently activated. In response to the specific DS1 READ command.

STOPPED D3U 00S — Check the D3U number in the input message. If the input messages is correct, check this D3U status. The D3U must be in service state before attempting a DS1 loopback.

STOPPED D3U NOT OPERATIONAL — The D3U in which the loopback was to be performed is not marked operational in translations.

STOPPED INTERNAL SYSTEM ERROR — An internal system error.

STOPPED TSI DUPLEX FAIL — The XTSI frame in which the loopback was to be performed is duplex fail.

STOPPED TSI NOT OPERATIONAL — The XTSI frame in which the loopback was to be performed is not marked operational in translations.

TASK BUSY — System is currently handling loopback task or has a loopback job in the PMOS queue on the same facility, such as D3U.

f Octal Trunk Appearance Number (OTAN).

4. ACTION TO BE TAKEN

Format [1], if status field is:

ABORTED DS1 OUT OF RANGE — For information only.

ABORTED INVALID DS3 LOOPBACK STATE, DS1 IS PROVISIONED. DS3 WAS RELEASED — System already released DS3 loopback. Check BLM report for more information.

ABORTED INVALID LOOPBACK STATE. RELEASED ALL LOOPBACKS — System already released DS3 and all DS1 loopbacks. Check BLM report for more information.

ABORTED TRANSLATION FAILURE — Check the DS1 number in the input message. If the input message is correct, check the trunk states associated with this DS1.

COMPLETED — For information only.

DENIED - INV TSI TYPE OR UNEQ — Re-enter the input message with a proper XTSI number.

OPERATED — For information only.

PMOS ERROR — If error re-occurred, contact National Electronic Switching Assistance Center (NESAC).

REJECTED DS1 LOOPBACK IN PROGRESS — For information only.

REJECTED DS3 LOOPBACK IN PROGRESS — For information only.

RELEASED — For information only.

SEE PROPRIETARY NOTICE ON COVER PAGE

STOPPED D3U OOS — Restore the D3U to service and re-enter the input message.

STOPPED D3U NOT OPERATIONAL — The D3U must be in operational state before attempting a DS1 loopback.

STOPPED INTERNAL SYSTEM ERROR — Re-enter the input message. If the problem persists, contact NESAC.

STOPPED TSI DUPLEX FAIL — The XTSI must be in the duplex or simplex state before attempting a DS1 loopback.

STOPPED TSI NOT OPERATIONAL — The XTSI must be in the Operational (OPER) state before attempting a DS1 loopback.

TASK BUSY — Then re-enter the input message later.

Format [2] and [3], are for information only.

Format [4], check the DS1 number in the input message. If the input messages is correct, check the trunk states associated with this DS1. Only trunk is Out-Of-Service (OOS) state with at least as associated manual reason will be considered eligible for loopback processing.

Format [5], indicates that the system already released DS1 loopback. Check the DS1 provision information, or check Base Level Maintenance (BLM) report for more information.

5. REFERENCES

PIDENT
XTSILPBK

Input Message
ORD:DS1LOOP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID ORD:DS3LOOP
WORK CENTER.. TEC, TOC
GENERIC 4E22 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] ORD:DS3LOOP;a:XTSI b,D3U c!
 d
- [2] ORD:DS3LOOP;READ:{XTSI b|ALL}!
 XTSI b,D3U c,DS3 OPERATED
 .
 .
 .
 COMPLETED
- [3] ORD:DS3LOOP;READ:{XTSI b|ALL}!
 COMPLETED
- [4] ORD:DS3LOOP {OPR|RLS}:XTSI b,D3U c!
 INVALID LOOPBACK STATE, RELEASED LOOPBACK:DS1 1-24:e DS1 25-28:f

2. REASON FOR OUTPUT

Prints in response to an ORD:DS1LOOP input message.

Format [1] is a general response message.

Format [2] prints when the Digital Signal Level 3 (DS3) loopback is currently activated. This message is in response to the non-specific DS3 READ command on a timed or demand basis. Approximately every half hour, the message prints in response to an ORD:DS3LOOP;READ:ALL! command and is printed on the Read Only Printer (ROP) if any DS3 loopback is activated in the entire office.

Format [3] prints when no DS3 loopback is activated. This messages is in response to the non-specific DS3 READ command on a timed or demand basis. Approximately every half hour, the message prints in response to an ORD:DS1LOOP;READ:ALL! command and is printed on the ROP if no DS3 loopback is activated in the entire office.

Format [4] prints when DS1 is in an invalid state. A bit is indicating the corresponding DS1 was in an invalid state and was cleared by the system.

SEE PROPRIETARY NOTICE ON COVER PAGE

3. VARIABLE FIELD DEFINITIONS

- a Connection request:
- | | |
|------|----------|
| OPR | Activate |
| RLS | Release |
| READ | Read |
- ALL All DS1s for the switch as a whole.
- b A 2-digit decimal number indicating the Expanded Time Slot Interchange (XTSI) member number (00-63), even member numbers only and has Digital Signal Level 3 Unit (D3U) subunits associated with it.
- c Member number of D3U (0-5).
- d Status explanation field:
- ABORTED INVALID DS1 LOOPBACK STATE. DS1 WAS RELEASED — DS1 is in an invalid state.
- ABORTED INVALID DS3 LOOPBACK STATE, DS1 IS PROVISIONED. DS3 WAS RELEASED — DS3 is in an invalid state. Possibly, DS1 is provisioned while DS3 has loopback in progress.
- ABORTED INVALID LOOPBACK STATE. RELEASED ALL LOOPBACKS — DS3 and DS1 all in invalid states. Possibly DS3 loopback and any DS1 loopback were in progress, or DS3 loopback was in progress with and invalid DS1 loopback.
- COMPLETED — The DS3 loopback request has been successfully sent to D3U unit software to start loopback task.
- DENIED - INV TSI TYPE OR UNEQ — The inputXTSI is not an Expanded Time Slot Interchange (XTSI) type of frame or is not equipped.
- OPERATED — The DS3 loopback is currently activated. In response to the specific DS3 READ command.
- PMOS ERROR — Fail to schedule Peripheral Maintenance Operating System (PMOS) task possibly due to PMOS internal system error.
- REJECTED DS1 IS PROVISIONED — The DS1 is PROVISIONED on D3U. In response to the OPR command for DS3LOOP.
- REJECTED DS1 LOOPBACK IN PROGRESS — The DS1 loopback is currently activated. In response to the OPR command.
- REJECTED DS3 LOOPBACK IN PROGRESS — The DS3 loopback is currently activated. In response to the OPR command.
- RELEASED — The DS3 loopback is not currently activated. In response to the specific DS3 READ command.

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- STOPPED D3U 00S — Check the D3U number in the input message. If the input messages is correct, check this D3U status. The D3U must be in service state before attempting a DS3 loopback.
- STOPPED D3U NOT OPERATIONAL — The D3U in which the loopback was to be performed is not marked operational in translations.
- STOPPED INTERNAL SYSTEM ERROR — An internal system error.
- STOPPED TSI DUPLEX FAIL — The XTSI frame in which the loopback was to be performed is duplex fail.
- STOPPED TSI NOT OPERATIONAL — The XTSI frame in which the loopback was to be performed is not marked operational in translations.
- TASK BUSY — System is currently handling loopback task or has a loopback job in the PMOS queue on the same facility, such as D3U.
- e A 24 bitmap. Bit position 0 is for DS1 1, bit 1 is for DS1 2, and so on until bit 23 is for DS1 24.
- f A 24 bitmap. Bit position 0 is for DS1 25, bit 1 is for DS1 26, bit 2 is for DS1 27, and bit 3 is for DS1 28.

4. ACTION TO BE TAKEN

Format [1], if status field is:

- ABORTED DS1 OUT OF RANGE — For information only.
- ABORTED INVALID DS1 LOOPBACK STATE. DS1 WAS RELEASED — System already released DS1 loopback. Check the DS1 provision information. Check Base Level Maintenance (BLM) report for more information.
- ABORTED INVALID DS3 LOOPBACK STATE, DS1 IS PROVISIONED. DS3 WAS RELEASED — System already released DS3 loopback. Check BLM report for more information.
- ABORTED INVALID LOOPBACK STATE. RELEASED ALL LOOPBACKS — System already released DS3 and all DS1 loopbacks. Check BLM report for more information.
- COMPLETED — For information only.
- OPERATED — For information only.
- PMOS ERROR — If error re-occurred, contact National Electronic Switching Assistance Center (NESAC).
- REJECTED DS1 IS PROVISIONED — For information only.
- REJECTED DS1 LOOPBACK IN PROGRESS — For information only.
- REJECTED DS3 LOOPBACK IN PROGRESS — For information only.
- RELEASED — For information only.

SEE PROPRIETARY NOTICE ON COVER PAGE

STOPPED D3U OOS — Restore the D3U to service and re-enter the input message.

STOPPED D3U NOT OPERATIONAL — The D3U must be in operational state before attempting a DS3 loopback.

STOPPED INTERNAL SYSTEM ERROR — Re-enter the input message. If the problem persists, contact NESAC. This message may result if the facilities are looped at the far end, i.e. T3 looped at opposite end.

DENIED - INV TSI TYPE OR UNEQ — Re-enter the input message with a newXTSI number.

STOPPED TSI DUPLEX FAIL — TheXTSI must be in the duplex or simplex state before attempting a DS3 loopback.

STOPPED TSI NOT OPERATIONAL — TheXTSI must be in the Operational (OPER) state before attempting a DS3 loopback.

TASK BUSY — Then re-enter the input message later.

Format [2] and [3], are for information only.

Format [4], system already released the invalid DS1 loopbacks. Check BLM report for more information.

5. REFERENCES

PIDENT
XTSILPBK

Input Message
ORD:DS3LOOP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID ORD:ES
WORK CENTER.. MOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

ORD:ES;a:bc, [d]

2. REASON FOR OUTPUT

To respond to an ORD:ES input message requesting an operate release or read of an echo suppressor (ES) for a specified trunk. Also, allows a read, operate, or release of a controllable echo canceler.

3. VARIABLE FIELD DEFINITIONS

- a Indicates what action was requested for this specified trunk:
- ORD — Operate the echo suppressor/echo canceler.
 - READ — Read the status of the echo suppressor/echo canceler.
 - RLS — Release the echo suppressor/echo canceler.
- NOTE:** Every RLS or OPR is followed by a read of the echo suppressor state.
- b Identity of specified trunk:
- CIN — Circuit identification number.
 - OTAN — Octal trunk appearance number (TAN).
 - TAN — Decimal TAN.
 - TSN — Decimal trunk scanner number (TSN).
- c A TAG (up to nine ASCII characters).
- d Text describing results of performing input request:
- ECHO CANCELER RELEASED
 - ECHO CANCELER OPERATED
 - ES DISABLED
 - ES DUPLEX FAILED — Digital echo suppressor terminal not usable.
 - ES FULL ENABLED
 - ES HALF ENABLED
 - NO ECHO SUPPRESSOR OR ECHO CANCELER — No echo suppressor or echo canceler associated with circuit.

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STOPPED DUE TO AUDIT CONDITION — An audit condition was detected so that the operation was not performed.

NON-CONTROLLABLE ECHO CANCELER — This echo canceler cannot be operated, read, or released since it is static and non-controllable.

NONOPERATIONAL UNIT — All units for the specified circuit are not operational.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
TMAD0005
TMTCEST

Input Message
ORD:ES

SEE PROPRIETARY NOTICE ON COVER PAGE

ID ORD:F
WORK CENTER.. MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

ORD:{SCAN|SD|TBITS};b:c d ,e
f

2. REASON FOR OUTPUT

To respond to an ORD:SCAN, ORD:SD, or ORD:TBITS input message requesting a read, one or more scan, signal distributor (SD) points, or TBITS associated with one or more scan points. It is also sent in response to an operate or release order on one or more SD points, and sets TBITS to IGNORE or NORMAL.

3. VARIABLE FIELD DEFINITIONS

SCAN	For scan read requests.
SD	For SD read or write requests.
TBITS	For TBITS read or write requests.
b	Indicates what action was to be taken:
IGNORE	— TBITS for each miscellaneous scanner number (MSN) specified are set to ignore.
NORM	— TBITS for each MSN specified are set to their normal "accept" state.
NULL	— Not present if F1, F2, band elimination filter (BEF) for common channel signaling system number 5 (CCITT No. 5) trunk present on input.
OPR	— Operate SD point request action.
READ	— Read of scan or SD point or TBITS requested.
RLS	— Release SD point is requested action.
c	Identity of the SCAN or SD point or pack location:
CIN	— With the circuit identification number.
CTAN	— With the 6-digit octal trunk appearance number (TAN).
EQPTLOC	— Physical pack location specified as bay, level, and horizontal position.
MDN	— With the decimal miscellaneous distributor number (MDN) of SD point.
MSN	— With the decimal MSN of scan point.

SEE PROPRIETARY NOTICE ON COVER PAGE

- SP — Signal processor member number.
- TAN — With the 7-digit decimal TAN.
- TDN — With the decimal trunk distributor number (TDN) of SD point.
- TSN — With the decimal trunk scanner number (TSN) of scan point.
- d Indicates family group such as signal distributor matrix (SDM), signal distributor applique pack (SDP), or service circuit pack (SCP) if it was requested, or indicates that the function was requested for a miscellaneous point or points associated with the trunk.
- e Disposition of the original input request:
- COMPLETED — Operation successfully completed.
- ILLEGAL OPERATION — Operation requested is illegal, e.g., a pack location for an SD matrix pack was specified but a SCAN read was requested. Or, base miscellaneous point (BMP) was specified with a number for a miscellaneous point which does not exist. Or, TBITS IGNORE or NORM was specified for a trunk (instead of an MSN). Or, F1, F2, BEF SD operation was requested on a non CCITT No.5 trunk. Or, BMP operation was requested on a CCITT No. 5 trunk.
- OPERATION FAILED — The SP matrix is not operational.
- UNEQUIPPED POINT — Unequipped SCAN, SD point, pulse point, or a point for a pseudo SP was specified.
- f Read result(s) if read was specified. Null if read was not requested. Read results are output from left to right starting with the lowest numbered point request. For a SCAN read, a 1 means the scan point is off-hook while a 0 means the scan point is on-hook. For an SD read, a 1 means the SD point is operated while a 0 means the SD point is released. TBITS read result has two octal digits to represent the 6 bits associated with each scan point.
- For CCITT No. 5 trunks:
- (1) If F1, F2, or BEF was specified on input for an ORD:SD request then the requested SD states are printed as requested.
 - (2) Scan and TBIT read results are labeled F1, F2, F1F2.
 - (3) SD read results are labeled F1, F2, BEF. (BEF = band elimination filter MDN = recognition time control MSN).

4. ACTION TO BE TAKEN

Once an SD point is operated, it may have to be followed by an ORD:SD input message with the RLS keyword in order to release the point.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
TMAD0005
TMAD0006

Input Messages
ORD:SCAN
ORD:SD
ORD:TBITS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID ORD:RF
WORK CENTER.. TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

ORD:RF;a,b

2. REASON FOR OUTPUT

To respond to an ORD:RF input message.

3. VARIABLE FIELD DEFINITIONS

a	Trunk ID number.
b	Message status:
	FAILURE
	INITIALIZED
	INVALID TR STATE FOR TESTING
	INVALID TRUNK SPECIFICATION
	NOT 53A TEST POSITION

4. ACTION TO BE TAKEN

None - message is informational.

5. REFERENCES

PIDENT
TMAD0006

Input Message
ORD:RF

SEE PROPRIETARY NOTICE ON COVER PAGE

ID ORD:TANTOTAN
WORK CENTER.. MAC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

ORD:TANTOTAN;{CONN|RLS}[:SUPV],{TSN a|CIN b|TAN c|OTAN d}:
{TSN e|CIN f|TAN g|OTAN h} i!

2. REASON FOR OUTPUT

To report that an ORD:TANTOTAN input message requesting the connection or the release of the two specified trunks has been processed.

3. VARIABLE FIELD DEFINITIONS

CONN	Connect the specified trunks.								
RLS	Release the specified trunks.								
SUPV	Supervisory integrity was requested.								
a	SP-ROW-POINT trunk scanner number (TSN) of the first trunk: <table> <tr> <td>SP</td><td>— A 2-digit decimal number indicating the signaling processor (SP) member number, range 00-31.</td></tr> <tr> <td>ROW</td><td>— A 3-digit decimal number indicating the row in the SP, range 00-255.</td></tr> <tr> <td>POINT</td><td>— A 2-digit decimal number indicating the point in the row, range 00-15.</td></tr> </table>	SP	— A 2-digit decimal number indicating the signaling processor (SP) member number, range 00-31.	ROW	— A 3-digit decimal number indicating the row in the SP, range 00-255.	POINT	— A 2-digit decimal number indicating the point in the row, range 00-15.		
SP	— A 2-digit decimal number indicating the signaling processor (SP) member number, range 00-31.								
ROW	— A 3-digit decimal number indicating the row in the SP, range 00-255.								
POINT	— A 2-digit decimal number indicating the point in the row, range 00-15.								
b	Circuit identification number (CIN) of first trunk.								
c	TSI-SP-PORT-CHANNEL trunk appearance number (TAN) of the first trunk: <table> <tr> <td>TSI</td><td>— 2-digit decimal number indicating the time slot interchange (TSI) member number, range 00-63.</td></tr> <tr> <td>SP</td><td>— 1-digit decimal member number indicating the SP of TSI, range 0-1.</td></tr> <tr> <td>PORT</td><td>— 1-digit decimal number indicating the port of TSI, range 0-6.</td></tr> <tr> <td>CHANNEL</td><td>— 3-digit decimal number indicating the channel, range 0-127.</td></tr> </table>	TSI	— 2-digit decimal number indicating the time slot interchange (TSI) member number, range 00-63.	SP	— 1-digit decimal member number indicating the SP of TSI, range 0-1.	PORT	— 1-digit decimal number indicating the port of TSI, range 0-6.	CHANNEL	— 3-digit decimal number indicating the channel, range 0-127.
TSI	— 2-digit decimal number indicating the time slot interchange (TSI) member number, range 00-63.								
SP	— 1-digit decimal member number indicating the SP of TSI, range 0-1.								
PORT	— 1-digit decimal number indicating the port of TSI, range 0-6.								
CHANNEL	— 3-digit decimal number indicating the channel, range 0-127.								
d	Octal TAN of first trunk.								
e	SP-ROW-POINT TSN of the second trunk. <table> <tr> <td>SP</td><td>— A 2-digit decimal number indicating the SP member number, range 00-31.</td></tr> </table>	SP	— A 2-digit decimal number indicating the SP member number, range 00-31.						
SP	— A 2-digit decimal number indicating the SP member number, range 00-31.								

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	ROW	— A 3-digit decimal number indicating the row in the SP, range 00-255.
	POINT	— A 2-digit decimal number indicating the point in the row, range 00-15.
f		Circuit identification number of the second trunk.
g		TSI-SP-PORT-CHANNEL TAN of the second trunk.
	TSI	— 2-digit decimal number indicating the TSI member number, range 00-63.
	SP	— 1-digit decimal member number indicating the SP of TSI, range 0-1.
	PORT	— 1-digit decimal number indicating the port of TSI, range 0-6.
	CHANNEL	— 3-digit decimal number indicating the channel, range 0-127.
h		Octal TAN of second trunk.
i		Text describing results of performing the input request: CAMP-ON FAILURE COMPLETED - SUCCESS DISK TROUBLE - RETRY LATER INPUT MSG TRUNK IDS NOT IN TABLE NETWORK CONN FAILED REJECTED. CANNOT CONN NON-E&M TRUNKS REJECTED. CANNOT CONN VFY DOM TRUNKS REJECTED. INOPERATIVE CIRCUIT REJECTED. INPUT TRUNK WAS NOT DTTU. REJECTED. TABLE FULL - RETRY LATER REJECTED. TRUNK BUSY REJECTED. TRUNKS NOT CAD.DSA REJECTED. TRUNKS NOT CONNECTED REQUEST DENIED. TRUNKS ALREADY USED. STOPPED DUE TO AUDIT CONDITION STOPPED: INVALID CONFIGURATION SPECIFIED

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENT
TANTOTAN

Input Message
ORD: TANTOTAN

SEE PROPRIETARY NOTICE ON COVER PAGE


```
ID ..... ORD:TL
WORK CENTER.. TOC
GENERIC ..... 4E19 and later
APPLICATION .. 4E
TYPE ..... Output
```

1. FORMAT

ORD:TL;a,b,c:d, e f

2. REASON FOR OUTPUT

To respond to an **ORD:TL** input message requesting the terminate and leave (T&L) status of the given trunk, or change the T&L state of a trunk.

3. VARIABLE FIELD DEFINITIONS

- a Indicates function requested.
- OPR — Place trunk into T&L state.
- READ — Output T&L state.
- RLS — Remove trunk from T&L state.
- b RDC — Circuit specified as RED-SPECIAL.
- c UCL — Specified when action is requested on a D-Channel.
- d Identity of trunk.
- CIN — Circuit identification name.
- OTAN — Octal format - trunk appearance number.
- TAN — Decimal format - trunk appearance number.
- TSN — Decimal format - trunk scanner number.
- e Explanatory text.
- COMPLETED — Operation successfully completed.
- ILLEGAL OPERATION — Request is denied.
- INVALID PARAMETERS — Invalid keyword; unable to camp-on.
- INVALID TRUNK SPECIFICATION — Trunk is not reserved for large scale nailup.
- f Variable f is printed in response to a read request.
- OPR — T&L set.
- RLS — T&L reset.

4. ACTION TO BE TAKEN

Once a trunk is placed into terminate and leave state, it may have to be followed by an ORD:TL; RLS input message request to remove the terminate and leave state.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
IOCPPOM4
LSNC00
TMAD0005

Input Messages
OP: TRKSTAT
ORD: TL
SET: TRKSTAT

Output Messages
OP: TRKSTAT
SET: TRKSTAT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID ORD:VSS-RETRY
WORK CENTER.. TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

ORD:VSS:RETRY:VSSID a, SID b, {ACT|SBY}
FAILURE REASON c

2. REASON FOR OUTPUT

To print the reason for failure of the ORD:VSS-RETRY input message.

3. VARIABLE FIELD DEFINITIONS

- a Voice storage system (VSS) identification (VSSID).
- b Service identification (SID).
- c Reason for failure:
- ANN LOCKOUT — Announcement handling locked out.
- CB QR FAIL — Failure to put callback request on VSS callback queue.
- DUPLEX FAIL — Mass announcement system (MAS) frame duplex failed.
- INVALID STE — Announcement state is not standby full.
- MISC ERROR — Audit problem, etc.
- NON VSS UPD — Announcement type not VSS.

4. ACTION TO BE TAKEN

Correct error before retrying the input message.

5. REFERENCES

PIDENTs
ANNHTTYM
TMAD0005

Input Message
ORD:VSS-RETRY

SEE PROPRIETARY NOTICE ON COVER PAGE

ID PCR:0
WORK CENTER.. MOC
GENERIC 4E21 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

[1] PCR: AENTRY

AC1FR	AC1GR	AC1JR	AC1KR	AC1LR	AC1XR
AC1YR	AC1ZR	AC1BR(H)	AC1BR(L)	AC1ASA(H)	AC1ASA(L)
AC1SCA	AC1SDA	AC1CSC	AC1ILA	AC1PCR	AC1SR
AC1MCO	AC1MCP	AC1MCD(H)	AC1MCD(L)	PS1RVB00T	CS1RVB00T

[2] PCR: BENTRY

AC1FR	AC1GR	AC1JR	AC1KR	AC1LR	AC1XR
AC1YR	AC1ZR	AC1BR(H)	AC1BR(L)	AC1ASB(H)	AC1ASB(L)
AC1SCA	AC1SDA	AC1CSC	AC1ILA	AC1PCR	AC1SR
AC1MCO	AC1MCP	AC1MCD(H)	AC1MCD(L)	AC1INH	AC1INS

[3] PCR: FAILED

AC1FR	AC1GR	AC1JR	AC1KR	AC1LR	AC1XR
AC1YR	AC1ZR	AC1BR(L)	AC1FRS	AC1GRS	AC1JRS
AC1KRS	AC1LRS	AC1XRS	AC1YRS	AC1ZRS	AC1SR
AC1SC	PC1HISTORY	PC1OVER- RIDE(H)	PC1OVER- RIDE(L)	PC1FILL_ADDR	AC1PCR

[4] PCR: A REQ

AC1JR	AC1GR	AC1SCA	AC1CSC	AC1PCR	AC1SR
AC1MCO	AC1MCP	AC1MCD(H)	AC1MCD(L)		

[5] PCR: B REQ

AC1JR	AC1GR	AC1SCA	AC1CSC	AC1PCR	AC1SR
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[6] PCR: FAIL

AC1JR	AC1GR	AC1SR	PC1HISTORY	PC1OVERRIDE(H)	PC1OVERRIDE(L)
PC1FILL_ADDR					

2. REASON FOR OUTPUT

To output a processor configuration recovery (PCR) action. This printout can be turned off by operating the clear utility poke key on the master control complex (MCC) of the emergency action interface (EAI) page.

SEE PROPRIETARY NOTICE ON COVER PAGE

3. VARIABLE FIELD DEFINITIONS

AC1ASA(H)	Contents of active central control (CC) interrupt return store A register, high bytes.
AC1ASA(L)	Contents of active central control (CC) interrupt return store A register, low bytes.
AC1BR(H)	Contents of active CC B register, high bytes.
AC1BR(L)	Contents of active CC B register, low bytes.
AC1ASB(H)	Contents of active CC interrupt return store B register, high bytes.
AC1ASB(L)	Contents of active CC interrupt return store B register, low bytes.
AC1CSC	Contents of active CC status register.
AC1FR	Contents of active CC F register.
AC1FRS	Contents of active CC F register shadow.
AC1GR	Contents of active CC G register.
AC1GRS	Contents of active CC G register shadow.
AC1ILA	Contents of active CC interrupt level activity register.
AC1INH	Contents of active CC interrupt inhibit register.
AC1INS	Contents of active CC interrupt source register.
AC1FES	Contents of active CC interface bus (IFB) error source register.
AC1JR	Contents of active CC J register.
AC1JRS	Contents of active CC J register shadow.
AC1KR	Contents of active CC K register.
AC1KRS	Contents of active CC K register shadow.
AC1LR	Contents of active CC L register.
AC1LRS	Contents of active CC L register shadow.
AC1MCD(H)	Contents of active CC MCC data register, high bytes.
AC1MCD(L)	Contents of active CC MCC data register, low bytes.
AC1MCO	Contents of active CC MCC override register.
AC1MCP	Contents of active CC MCC A-level program request register.
AC1PCR	Active CC processor configuration (PC) control register: Bits Definition 0-15 Contents of active CC PC control register. 16-23 Upper byte of failing data.
AC1SC	Contents of active CC stack counter register.
AC1SCA	Contents of active CC save current address register.

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AC1SDA	Contents of active CC save data address register.
AC1SR	Contents of active CC stack register.
AC1XR	Contents of active CC X register.
AC1XRS	Contents of active CC X register shadow.
AC1YR	Contents of active CC Y register.
AC1YRS	Contents of active CC Y register shadow.
AC1ZR	Contents of active CC Z register.
AC1ZRS	Contents of active CC Z register shadow.
CS1RVB00T	Call store variable boot strap status after recovery.
PC1FILL_ADDR	MCODE of store being pumped at time of failure.
PC1HISTORY	PC history flags-actions taken by PC.
PC1OVERRIDE(H)	PC override control-override used in this PC, high bytes.
PC1OVERRIDE(L)	PC override control-override used in this PC, low bytes.
PS1RVB00T	Program store variable boot strap status after recovery.

4. ACTION TO BE TAKEN

Save printout for expert analysis if the system fails to recover from a processor configuration, or if the cause of the processor configuration is unknown. If output message repeats seek higher level of support.

5. REFERENCES

PIDENTs
PCRVBOOT
PCRVCONT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RC:COMMENT
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] RC:COMMENT
CLR:RCB a
- [2] RC:COMMENT
RCCNL:RCBORNU a
- [3] RC:COMMENT
RCCNL:ROLLBACK ORNU a

2. REASON FOR OUTPUT

To provide information to determine which messages should be in the buffer or rolled back. This message is written onto the roll forward tape for RCCNL:ROLLBACK input messages. For CLR:RCB and RCCNL:RCBORNU input messages, the RC:COMMENT output message is written on the buffer backup tape.

3. VARIABLE FIELD DEFINITIONS

a The order number (ORNU).

4. ACTION TO BE TAKEN

Input the second line of the RC:COMMENT message as an input message, if desired.

5. REFERENCES

PIDENT
RCMAMAIN

Translation Guide, 4ESSTM, TG-4

Input Messages
CLR:RCB
RCCNL:RCBORNU
RCCNL:ROLLBACK

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RC:IN-PROGRESS
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RC:IN PROGRESS: BUFFER FOUND IN ERROR STATE
IT HAS BEEN CLEARED

2. REASON FOR OUTPUT

To report that the recent change buffer has been cleared because of an error. Processing of the current input message will continue.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

Resubmit messages that were in the buffer.

5. REFERENCES

PIDENT
RCMAMAIN

Translation Guide, 4ESSTM, TG-4

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RC:MESSAGE-REJ
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RC:MESSAGE REJECTED FOR BUF STATE:
ERROR IN KEYWORD OF MESSAGE ORNU
a

2. REASON FOR OUTPUT

To indicate that an recent change (RC) action message was rejected. RCMA requests this message on detecting a keyword error in an recent change (RC) action message during parsing.

3. VARIABLE FIELD DEFINITIONS

a The order number (ORNU) followed by the keyword (if available) in which the error was detected and its associated data. A keyword will not be available if the data error occurred in a tabular portion of a message. If the error falls before order number interpretation, the order number will be zero.

4. ACTION TO BE TAKEN

Correct the keyword or data field printed out, and resubmit the recent change (RC) action message.

5. REFERENCES

PIDENT
RCMAMAIN

Translation Guide, 4ESSTM, TG-4

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RC:MISC
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RC:MISC:OPT(MULTACT) STOPPED
THE FOLLOWING ORNU WERE NOT ACTIVATED:
aaaaaa bbbbbb cccccc dddddd eeeeee fffffff gggggg hhhhhh
iiiiii jjjjjj
aaaaaa bbbbbb cccccc dddddd eeeeee fffffff gggggg hhhhhh
iiiiii jjjjjj
aaaaaa bbbbbb cccccc dddddd eeeeee fffffff gggggg hhhhhh
iiiiii jjjjjj
aaaaaa bbbbbb cccccc dddddd eeeeee fffffff gggggg hhhhhh
iiiiii jjjjjj

2. REASON FOR OUTPUT

To report that one of the order numbers on a multiple activate (MULTACT) message has failed the activate state. This terminates processing of any further order number (ORNU). The message lists the unactivated ORNU.

3. VARIABLE FIELD DEFINITIONS

a-j Order numbers of the changes not activated.

4. ACTION TO BE TAKEN

If desired, activate ORNUs that have no dependency on the failing message by entering another MULTACT recent change message or activate individually by using the RCACT:ORNU input message. Correct the failing ORNU and activate the dependent ORNU.

5. REFERENCES

PIDENT
RCMAMAIN

Translation Guide, 4ESSTM, TG-4

Input Message
RCACT:ORNU

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RC:ORNU
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RC: ORNU aaaaaa REJECTED FOR BUF STATE:
ERROR ADDRESS = bbbbbbbb
c IS INCOMPATIBLE WITH d

2. REASON FOR OUTPUT

To indicate that an recent change (RC) action message was rejected. The data values in two input fields cannot be used together.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | Order number. If the error is found before the order number field is processed, then the value will be zero. |
| b | Program address of the failure. |
| c | Current data or data field being processed. |
| d | Data or data field that c conflicts with. |

4. ACTION TO BE TAKEN

Correct the data inconsistency and resubmit the RC: message.

5. REFERENCES

PIDENT
RCMAMAIN

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RC:ORNU-ACCEPT
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RC:ORNU aaaaaa SUCCESSFULLY BUFFERED

2. REASON FOR OUTPUT

To report that recent change (RC) action message parsing for a buffered message has been completed. The RC: message has correct format and all data is within range limits. The recent change has been entered into the disc message buffer.

3. VARIABLE FIELD DEFINITIONS

a The order number.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
RCMAMAIN

Translation Guide, 4ESSTM, TG-4

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RC:ORNU-INTERN
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RC:ORNU aaaaaa STOPPED: INTERNAL ERROR DURING MESSAGE b
PLEASE RESUBMIT LATER OR REQUEST TECHNICAL ASSISTANCE
ERROR ADDRESS=cccccccc

2. REASON FOR OUTPUT

To print after an unsuccessful attempt to parse or reform a message. Probable causes include over or under flow of message processing information area or mutilation of disk copies of parsing tables or disk message buffer area.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|-------------------------------|
| a | The order number. |
| b | The function being performed: |
| | PARSING |
| | REFORMING |
| c | The failing address. |

4. ACTION TO BE TAKEN

Resubmit the message or request technical assistance.

5. REFERENCES

PIDENT
RCMAMAIN

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RC:ORNU-MESSAG
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RC:ORNU aaaaaa STOPPED: MESSAGE TOO LONG

2. REASON FOR OUTPUT

To print when some internal state information necessary to process a message exceeds the designed storage limit.

3. VARIABLE FIELD DEFINITIONS

a The order number of the current recent change (RC) action message, if available.

000000 - Order number is unavailable.

4. ACTION TO BE TAKEN

Submit message on two RCDMs.

5. REFERENCES

PIDENT
RCMAMAIN

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RC:ORNU-REJ-AL
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RC:ORNU aaaaaa REJECTED: ORNU ALREADY IN BUFFER
MESSAGE PASSES ALL OTHER BUF STATE CHECKS

2. REASON FOR OUTPUT

To print upon encountering an order number that is already resident in the disk message buffer. The recent change message has passed all other format and data range checks.

3. VARIABLE FIELD DEFINITIONS

a The order number of the current recent change (RC) action message.

4. ACTION TO BE TAKEN

Use the OP:RCBMSG input message to check if this is a duplicate order number. Change the order number field, and resubmit the message if it is a duplicate.

5. REFERENCES

PIDENT
RCMAMAIN

Translation Guide, 4ESSTM, TG-4

Input Message
OP:RCBMSG

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RC:ORNU-REJ-FOR
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RC:ORNU aaaaaa REJECTED FOR BUF STATE:
AT LEAST ONE LINE OF THE TABLE OR ONE
FIELD OF THE FORM MUST CONTAIN AN ENTRY

2. REASON FOR OUTPUT

To indicate that a recent change form was rejected due to either an empty table, which must have at least one line entered, or to one of several blank fields, one or more of which must contain an entry.

3. VARIABLE FIELD DEFINITIONS

a The order number.

4. ACTION TO BE TAKEN

Enter data in the table or in one of the fields and resubmit the message.

5. REFERENCES

PIDENT
RCMAMAIN

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RC:ORNU-REJ-INC
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RC: ORNU aaaaaa REJECTED FOR BUF STATE:
ERROR ADDRESS = bbbbbbbb
c IS INCOMPATIBLE WITH d

2. REASON FOR OUTPUT

To indicate that an recent change (RC) action message was rejected. The data values in two input fields cannot be used together.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | Order number. If the error is found before the order number field is processed, then the value will be zero. |
| b | Program address of the failure. |
| c | Current data or data field being processed. |
| d | Data or data field that c conflicts with. |

4. ACTION TO BE TAKEN

Correct the data inconsistency and resubmit the recent change (RC) action message.

5. REFERENCES

PIDENT
RCMAMAIN

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RC:ORNU-REJ-NO
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RC:ORNU aaaaaa REJECTED: MESSAGE BUFFER CONTAINS
NO SPACE FOR THIS MESSAGE
CANCEL MESSAGES OR ACTIVATE THEM TO FREE
SPACE MESSAGE PASSES BUF STATE CHECKS

2. REASON FOR OUTPUT

To report that there is insufficient room in the disk message buffer to enter the current message. This does not necessarily mean that the OP:RCBSPACE output message would indicate a full buffer. The current recent change (RC) action message has passed format and data field checks.

3. VARIABLE FIELD DEFINITIONS

a Order number of the current message.

4. ACTION TO BE TAKEN

Cancel or activate the messages to make room for new messages, and resubmit the recent change (RC) action message.

5. REFERENCES

PIDENT
RCMAMAIN

Translation Guide, 4ESSTM, TG-4

Output Message
OP:RCBSPACE

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RC:STOPPED
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RC:STOPPED: FORM NOT CURRENTLY IMPLEMENTED

2. REASON FOR OUTPUT

To print when the particular recent change (RC) action message input is not available for the current generic at the office.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

Seek technical assistance to make the desired recent change.

5. REFERENCES

PIDENT
RCMAPPOP

Translation Guide, 4ESSTM, TG-4

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RCCNL:RCBORN-A
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RCCNL:RCBORNU aaaaaa ACCEPTED

2. REASON FOR OUTPUT

To print in response to an RCCNL:RCBORNU input message upon successfully canceling a message. This is followed by another message with the text of the canceled recent change.

3. VARIABLE FIELD DEFINITIONS

a Order number of canceled message.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
RCMAMAIN

Input Message
RCCNL:RCBORNU

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RCCNL:RCBORN-S
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RCCNL:RCBORNU aaaaaa STOPPED: INTERNAL ERROR DURING CANCEL
INPUT PROCESSING
MESSAGE HAS BEEN CANCELLED. ONLY INCOMPLETE TEXT CAN BE OUTPUT
ERROR ADDRESS=bbbbbbbb

2. REASON FOR OUTPUT

To print when the disk buffered copy of a message has been garbaged and cannot be reformed for printout.

3. VARIABLE FIELD DEFINITIONS

a Order number of message canceled.
b Failing address.

4. ACTION TO BE TAKEN

Seek technical assistance if this message prints repeatedly.

5. REFERENCES

PIDENT
RCMAMAIN

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RCCNL:RLBK-EMPT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RCCNL:ROLLBACK NOT STARTED
ROLLBACK AREA EMPTY

2. REASON FOR OUTPUT

To report that there is no rollback block to roll back.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
RCMAMAIN

Input Message
RCCNL:ROLLBACK

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RCCNL:RLBK-LKO
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RCCNL:ROLLBACK NOT STARTED
FAILURE a, ADDRESS b,
c

2. REASON FOR OUTPUT

To report that a rollback area is locked out of the hash table.

3. VARIABLE FIELD DEFINITIONS

a Failure error code.
b Failure address.
c Error description (text).

4. ACTION TO BE TAKEN

Terminate the operation that is controlling the hash table before reentering the rollback request.

5. REFERENCES

PIDENTs
RCMAMAIN
RCMVOO

Input Message
RCCNL:ROLLBACK

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RCCNL:RLBK-MKEY
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RCCNL:ROLLBACK NOT STARTED
RESTRICT RC TO MOC KEY NOT OPERATED

2. REASON FOR OUTPUT

To report a restriction of recent change to the "MOC" key that is not operated on the master control complex (MCC).

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

Operate the restrict recent change to "MOC" key.

5. REFERENCES

PIDENT
RCMAMAIN

Input Message
RCCNL:ROLLBACK

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RCCNL:RLBK-REST
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RCCNL:ROLLBACK NOT STARTED
ROLLBACK OF THE NEXT BLOCK IS RESTRICTED

2. REASON FOR OUTPUT

To report that a rollback was not performed because of a recent-change restriction on the rollback block.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

Reenter the input message RCCNL : ROLLBACK. Use the UCL variable with caution.

5. REFERENCES

PIDENT
RCMAMAIN

Input Message
RCCNL : ROLLBACK

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RCCNL:ROLLBACK
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RCCNL:ROLLBACK NOT STARTED
FAILURE a, ADDRESS b,
c

2. REASON FOR OUTPUT

To report that a rollback area is locked out of the hash table.

3. VARIABLE FIELD DEFINITIONS

a Failure error code.
b Failure address.
c Error description (text).

4. ACTION TO BE TAKEN

Terminate the operation that is controlling the hash table before reentering the rollback request.

5. REFERENCES

PIDENTs
RCMAMAIN
RCMVOO

Input Message
RCCNL:ROLLBACK

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RECOVERY:SR
WORK CENTER.. MOC
GENERIC 4E21 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

```
RECOVERY:SR a
[[b] cccccc]
d
[e] WRITTEN ffffff
FIRMWARE VERSION NUMBER gggggggg
SYSRMAIN LISTING NUMBER hhhhhhhh
PS0 FOUND: LOADING GEN
iiiiiii
[CC ACCESS TESTS PASSED]
[AUB CONFIGURED]
[BASE CS CONFIGURED]
[IFB CONFIGURED]
[PS CONFIGURED]
[WAITING NEXT TAPE]
[CS CONFIGURED]
[SR FAIL: CODE j, DATA k]
[** TAPE ERROR FOUND IN l **]
[* API RECONFIGURED *]
[** APS DUPLEX FAILED - DISK DATA INVALID]
[** DISABLE AUTO PC KEY MUST BE OPERATED DURING SR **]
[** POWER DOWN ALL NON-OPERATIONAL STORES **]
[*DISK DATA IS LOADED*]
RECOVERY:SR COMP
```

2. REASON FOR OUTPUT

To report the progress of a System Reinitialization (SR).

3. VARIABLE FIELD DEFINITIONS

- a IP — System reinitialization is in progress.
- b Data type presently being loaded. Will be one of the following:
- Blank — Implies generic data.
- 0 — Office data.
- c Office identification. The first four characters are the AT&T Technologies assigned BASE and the last two are the AT&T Technologies assigned CONTROL.

NOTE: The office identification is not specified when reading the generic data.

SEE PROPRIETARY NOTICE ON COVER PAGE

- d One to twenty-one character generic identification.
- e Location where the tape being loaded was written. This field may be either:
- Blank — Implies that the tape was generated off-line.
- OFFICE — Indicates that the tape was written in the office.
- f Date on which the tape was written in order of month, day, and year.
- g Firmware version number .
- h Listing number for this SYSR PIDENT. This number and the listing number in the hard copy of the PIDENT must agree for use of the SR failing address dictionaries.
- PS0 FOUND:LOADING GEN The source file for PS0 has been found. The loading of the generic data into the stores has begun.
- i Recovery progress marks an 8-digit octal address of the data file currently being read from the data source.
- If the sign bit is set to one, it is a file system address.
 - If reset, it is a core address.
 - If sign bit reset and file segment is 1, 2, or 3 then the data is a segment offset.
 - For core data backed up on disk, the core address is displayed.
 - For paged and disk only data, the file system address is displayed.
- CC ACCESS TESTS PASSED Access testing of the forced CC has successfully passed.
- AUB CONFIGURED Testing and configuration of Attached Processor Interface (API) and associated Auxiliary Unit Bus (AUB) has been successfully completed.
- BASE CS CONFIGURED Testing and configuration of all call stores within the MCODE range 1770-1777 is complete.
- IFB CONFIGURED The Interface Bus (IFB) is configured and any access testing of its clients has been successful.
- PS CONFIGURED Testing and configuration of all required program stores is complete.
- WAITING NEXT TAPE All of the data bases required to reload the system are not written on the same tape as the generic. Mount the appropriate tape on a tape unit and continue the system reinitialization.
- CS CONFIGURED Testing and configuration of all required call stores is complete.
- SR FAIL:CODE j, DATA k If present, a failure has occurred during the recovery.
- If the fault is one for which an automatic reconfiguration can be executed, recovery has continued.
 - If not, the recovery has stopped and must be manually initiated.

SEE PROPRIETARY NOTICE ON COVER PAGE

- j Failing address in the recovery program. This address must be looked up in the failing address dictionary in the appropriate listing.
- k Failing data to be used in conjunction with the instructions in the failing address dictionary.
- l Tape error correction is inhibited. Tape errors have been detected on the tape and the data has been loaded into the file system.
- THIS DATA BASE — Errors were found on the tape that SR just finished loading. For example, if this output message is printed between the generic and office data tape, the errors were on the generic tape.
- * API RECONFIGURED * SR is having trouble with the API or 3B computer. SR delays long enough for any recovery to occur on the 3B computer before proceeding. Do not restart the SR recovery action unless SR fails.
- ** APS DUPLEX FAILED-DISK DATA INVALID ** SR was initiated with duplex failure allowed and the SR had to duplex fail in order to continue the SR. SR should complete successfully, but the data on the 3B disk is invalid.
- ** DISABLE AUTO PC KEY MUST BE OPERATED DURING SR ** Because of the variable time that SR jobs take, it cannot always keep the program sanity timer satisfied. If a Program Control (PC) trigger (sanity timer time out) occurs during SR, the SR will fail. To prevent this, SR is always run with the disable auto PC key operated. The program scans the key and prints this warning output message to the operator if the key is not operated.
- ** POWER DOWN ALL NONOPERATIONAL STORES ** SR has no translations. If the mode of the SR is one that will not result in a system pump at its conclusion (minimum configuration, duplex file system failure option), this output message is printed.
- *DISK DATA IS LOADED* The 1B file on the 3B computer is loaded. If the SR fails beyond this point, the system may be recovered by a PC.

RECOVERY:SR COMP Reports the successful completion of the SR.

4. ACTION TO BE TAKEN

If API RECONFIGURED — Problems were detected during SR with the 3B or the API. If SR fails, look to those units for the problem. If SR completes, determine if hardware problems exist with the API or if software/hardware problems exist on the 3B computer. Take appropriate steps to remedy any problem found.

If APS DUPLEX FAILED - DISK DATA INVALID — The SR had to fail the disk data and it is invalid. After SR completes, the hardware/software problem causing the duplex failure should be investigated and the disk data rebuilt. Consult recovery from duplex APS failure documents.

If AUB CONFIGURED — None.

SEE PROPRIETARY NOTICE ON COVER PAGE

If BASE CS CONFIGURED — None.

If CC ACCESS TESTS PASSED — None.

If CS CONFIGURED — None.

If DISABLE AUTO PC KEY MUST BE OPERATED DURING SR — Poke the disable auto PC key on the Master Control Complex (MCC). It should be in the lit state.

If DISK DATA IS LOADED — If SR fails beyond this point, the system may be recovered by a PC.

If IFB CONFIGURED — None.

If POWER DOWN ALL NON-OPERATIONAL STORES — The operator should power down any call stores or program stores that are in the growth, special growth, or any other state which makes them unavailable to the normal system. If stores are powered down, the SR should be manually restarted.

If PS CONFIGURED — None.

If PS0 FOUND:LOADING GEN — None.

If RECOVERY:SR COMP — System should recover. If recovery does not occur, use PC to attempt recovery actions.

If RECOVERY:SR IP — None.

If SR FAIL:CODE h, DATA i — If the system reinitialization has failed, look up the address in the failing address dictionary in the PIDENT listing. The upper three characters of the address represent the PIDENT in which the failure occurred, as follows:

PCRVBOOT — 331

SYSRMAIN — 357

Follow the instructions in the dictionary for reinitiating the recovery. If the recovery has completed successfully, complete the file system initialization (reapply recent changes, etc.).

NOTE: SYSRMAIN, and PCRVBOOT displays failing address and data information on the Master Control Complex (MCC). SYSRMAIN also prints it on the Teletypewriter (TTY).

If WAITING NEXT TAPE — Mount the appropriate tape on a tape unit, place the tape unit in the SR mode, and continue the system reinitialization.

5. REFERENCES

PIDENTs
PCRVBOOT
SYSRMAIN[7]

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPEAT:LATER
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPEAT LATER - THIS UNIT IS BEING DIAGNOSED

2. REASON FOR OUTPUT

To print whenever any load or dump is performed to a peripheral unit which is currently being diagnosed. The exception is that if the unit is suspended during an interactive diagnostic, the utility function will be allowed.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

Wait until the diagnostic completes and input the utility function again, or use the STOP:MACLI input message on the subclass the unit is in and input the utility function again.

5. REFERENCES

PIDENT
PULP

Practice 234-180-280, *Peripheral Utility Program (PULP) - Description*

Input Message
STOP:MACLI

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4ESS™ 1B Processor Input/Output Message Error Reporting Form

Use this form to report errors and make suggestions for improving the contents of the manual or quarterly release. If an error relates to a specific message, please write your comments on a TTY output or a photocopy of the message documentation and attach it to this form.

Manual: Input ☐ Output ☐

Generic: _____ Issue: _____

Quarterly Release (If applicable) : _____

Message ID(s): _____

Comments: _____

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P.O. Box 3033
Naperville, Illinois 60566-7033

Submitted by:

Name: _____

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Generic: 4E27

Issue: 1.8.1

	Excellent	Good	Fair	Poor
Ease of Use				
Accuracy				
Completeness				
Organization				
Appearance				
Writing				
Clarity				
Front Matter				

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To learn procedures, To get background information, As a quick reference,
Other (specify): _____
2. Could information be organized differently to help you on the job? YES NO
If YES how? _____
3. Anything missing that should be added? YES NO
Describe: _____
4. Overall how would you rate this document as an aid in doing your job?
EXCELLENT VERY GOOD GOOD FAIR POOR
5. Any additional comments (packaging, format) ? _____

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4ESS[™] Switch
1B Processor
Output Messages
Volume 4
REPT

OM-4B000-01
Issue 1.8.1
July 2002

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REPT:(C-LEV)	REPT:C-LEV:0	4E27R2	1.8.1
REPT:(D-LEV)	REPT:D-LEV:0	4E27R2	1.8.1
REPT:(E-LEV)	REPT:E-LEV:0	4E27R2	1.8.1
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Volume 4 Alphabetical Index (Continued)

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REPT:FOR ATR	REPT:FOR-ATR	4E19	1
REPT:FUSE ALARM	REPT:FUSE-ALARM	4E21	1.3
REPT:GAP CONTROL	REPT:GAP-CNTRL	4E19	1
REPT:IAOFC	REPT:IAOFC	4E24	1.5
REPT:IATSG	REPT:IATSG	4E24	1.5
REPT:INFO1	REPT:INFO1	4E19	1
REPT:INVD ENTRY CC FR PROG	REPT:INVD	4E19	1
REPT:IOCP	REPT:IOCP	4E19	1
REPT:IOUS	REPT:IOUS	4E19	1
REPT:LCHAN	REPT:LCHAN-AT	4E19	1
REPT:LCHAN	REPT:LCHAN-AUDIT	4E19	1
REPT:LCHAN	REPT:LCHAN-ERR	4E19	1
REPT:LCHAN	REPT:LCHAN-TIME	4E19	1
REPT:LIB	REPT:LIB	4E19	1
REPT:MACLI	REPT:MACLI	4E19	1
REPT:MACLI-GUTL	REPT:MACLI-GUTL	4E23R3	1.4
REPT:MACP	REPT:MACP	4E19	1
REPT:MAN	REPT:MAN	4E19	1
REPT:MANUAL	REPT:MANUAL	4E19	1
REPT: MANUAL OVERRIDE	REPT:MANUAL-OR	4E19	1
REPT:MANUAL	REPT:MANUAL-OV	4E19	1
REPT:MCA DOC	REPT:MC	4E19	1
REPT:MC3 DOC LEVEL	REPT:MC3	4E19	1
REPT:MCC	REPT:MCC	4E20	1.1

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REPT:MUP DUPLEX FAILED	REPT:MDF	4E19	1
REPT:MEASREPT	REPT:MEASREPT	4E19	1
REPT:MSG	REPT:MSG	4E19	1
REPT:NCATANOM	REPT:NCATANOM	4E19	1
REPT:NCSU	REPT:NCSU-FAST	4E19	1
REPT:NCSU	REPT:NCSU-FREE	4E19	1
REPT:NCSU	REPT:NCSU-FRNT	4E19	1
REPT:NCSU	REPT:NCSU-HR	4E19	1
REPT:NCSU	REPT:NCSU-NCLK	4E19	1
REPT:NCSU	REPT:NCSU-OFCE	4E19	1
REPT:NCSU	REPT:NCSU-OSC	4E19	1
REPT:NCSU	REPT:NCSU-STBY	4E19	1
REPT:NETEX	REPT:NETEX	4E19	1
REPT:NM TBL	REPT:NM	4E19	1
REPT:NTC	REPT:NTC	4E19	1
REPT:OA	REPT:OA	4E19	1
REPT:OSOR	REPT:OSOR-STAT	4E19	1
REPT:OTAN	REPT:OTAN	4E22	1.3
REPT:OVER	REPT:OVER	4E19	1
REPT:OVER	REPT:OVER-BILL	4E19	1
REPT:OVL	REPT:OVL	4E19	1
REPT:PA	REPT:PA	4E19	1.3
REPT:PFLR	REPT:PFLR	4E19	1
REPT:PHASE INFORMATION	REPT:PHASE-INF	4E19	1
REPT: PHASE NOT	REPT:PHASE-NOT	4E19	1
REPT:PMOS	REPT:PMOS-LVS	4E19	1
REPT:PMOS	REPT:PMOS-TSKID	4E24R2	1.6
REPT:PMOS	REPT:PMOS-UTIL	4E19	1
REPT:POWER DOWN	REPT:POWER-DOWN	4E19	1
REPT:PROG	REPT:PROG	4E23R3	1.4
REPT:PROTOCOL HANDLER	REPT:PROT-HDLR	4E19	1
REPT:PS a FORCED OOS	REPT:PS-FRC	4E19	1
REPT:PUFR	REPT:PUFR	4E22	1.4
REPT:PULSE SCE EER NO CC SW	REPT:PULSE	4E19	1
REPT:PWR	REPT:PWR	4E19	1
REPT:RATE BASED REROUTE	REPT:RATE-BASE	4E19	1
REPT:RAW	REPT:RAW	4E19	1
REPT:RC ACTIVATION	REPT:RC-ACTIV	4E19	1
REPT:RC DUMP	REPT:RC-DUMP	4E19	1

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DETECTED	REPT:RC-ERROR	4E19	1
REPT:RC IB DUMP	REPT:RC-IB	4E19	1
REPT:RC INFORMATION	REPT:RC-INFO	4E19	1
REPT:RC MESSAGE PROCESSING			
STOPPED:INTERRUPT	REPT:RC-INTERR	4E19	1
REPT:RC MESSAGE PROCESSING			
STOPPED:AUDIT	REPT:RC-MESS-A	4E19	1
REPT:RC MESSAGE PROCESSING			
STOPPED:DISK	REPT:RC-MESS-P	4E19	1
REPT:RC MESSAGE STOPPED	REPT:RC-MESS-S	4E19	1
REPT:RC MESSAG	REPT:RC-MESSAG	4E19	1
REPT:RC ORNU	REPT:RC-ORNU	4E19	1
REPT:RC SYSTEM PRINT			
FAILURE	REPT:RC-PRINT	4E19	1
REPT:RC STOPPED	REPT:RC-STOP-LOCK	4E19	1
REPT:RC STOPPED	REPT:RC-STOPPED	4E19	1
REPT:RC SYSTEM	REPT:RC-SYSTEM	4E19	1
REPT:RC TST STATE MESSAGE	REPT:RC-TST	4E19	1
REPT:RC WARNING	REPT:RC-WARN-FAIL	4E19	1
REPT:RC WARNING	REPT:RC-WARNIN	4E19	1
REPT:RC WARNING	REPT:RC-WARNING	4E19	1
REPT:RCAS	REPT:RCAS	4E20	1.2
REPT:RCCNL	REPT:RCCNL-INIT	4E19	1
REPT:READY	REPT:READY	4E19	1
REPT:RING OVLD	REPT:RING-OVLD	4E19	1
REPT:RING OVLD	REPT:RING-OVLDIF	4E19	1
REPT:RING OVLD	REPT:RING-OVLDNR	4E19	1
REPT:RMSD2:ALM	REPT:RMSD2-ALM	4E19	1
REPT:RST	REPT:RST	4E19	1
REPT:SADK UNABLE	REPT:SADK-UNABLE	4E19	1
REPT:CHAN	REPT:CHAN-EST	4E19	1.1
REPT:CHAN	REPT:CHAN-FAIL	4E19	1.1
REPT:SCS	REPT:SCS	4E22	1.4
REPT:SDC	REPT:SDC	4E19	1
REPT:SDU	REPT:SDU	4E22	1.3
REPT:SINGLE DIP	REPT:SINGLE-DIP	4E19	1
REPT:SLC	REPT:SLC	4E19	1
REPT:SLC a INSECURE	REPT:SLC-INSEC	4E19	1
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REPT:STRMEX	REPT:STRMEX-INVAL	4E19 only	1
REPT:STRMEX	REPT:STRMEX-LOAD	4E19 only	1
REPT:STRMEX LOST	REPT:STRMEX-LOST	4E19 only	1
REPT:STRMEX STATUS	REPT:STRMEX-STAT	4E19 only	1
REPT:SVCSTAT	REPT:SVCSTAT	4E19	1.1
REPT:SYSTEM	REPT:SYST-PDT	4E19	1
REPT:SYSTEM RUNNING	REPT:SYST-RUN	4E19	1
REPT:SYSTEM TROUBLE	REPT:SYSTEM	4E19	1
REPT:SYSTEM TROUBLE: AUDIT UNABLE TO CORRECT	REPT:SYSTEM-TR	4E19	1
REPT:TAPE MUST	REPT:TAPE	4E19 thru 4E21	1.4
REPT:TAPE PAGING	REPT:TAPE-PAG	4E19 thru 4E21	1.4
REPT:TAS TAPE OPERATION	REPT:TAS	4E19 thru 4E21	1.4
REPT:TAS TAPE FUNCTION	REPT:TAS-TAPE	4E19 thru 4E21	1.4
REPT:TASI-E DLC ALARM	REPT:TASI-E-DL	4E19	1
REPT:TASI-E DYNAMIC LOAD CONTROL	REPT:TASI-E-DY	4E19	1
REPT:TBL	REPT:TBL-FLN	4E19	1
REPT:TBL	REPT:TBL-NMFR	4E19	1
REPT:TELEVOTE	REPT:TELEVOTE	4E19	1
REPT:TERMINAL ab BUFFER OVERFLOW	REPT:TERMINAL	4E19	1
REPT:THRESH	REPT:THRESH-TR	4E19	1
REPT:THRESHOLD EXCEEDED	REPT:THRESHOLD	4E19	1
REPT:TIMEOUT	REPT:TIMEOUT	4E19	1
REPT:TRAFFIC / PLANT	REPT:TRAFIC-PT	4E19	1
REPT:TROUBLE - EMERGENCY MODE ENTERED	REPT:TROUB	4E19	1
REPT:TROUBLE	REPT:TROUBLE	4E19	1
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REPT:UNABLE	REPT:UNABLE	4E19	1
REPT:UNEXPECTED	REPT:UNEXPECTED	4E19	1
REPT:UPAD	REPT:UPAD	4E19 only	1
REPT:UTIL	REPT:UTIL	4E21	1.2

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REPT:UTILITY	REPT:UTILITY-ISS	4E19	1
REPT:VCFR	REPT:VCFR	4E19	1
REPT:VCNT	REPT:VCNT-EXCD	4E19	1
REPT:VCNT	REPT:VCNT-THRE	4E19	1
REPT:VCNT	REPT:VCNT-WORS	4E19	1
REPT:VIF	REPT:VIF	4E19	1
REPT:VSSID	REPT:VSSID	4E19	1
REPT:XALM	REPT:XALM	4E21R4	1.3
REPT:XALM-REPORTING	REPT:XALM-REPORT	4E21R4	1.3
REPT:XPWR	REPT:XPWR	4E19	1
REPT:XTSI	REPT:XTSI	4E21	1.4

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ID REPT:0
WORK CENTER.. MOC
GENERIC 4E27R2 and later
APPLICATION .. 4E,1A-APS,1B
TYPE Output

REPT:0 - User Index

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4ESS
OM-4B000-01

REPT:

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REPT:0-4

Issue 1.8.1
July 2002

1. FORMAT

```

REPT: a  bbbbbbbb MFNUM=cccccccc MICON=dddddddd e
LV=ffff D0=gggggggg D1=hhhhhhhh D2=iiiiiii D3=jjjjjjjj
k
l l l l m [n o p q r s t u]
. . . . .
. . . . .
. . . . .
l l l l m [n o p q r s t u]
DATA: v
. .
. .
. .
DATA: v

```

2. REASON FOR OUTPUT

To report the occurrence of an interrupt or other action requiring intervention by maintenance recovery. An interrupt or interject is determined by circuits built into each frame and CC. These circuits recognize a problem and report it to the CC over a private communication path. There are two types of REPT messages: full and abbreviated. The full REPT message not only reports the level of difficulty but specific trouble occurrences via the action lines and data blocks. The abbreviated REPT message prints only one line of information concerning the interrupt with a full REPT message to follow. The abbreviated messages are listed in the Table of Contents and are found at the end of this message.

3. VARIABLE FIELD DEFINITIONS

The full REPT message can be broken down into four parts: information block, action line, entry action line, and data block. A REPT message has one interrupt information block, zero or more action lines, zero or more summary action lines, and zero or more data blocks. (A sample REPT message is shown in Figure 1.) In the REPT message, the information block, the action line and the entry action line are defined in the following paragraphs. The data blocks are listed alphabetically, according to the first word following DATA:.

- a Level or type of interrupt or interject. See TABLE A for the list of possible values.
- b Program address where processing was interrupted. If the interrupt was initiated by a maintenance interrupt (levels A-F and K), the contents of the current address register are printed. For all other levels (i.e., INTERJECT, BASE LEVEL, and ERROR STOP), the contents of the stack register are printed.
- c Maintenance file number (MFNUM) in octal. It identifies the interrupt in a particular sequence of maintenance actions, starting from the point of interruption to resumption of call processing. The same MFNUM can be found in several nonsequential messages if these messages are reporting on the same interrupt. For example, if the sequence of a maintenance interject program was interrupted by a D-LEVEL and a B-LEVEL, the sequence would be identified by a single MFNUM value.

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- This value is used to retrieve the data stored by error analysis for that particular sequence of actions.
- d Maintenance interrupt control (MICON) word (MI1CONT). It indicates actions taken by the maintenance restart program (MARP):
- | Bit | MARP Control Action Taken |
|-------|--|
| 00 | MARP return to reference point |
| 01 | MARP return by rolling back to intermediate level |
| 02 | MARP return by rolling ahead to intermediate level |
| 03 | Audit in progress flag |
| 04 | In restart flag |
| 05 | CCs have been switched |
| 06 | A pump of CS(s) has been performed |
| 07 | A pump of PS(s) has been performed |
| 08 | No back-up area has been zeroed |
| 09 | A phase (indicated in MI1PHASEPT) has been requested |
| 10 | A pulse source B-level has occurred |
| 11 | An out-of-range pulse source B-level |
| 12 | An out-of-range call store D-level |
| 13 | An out-of-range program store E-level |
| 14 | An out-of-range peripheral F-level |
| 15 | Request hash sum of area indicated in MI1HASHADRS |
| 16 | A MTCE phase record is to be formed by ERAP |
| 17 | A software error has occurred |
| 18 | An invalid interrupt has occurred |
| 19 | A call store was copied with minimal errors |
| 20 | A call store duplex failure occurred |
| 21-22 | Application work flags |
| 23 | Print audit message |
- e Status of the message partition:
- COMPLETED — (Message completed). This message has only one part.
- MSG STARTED — (Message started). This message is part of a partitioned interrupt and eventually will be followed by zero or more MSG IP parts and one MSG COMPL part.

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MSG IP — (Message in progress). This message is part of a partitioned interrupt and eventually will be followed by a MSG COMPL part. An interrupt may have zero or more MSG IP parts.

MSG COMPL — (Message completed). This message is the final part of a partitioned interrupt.

f An octal number identifying the maintenance interrupt levels that have occurred from the first interrupt to the resumption of processing. Each bit set indicates a particular level of interrupt.

Bit	Level of Interrupt
00	A-level interrupt
01	B-level interrupt
02	C-level interrupt
03	D-level interrupt
04	E-level interrupt
05	F-level interrupt
06	Error stop
07	K-level interrupt
08	Interject
09	Base level maintenance

g Source data word (D0) collected. Each bit within this octal number indicates a block of data that has been collected and will be saved by error analysis.

Bit	Source data collected
00	PCRV tests run and hash sum results
01	MAC control memory
02	D-level software failure results
03	CSFR identification data
04	CSFR test results
05	Common auxiliary unit data
06	Supplementary auxiliary unit data
07	Unique file store or API data
08	CCFR interrupt data
09	B-level standby CC registers
10	Internal DUS registers and test results

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	11	PSFR identification data
	12	PSFR test results
	13	E-level software failure results
	14	C-level interrupt bin (active CC)
	15	C-level interrupt bin (standby CC)
	16	Active CC fail data
	17	Standby CC fail data
	18	File store error correction data
	19	I/O status and internal data
	20	I/O operational failure data
	21	Call store progression table
	22	Program store progression table
	23	Contents of stack
h	Fault recognition data (D1). Each bit within this octal number indicates a block of data that has been collected by fault recognition and saved by error analysis.	
	Bit	Meaning
	00	Supplementary error data
	01-04	Unused
	05	EST last-look store memory
	06	EST critical registers
	07-11	Unused
	12	Digroup terminal critical registers
	13	VIF critical register
	14	CCIS critical registers
	15	Invalid interrupt internal registers
	16	H-level CC registers
	17	J-level CC registers
	18	Network clock data
	19	TMS critical registers
	20	TSI critical registers
	21	SP internal registers

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	22	Peripheral fault recognition results
	23	Error analysis (ERAT) recent history table
i		Fault recognition data (D2). Each bit within this octal number indicates a block of data that has been collected by fault recognition and saved by error analysis.
	Bit	Meaning
	00	Peripheral system data
	01	Interrupt source data
	02	Fault recognition isolation data
	03	Error analysis (ERAT) strategy data
	04	Auxiliary data
	05	Digital interface frame (DIF) critical registers
	06	Unused
	07	Service circuit system (SCS) critical registers
	08	Unused
	09	SCLK critical registers (SCLK)
	10-23	Unused
j		Source data collected (D3). Each bit within this octal number indicates a block of data that has been collected and will be saved by error analysis.
	Bit	Meaning
	00	Unique MUP data
	01	MUP internal raw data
	02	Common IFB recovery data
	03	Unique SSD data
	04	XPWR internal data
	05	Active IFBC stack
	06	Standby IFBC stack
	07	Active CC execution pipeline history
	08	Standby CC execution pipeline history
	09	Active CC bus node data part 1
	10	Active CC bus node data part 2
	11	Active CC bus node data part 3

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	12	Active CC bus node data part 4
	13	Standby CC bus node data part 1
	14	Standby CC bus node data part 2
	15	Standby CC bus node data part 3
	16	Standby CC bus node data part 4
	17	
	18	IFB bootstrap failure data
	19	Invalid G-Level data
	20	XA window information
k		Entry action line. Test phase that lists the type of interrupt, unit type, and member number of the unit (optional item).
l		PIDENT that is the source of action taken.
	Originator	Full PIDENT Name
	APFR	Attached processor fault recognition
	AUFR	1B Processor auxiliary unit fault recognition
	BBFR	Babbling bus fault recovery
	CCFR	Central Control fault recognition
	CCIS	Common channel interoffice signaling fault recovery
	CLFR	Clock fault recovery
	CSFR	Call store fault recognition
	DIFR	DIF fault recovery
	DTFR	Digroup terminal fault recognition
	DUFR	Data unit fault recognition
	ERAP	1B processor error analysis
	ERAT	Error analysis program - toll
	ESFR	EST error recovery
	FERA	Restructured error analysis program - toll
	FSFR	File store fault recognition
	IOCP	Input/output control program
	IFFR	Interface bus fault recovery
	LINK	
	MARP	1B processor maintenance restart program

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	MCAI	Master control complex A-level interrupt program
	MCCM	Master control complex main program
	MCFR	MCC and utility processor fault recovery
	NCFR	Network clock fault recognition
	PBFR	Peripheral unit bus fault recognition
	PCRVR	Processor configuration recovery program
	PFLR	1B Processor F-level fault recovery program
	PSFR	Program store fault recovery
	SCFR	System clock fault recognition
	SCSF	Service circuit system fault recovery
	PUCF	PUC fault recovery
	SCFR	System clock fault recognition
	SDFR	Scan and signal distributor fault recovery
	SIRE	System interrupt recovery program
	SPFR	Signal processor fault
	TNFR	Time division switching network fault recognition
	TOPC	Toll peripheral configuration program
	VCFR	Voiceband interface controller fault recovery
	WPAD	Write protect administration program
	XPWR	Miscellaneous power fault recovery
m		Description of the action taken. Refer to TABLE B for some of possible values, but it is only a partial listing.
n		Unit type involved in the action (optional item).
o		Member number of the unit type (optional item displayed if n is printed).
p		Subunit type of the unit type that was involved (optional item).
q		Member number of the subunit type. (Optional item displayed if p is printed.)
r		Unit type that has been selected to help in diagnosing the involved unit type (optional item).
s		Member number of the helper unit type (optional item).
t		Subunit type of the helper unit type (optional item).
u		Member number of the helper subunit type (optional item).

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v

Data block. Each data block is a dump of data in the report. If this information is generated by the report, one or more data blocks are printed. The first data block pertains to the interrupt level (variable a). Any other data blocks printed in this message represent data collected by the fault recognition programs. Refer to the Table of Contents for a listing of data blocks and their page numbers. See TABLE C for a listing of commonly used prefixes for data block words. See TABLE D for a list of commonly used abbreviations of registers and locations used in data blocks.

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INTERRUPT INFORMATION BLOCK	REPT: INTERJECT 15315501 MFNUM=00000371 MICON=00000002 MSG IP LV=0400 D0=00000000 D1=00000000 D2=00000057 D3=00000000
ENTRY ACTION LINE	INTERJECT FROM DIF 21
ACTION LINE	DIFR RESOLVED ERROR DIF 21 DIU 15 DIFR RECOMMENDED FORCE REMOVAL DIF 21 DIU 15 DIFR RECOMMENDED DIAGNOSTICS DIF 21 DIU 15 DIFR RECOMMENDED CLEANUP DIF 21 FERA FORCE REMOVED DIF 21 DIU 15 FERA SCHED DGN DIF 21 DIU 15 FERA SCHED CLEANUP OF DIF 21
DATA BLOCKS	DATA: INTERJECT 06020000 DATA: PERIPHERAL SYSTEM DATA 23026716 60010006 00000006 00000000 00000000 00000032 50010063 00000032 00010063 03600001 03600001 03600001 03600001 DATA: INTERRUPT SOURCE DATA 00000040 07615711 01252000 00000001 10000000 DATA: FAULT RECOGNITION ISOLATION DATA 00000031 00000000 00000241 00000000 00000003 00000000 DATA: ERROR ANALYSIS STRATEGY DATA 00002025 60231017 00500302 00004642 00002025 31003101 00000000 00030000 00003241 01000000 00000000 01000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 12134636 12347302 12345756 14332334 00000371 00000064 00100000 00000000 00001604

Figure 1 Sample of REPT:0 Output Message.

TABLE A
INTERRUPT LEVELS AND INTERJECTS

Variable a	Cause
A-LEVEL	Manual request for reconfiguration or program request.
B-LEVEL	Hardware or software problem of system sanity.
C-LEVEL	Hardware problem in a central control (CC) frame.
D-LEVEL	Hardware problem in a call store (CS) or auxiliary unit (AU). Software problem found by CS or AU fault recognition programs.
E-LEVEL	Hardware problem in program store (PS). Software problem found by PS fault recognition program.
F-LEVEL	Hardware problem with peripheral unit bus (PUB) frames.
K-LEVEL	Software problem caused by a program unit using too much CC time. Normally, each program unit is allowed 3 ms. to execute. A K-level interrupt occurs after 10 ms. has elapsed without the interject timer being reset.
BASE LEVEL MAINT	Usual maintenance operation - lowest level.
ERROR STOP	Software problem generated by a program that has transferred to an invalid address.
INTERRUPT	Invalid interrupt condition or any invalid hardware state. For all cases except Invalid G-Level, only the interrupt information block (see Figure 1) is printed. This message does not require any action to be taken.
INTERJECT	Deferred (up to 10 ms.) maintenance action on the frame. Hardware problem in auxiliary unit or autonomous peripheral unit.

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TABLE B
MOST FREQUENTLY PRINTED ACTION TAKEN

Action	Meaning
1B FILE ACCESS DUPLEX FAILED	1B processor has software duplex failed the 1B file on the 3B computer.
3B REQUESTS DUPLEX FAIL OF 1B FILE	3B detected non-recoverable software problem with 1B file. Requested 1B processor to software duplex fail the 1B file.
ABORTED CONFIGURATION OF	A configuration was requested by error analysis.
ABORTED REMOVED OF	A remove requested by error analysis was aborted.
ABORTED RESTORE OF	A restore requested by error analysis was aborted.
ABORTED SWITCH ON	A switch function requested by error analysis was aborted.
ATTEMPTED ISOLATION	Indicates first unit fault recovery (FR) thought was at fault.
BOOTSTRAP	The unit(s) indicated was bootstrapped to obtain a working system.
BOTH OOS REMOVED	The last in service was removed, and now both units are out-of-service.
CNI BUFFER INITIALIZATION REQUEST	A request has been made to initialize the CNI message buffer pointers.
CONFIGURED	A change in configuration isolated the fault from the operating system, no unit was removed from service. The unique fault recovery task routine in APFR has configured the indicated API.
CONFIGURE DENIED	Attempted reconfiguration denied by error analysis.

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TABLE B (continued)
MOST FREQUENTLY PRINTED ACTION TAKEN

Action	Meaning
COPIED HARD TO SOFT	Error analysis requests an update of the software status from the hardware status.
COPIED SOFT TO HARD	Error analysis requests an update of the hardware from the software status.
DETECTED A GROWTH UNIT	Unit was in growth or special growth.
DETECTED AN UNEQUIPPED UNIT	Unit was not equipped.
DETECTED CNI OUTGOING BUFFER OVERFLOW	The CNI outgoing buffer overflowed. Messages bound for the CNI Ring were rejected.
DETECTED CNI STREAM TROUBLE	A fault has been detected in the CNI message stream.
DIAGNOSTICS NOT REQUESTED	If a program store (PS) or a call store (CS) number is given, then the error count for that store is excessive and diagnostics on that store have not been requested. If no member number is given, then the interrupt with bootstrap count is excessive and no diagnostics have been requested on any stores, buses, or on the central control (CC). Also, see the REPT:EXCS-BOOT output message for more information about this condition. That message may indicate the need for further investigation into the cause of the problem.
DUPLEX FAILED	Error analysis requests a duplex fail.
DUPLEX FAILED	APS unit failed.
FNCTSUBS DETECTED MESSAGE TROUBLE	Function SUBS messages are not completing in allotted time.
FORCE REMOVED	Error analysis requests a force remove.
FRBLM	Base level maintenance on UTMN.
FRINJ	Interject from UTMN.

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TABLE B (continued)
MOST FREQUENTLY PRINTED ACTION TAKEN

Action	Meaning
GROWTH UNIT	Fault occurred on a growth unit.
INCONCLUSIVE	No reason for the error which caused the fault recovery system to be entered could be found.
INITIALIZED COMMUNICATION BUFFERS	The APS communication buffers have been initialized on the 1B and 3B computers.
INH SCSLAN	Inhibit SCS frame - LAN communication.
INHIBIT CC INT.	The only means by which the failure could be prevented from further disturbing normal processing was to inhibit the associated internal source in the CC.
INT. INHIBITED	The only means by which the failure could be prevented from further disturbing normal processing was to inhibit failure detection at the unit from which the error was received.
INT. INHIBITED DENIED	Attempted interrupt inhibit denied by error analysis.
INTERNAL ERROR	Invalid data was found.
LIM DETECTED SOFTWARE RECOVERY REQUEST	The link integrity monitor (LIM) received a software recovery request from the 3B computer.
LIM ERROR: BAD STATUS	The link integrity monitor (LIM) has determined that the status for the APS is incorrect. No active API was found or both APIs were active; refer to BLM error word in data block.
LINK INTEGRITY MONITOR TROUBLE	The LIM has found a problem on the 1B or 3B computer; refer to BLM error word in data block.
LINK INTEGRITY TROUBLE	APS communication link was found to be faulty.
MATRIX INHIBIT	The fault detection capability in each signal processor's controllers for the simplex matrix was inhibited.
MESSAGE HANDLER ERROR	The message handler has found an error; refer to data block.

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TABLE B (continued)
MOST FREQUENTLY PRINTED ACTION TAKEN

Action	Meaning
NO ACTION	No action taken.
NO ERROR FOUND	No error found.
PESTED	Error analysis requests a pest function.
PROTECTED AREA FAILURE	A program error in which a store-secure was directed to a nonsecure address or a store instruction was directed to a secure address.
RECOMMENDED CLEANUP	Fault recovery requested a cleanup.
RECOMMENDED COPY HARDWARE TO SOFTWARE	Fault recovery requested the software status to be updated from the hardware status.
RECOMMENDED COPY SOFTWARE TO HARDWARE	Fault recovery requested the hardware status to be updated using the software status.
RECOMMENDED DIAGNOSTICS	Fault recovery requested a diagnostic
RECOMMENDED DGN WITH OPTIONAL PHASE	Fault recovery requested a diagnostic with optional phases.
RECOMMENDED DUPLEX FAIL	Fault recovery requested a unit to be duplex failed.
RECOMMENDED FORCE REMOVAL	Fault recovery requested a force removal.
RECOMMENDED NO ACTION	No action performed.
RECOMMENDED NORMAL REMOVAL	Fault recovery asked for a remove.
RECOMMENDED PERIPHERAL UNIT STATUS AUDIT	Fault recovery requested a peripheral unit to be scheduled.
RECOMMENDED PEST UPDATE	Fault recovery requested a pest update.
RECOMMENDED PESTING	Fault recovery requested a pesting function.

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TABLE B (continued)
MOST FREQUENTLY PRINTED ACTION TAKEN

Action	Meaning
RECOMMENDED REMOVAL LOM	Fault recovery requested a remove to listen-only mode.
RECOMMENDED REMOVE SUBJECT REMOVE MATE	Fault recovery requested both subunits to be removed.
RECOMMENDED REMOVE SUBJECT RESTORE MATE NOT UPDATED	Fault recovery requested the specified SUTMN to be removed and the mate to be restored.
RECOMMENDED REMOVE SUBJECT RESTORE MATE UPDATED	Fault recovery requested the hardware status be updated using the software status.
RECOMMENDED RESTORE	Fault recovery requested the subject be restored.
RECOMMENDED RESTORE NO UPDATE	Fault recovery requested a restore with no memory updates.
RECOMMENDED RESTORE SUBJECT REMOVE MATE LOM	Fault recovery wants the specified SUTMN to be restored and its mate removed to the listen-only mode.
RECOMMENDED RESTORE WITH UPDATE	Fault recovery requested a restore with memory updates.
RECOMMENDED RETRY ON	Fault recovery requests a retry.
RECOMMENDED SWITCH	Fault recovery requested a switch.
RECOMMENDED ZAP AND ZERO START MATE	Fault recovery requested a zap and zero start function.
REMOVED	Error analysis requests a remove or unit was removed.
REMOVED LOM	Error analysis requests a remove to listen-only mode.
REMOVED AND REQUESTED DIAGNOSTICS	Unit was removed and diagnostic requested.
REMOVED DENIED	Attempted removal denied by error analysis.

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TABLE B (continued)
MOST FREQUENTLY PRINTED ACTION TAKEN

Action	Meaning
REMOVED MATE AND RESTORED	The last of a duplicate pair of controllers was found faulty. The other controller was out-of- service, but was forced in-service so the faulty mate could be removed.
REMOVED STANDBY	A fault from the standby API has resulted in the removal of the API.
REQ CLEANUP OF	Error analysis requested a cleanup.
REQ NO ACTION	Error analysis recommends that no action be taken.
REQUESTED INITIALIZATION APDRV	A request was made to initialize APDRV.
REQUESTED 3B BOOT	A request was made to boot the 3B processor.
REQUESTS NO ACTION	Error analysis requests no action be taken.
REQUESTS REMOVAL	Error analysis requests removal.
REQUESTS RESTART	Error analysis requests a restart.
REQUESTS RESTORAL	Error analysis requests a restoral.
REQUESTS RMV & DGN	Error analysis requests removal and diagnostic restoral.
RESOLVED ERROR	Unit that the error was really in.
RESTORED	Error analysis requests a restore or unit was restored.
RESTORE DENIED	Attempted restoral denied by error analysis.
RETRY FAILED	Retry requested by error analysis was unsuccessful.
RETRY PASSED	Retry requested by error analysis was successful.

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TABLE B (continued)
MOST FREQUENTLY PRINTED ACTION TAKEN

Action	Meaning
RMVD BOTH MATE &	Error analysis requests both the specified SUTMN and its mate be removed.
RMVD & DEF RST	Error analysis requests a removal and deferred restoral.
RMV MATE LOM & RST	Error analysis requests the specified SUTMN be restored and its mate removed to listen-only mode.
RST MATE UPD & RMVD	Error analysis requests the specified SUTMN to be removed and its mate updated and restored.
RST MATE NO UPD & RMVD	Error analysis requests the specified SUTMN to be removed and its mate restored.
RST NO UPDATE	Error analysis requests a restore with no memory updates.
RST WITH UPDATE	Error analysis requests a restore with memory updates.
SADK ERROR:	The disk system audit program has found an error; refer to BLM error word in data block.
SCHED DGN	Error analysis requests a diagnostic.
SCHED DGN & OPT PHASES	Error analysis requests a diagnostic to be run with optional phases.
SCHED PERIPH UNIT STATUS AUDIT	Error analysis requested a peripheral unit audit to be run.
SCHED ZSTART	Scheduled zero start of mate.
SCHED PEST UPDATE	Error analysis requests a pest update.
SOFT ERROR	A program error caused the failure.
STOPPED CONFIGURATION OF	A configuration requested by error analysis was stopped.

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TABLE B (continued)
MOST FREQUENTLY PRINTED ACTION TAKEN

Action	Meaning
STOPPED REMOVE OF	A remove requested by error analysis was stopped.
STOPPED RESTORE ON	A restore requested by error analysis was stopped.
STOPPED SWITCH ON	A switch requested by error analysis was stopped.
STORE DATA PARITY FAILURE	Store error is a result of a parity failure only.
SWITCHED	Error analysis requests a switch function.
SWITCH REMOVED API a	APFR switched the standby API to active and the active API was removed to out of service.
TRANSIENT	The faulty condition was found to be transient.
UNEQ UNIT	Fault occurred on unequipped unit.
UNIQUE TROUBLE	AUFR has determined that the problem exists in a unique AU unit.
UNIQUE TROUBLE	The unique fault recovery task routine in APFR has been called to recover the APS; see the recovery information word in the data block to determine which recovery actions were taken.
UNIQUE TROUBLE: BAD STATUS	The unique fault recovery task routine in APFR has discovered a bad status for APS.
UNRESOLVED ERROR	Fault recovery could not find the problem.
UPDATED STATUS	Error analysis updated status to correct fault.
WRITE PROTECT VIOLATION	A program has attempted to write into an address range in a 256K store that is write-protected by the write protect administration program.
ZSTART MATE & ZAPED	Error analysis requests a zap and zero start function.

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TABLE C
COMMONLY USED WORD PREFIXES

Prefix	Meaning
AC1	Active CC address
AU1	Core storage location for auxiliary unit data
CS1	Core location for stack and call store results
DC1	Core storage location for file store data
DS1	Core storage location for file store data
FS1	Core storage location for File Store Data
IB1D_	Core storage location for D-levels
IB1E_	Core storage location for E-levels
IB1F_	Core storage location for F-levels
IN1	Internal CC address
MA1	Core storage location for MAC control memory
PC1	Processor configuration data
PU1	Peripheral unit data
ST1	Standby CC address

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TABLE D
COMMONLY USED ABBREVIATIONS OF REGISTERS AND LOCATIONS

	AC1 prefix = Active CC register
	ST1 prefix = Standby CC register
	IN1 prefix = Internal CC register
	(H) suffix = High order 8 bits
	(L) suffix = Low order 24 bits
Prefix	Meaning
ABC	Auxiliary buffer control
ABL	Auxiliary buffer order word, left
ABR	Auxiliary buffer order word, right
ACR	Auxiliary current address register
ACT	Auxiliary activity register
AP	Address parity register
ASA	Interrupt return store A
ASB	Interrupt return store B
ASC	Interrupt return store C
ASD	Interrupt return store D
ASE	Interrupt return store E
ASF	Interrupt return store F
ASG	Interrupt return store G
ASH	Interrupt return store H
ASJ	Interrupt return store J
ASK	Interrupt return store K
BOL	Buffer order word, left
BOR	Buffer order word, right
BPS	Buffer pulse source
BR	Buffer (B) register
BRS	Buffer register shadow
BRW	Buffer register wraparound
BS0	CC RAM location 0
BS1	CC RAM location 1
BS2	CC RAM location 2
BS3	CC RAM location 3
BS4	CC RAM location 4
BS5	CC RAM location 5
CAR	Current address register
CCS	Bus control status
CES	CC error summary
CFA	Current fetch address register
CLE	Clock error detect and status
CR00	Control read store data register (even)

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TABLE D (continued)
COMMONLY USED ABBREVIATIONS OF REGISTERS AND LOCATIONS

Prefix	Meaning
CR01	Control read store configuration and error source register
CR10	Control read store status register
CR11	Control read store data register (odd)
CRAL	Control store address loop-around
CSC	Central control status flip-flops
CUI	Utility bus interface register
CW00	Control write store data register (even)
CW01	Control write store configuration register
CW10	Control write store write-protect control
CW11	Control write store data register (odd)
D00	DIR 0 control, segment 0
D01	DIR 0 control, segment 1
D02	DIR 0 control, segment 2
D10	DIR 1 control, segment 0
D11	DIR 1 control, segment 1
D12	DIR 1 control, segment 2
DAR	Data address register
DLR	Delay-limited-run register
EPS	Execution pipeline state
ER	Peripheral unit enable (E) register
FCE	IFBC client enable
FCT	IFBC control register
FEE	IFBC error enable
FER	IFBC error request
FES	IFBC error source register
FIP	IFBC interrupt/interject poll
FIS	Fetch-index state register
FLA	IFBC last transfer address
FLD	IFBC last transfer data
FLT	IFBC last transfer type
FR	F register
FRL	IFBC lower relocation register
FRU	IFBC upper relocation register
FST	IFBC status
GR	G register
HWR	Half word register
IBR	Inhibit buffer bus read flip-flops
IFR	Instruction fetch state register

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TABLE D (continued)
COMMONLY USED ABBREVIATIONS OF REGISTERS AND LOCATIONS

Prefix	Meaning
ILA	Interrupt level activity
ILR	Interrupt level request
INH	Interrupt inhibit register
INJ	Interject source
INS	Interrupt source register
ITR	Interval timer register
IXI	Index adder intermediate
JR	J register
KR	K register
LIT	Long interval timer
LPA	Lower protected area bound
LPI	Address of last peripheral instruction
LR	Logic (L) register
MCD	MCC data insert
MCLK	Millisecond clock
MCO	MCC override register
MCP	MCC A-level program request
ME0	External matcher register 0
ME1	External matcher register 1
MI0	Internal matcher register 0
MI1	Internal matcher register 1
MMR	Match mode control register
MSR	Match summary register
PCR	Processor configuration control register
PES	Peripheral error summary
PM0	Peripheral unit KCODE matcher 0
PM1	Peripheral unit KCODE matcher 1
PRL	P register, least significant bits
PRM	P register, most significant bits
PSC	Peripheral sequencer control
PSQ	PU sequencer auxiliary counter
RP0	PU reply bus 0 ONEs catcher
RP1	PU reply bus 1 ONEs catcher
SAL	Save auxiliary, left
SAR	Save auxiliary, right
SAT	Sanity timers

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TABLE D (continued)
COMMONLY USED ABBREVIATIONS OF REGISTERS AND LOCATIONS

Prefix	Meaning
SC	Stack counter
SCA	Saved current address
SCCA	Saved CC address register
SDA	Saved data address register
SR	Stack (T) register
STAR	Saved transition address register
TAR	Transition address register
UBPS	Utility buffer pulse source
UPA	Upper protected area bound
XACTL	Extended access (XA) control register
XAWT	XA window type register
XAWP0	XA window pointer 0
XAWP1	XA window pointer 1
XAWP2	XA window pointer 2
XAWP3	XA window pointer 3
XAWP4	XA window pointer 4
XAWP5	XA window pointer 5
XAWP6	XA window pointer 6
XAWP7	XA window pointer 7
XR	X register
YR	Y register
ZR	Z register

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Data Blocks

DATA: A-LEVEL (ALEV)

AC1FR	AC1GR	AC1JR	AC1KR	AC1LR	AC1XR
AC1YR	AC1ZR	AC1BR (H)	AC1BR (L)	AC1ASA (H)	AC1ASA (L)
AC1SCA	AC1SDA	AC1CSC	AC1CES	AC1FST	AC1FES
AC1ILA	AC1INS	AC1INH	AC1INJ	AC1SC	AC1SR
AC1SCTR	ST1INS	ELIT	AC1LPI	AC1ER	AC1PRM
AC1PRL	AC1PSC	AC1BRS (H)	AC1BRS (L)	AC1SAT	AC1PCR
AC1MCO	AC1MCP	AC1MCD (H)	AC1MCD (L)	AC1TAR	

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DATA: ACTIVE CC BUS NODE DATA PART 1 (PART 2, PART 3, PART 4)

BNA_WD0(000)	BNA_WD1(000)	BNA_WD2(000)	BNA_WD0(001)	BNA_WD1(001)	BNA_WD2(001)
.	.	.	.	.	.
.	.	.	.	.	.
.	.	.	.	.	.
BNA_WD0(040)	BNA_WD1(040)	BNA_WD2(040)	BNA_WD0(041)	BNA_WD1(041)	BNA_WD2(041)

NOTE: Each part contains a variable list report from entry 000 to 041 where entry 000 is the oldest in time and entry 041 is the most recent in time.

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Defined as:

BNA_WD0 Bus Node Arbiter Word 0.

Bit Meaning

0-5 Upper bits of the port address.

6 Read control signal.

7 Control parity signal.

8-9 Port identification information.

Number Port Identification

0 = DNA

1 = XNA

2 = FNA

3 = IBA

10-17 Control bits for CC or IFB based on active port identification information.

BUS NODE CONTROL BITS - CENTRAL CONTROL

Bit Meaning

10 Write control signal from the data node.

11 Maintenance control signal from the data node.

12 Control signal from the data node.

13 GCP control signal from the data node.

14 Control signal from the index node.

15 Write request signal from the data node.

16 Interface Bus grant to data node.

17 Not used.

BUS NODE CONTROL BITS - INTERFACE BUS

Bit Meaning

10 Write control signal from the Interface Bus Controller.

11 Maintenance control signal from the Interface Bus Controller.

12 Control signal from the Interface Bus Controller.

13 Word DMA request from the Interface Bus Controller.

14 Not used.

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18-20 Access identification information.
Number Identification

0 = NA

1 = CS

2 = PS

3 = PROM

4 = MMIO

5 = Buffer Bus

23 Entry valid bit used by software.
Number Identification

0 = Invalid

1 = Valid

BNA_WD1 Bus Node Arbiter Word 1.
Bit Meaning

0-23 Address on the port.

BNA_WD2 Bus Node Arbiter Word 2.
Bit Meaning

Bus Node operation results (0-5).

0 All Seems Well (ASW).

1 Data Parity Failure (DPF).

2 All Seems Well Failure (ASWF).

3 Node Attempted Illegal Access (NAIA).

4 Control Parity B Source (CPBS)

5 Controller or Client D Source (CLIDS).

6-13 Number of the entry in the raw data bin. This number can be used to identify what ports were active at the same time.

14-16 Internal fault recovery results.

17 PS segment number

18-21 CS segment number

22 PS segmenting enabled

23 CS segmenting enabled

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DATA: ACTIVE CC EXECUTION PIPELINE HISTORY

SCA(00)	SDA_H(00)	SDA(00)	EPH_RESULT(00)
.	.	.	.
.	.	.	.
.	.	.	.
SCA(15)	SDA_H(15)	SDA(15)	EPH_RESULT(15)

NOTE: Entry 00 is the oldest in time and entry 15 is the most recent in time.

Defined as:

SCA Saved Current Address.

Bit Meaning

0-23 The address of an instruction that left indexing.

SDA_H Saved Data Address. (High order bits)

Bit Meaning

0-6 The high order bits of the 30 bit Saved Data Address (SDA). The complete data address is determined by concatenating SDA_H with SDA.

SDA Saved Data Address. (Low order bits)

Bit Meaning

0-23 The low order bits of the 30 bit SDA. The complete data address is determined by concatenating SDA_H with SDA.

NOTE: The data address (from concatenation fo SDA_H and SDA) applies only when the SDA/EPH valid bit is set in the EPH_RESULT field. A valid SDA entry must be confirmed with the source listing to verify that the SDA applies to the SCA.

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EPH_RESULT Execution pipeline history (EPH) result. Applies only when the SDA/EPH valid bit is set in the EPH_RESULT field.

This word represents the different pipeline states and completion of an instruction located at SCA.

Bit Meaning

0 Instruction completion bit. If set, instruction was determined to have completed. If not set, instruction completion could not be determined.

3-7 Final pipeline state of the instruction. (Refer to TABLE E for a list of pipeline states).

9-13 Initial pipeline state of the instruction. (Refer to TABLE E for a list of pipeline states).

15-17 Operation type of the instruction.

0 = The instruction that left indexing was an INDEX ONLY operation and does not require a decoded instruction register to execute.

1 = The instruction that left indexing was a READ operation and requires at least 1 decoded instruction register to execute.

2 = The instruction that left indexing was a WRITE operation and requires at least 1 decoded instruction register to execute.

3 = The instruction that left indexing was a NON-MEMORY operation and requires at least 1 decoded instruction register to execute.

4 = The instruction that left indexing was a GCP operation and does not require a decoded instruction register to execute.

5 = The instruction that left indexing was a STACK operation and requires at least 1 decoded instruction register to execute.

23 SDA/EPH data is valid if set.

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TABLE E
EXECUTION PIPELINE STATES (OCTAL)

- 000 = Nothing happened during this clock cycle. The pipeline may be empty or an instruction is stalled in decoded instruction register 0. The instruction in indexing could be blocked waiting for another condition to clear or we could be waiting for an instruction fetch to provide an instruction to indexing.
- 002 = The instruction in indexing was loaded into decoded instruction register 1 since decoded instruction register 0 is not available.
- 004 = The instruction in decoded instruction register 0 has completed, but there is no instruction in either decoded instruction register 1 or an index only instruction to execute. Therefore, the empty word is clocked into decoded instruction register 0.
- 005 = The instruction in indexing was loaded into decoded register 0.
- 007 = The instruction in indexing requires two decoded instruction registers and is loaded into both decoded registers 0 and 1.
- 010 = There is an instruction in both decoded instruction registers 0 and 1, but the instruction in decoded instruction register 0 has not completed yet.
- 014 = The instruction in decoded instruction register 0 is complete, so the instruction in decoded instruction register 1 moves to decoded instruction register 0 and the empty word is loaded into decoded instruction register 1.
- 016 = The instruction in decoded instruction register 0 is complete, so the instruction in decoded instruction register 1 moves to decoded instruction register 0 and the instruction in indexing is loaded into decoded instruction register 1.

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DATA: ACTIVE CC REGISTERS (CLEVAC)

AC1FR	AC1GR	AC1JR	AC1KR	AC1LR	AC1XR
AC1YR	AC1ZR	AC1SR	AC1SC	AC1CES	AC1IBR
AC1INS	AC1INJ	AC1ILA	AC1ILR	AC1ITR	AC1INH
AC1CSC	AC1SAT	AC1PCR	AC1MCLK	AC1LIT	AC1DLR
AC1LPA	AC1UPA	AC1ACT	AC1ER	AC1PRM	AC1PRL
AC1LPI	AC1PES	AC1PSC	AC1PSQ	AC1RP0	AC1RP1
AC1PM0	AC1PM1	AC1ABC	AC1SAL	AC1SAR	AC1FIS
AC1EPS	AC1IFR	AC1MMR	AC1MSR	AC1MCO (H)	AC1MCO (L)
AC1MCD (H)	AC1MCD (L)	AC1MCP	AC1CCS (H)	AC1CCS (L)	AC1CUI
AC1FCT	AC1FCE	AC1FES	AC1FEE	AC1FER	AC1FST
AC1FLA (H)	AC1FLA (L)	AC1FLD (H)	AC1FLD (L)	AC1FLT (H)	AC1FLT (L)
AC1FRU (H)	AC1FRU (L)	AC1FRL (H)	AC1FRL (L)	AC1FIP	AC1CLE

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DATA: ACTIVE IFBC STACK

AC1FST_HI	AC1FST_LOW	AC1FLT_HI	AC1FLT_LOW	AC1FLA_HI	AC1FLA_LOW
AC1FLD_HI	AC1FLD_LOW	AC1FST_HI	AC1FST_LOW	AC1FLT_HI	AC1FLT_LOW
AC1FLA_HI	AC1FLA_LOW	AC1FLD_HI	AC1FLD_LOW	AC1FST_HI	AC1FST_LOW
AC1FLT_HI	AC1FLT_LOW	AC1FLA_HI	AC1FLA_LOW	AC1FLD_HI	AC1FLD_LOW
AC1FST_HI	AC1FST_LOW	AC1FLT_HI	AC1FLT_LOW	AC1FLA_HI	AC1FLA_LOW
AC1FLD_HI	AC1FLD_LOW	AC1FST_HI	AC1FST_LOW	AC1FLT_HI	AC1FLT_LOW
AC1FLA_HI	AC1FLA_LOW	AC1FLD_HI	AC1FLD_LOW	AC1FST_HI	AC1FST_LOW
AC1FLT_HI	AC1FLT_LOW	AC1FLA_HI	AC1FLA_LOW	AC1FLD_HI	AC1FLD_LOW

Defined as:

AC1FST_HI	Upper byte of active IFBC status stack
AC1FST_LOW	Lower bytes of active IFBC status stack
AC1FLT_HI	Upper byte of active IFBC last transaction stack
AC1FLT_LOW	Lower bytes of active IFBC last transaction stack
AC1FLA_HI	Upper byte of active IFBC last transfer address stack
AC1FLA_LOW	Lower bytes of active IFBC last transfer address stack
AC1FLD_HI	Upper byte of active IFBC last transfer data stack
AC1FLD_LOW	Lower bytes of active IFBC last transfer data stack

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DATA: API DUMP RAM DATA (API Firmware code MC5A014)

76543210	76543210	76543210	76543210	h-----h	i-----i
j-----j	k-----k	l-----l	m-----m	n-----n	o-----o
p-----p	q-----q	r-----r	s-----s	t-----t	u-----u
v-----v	w-----w	x-----x	y-----y	z-----z	A-----A
B-----B	C-----C	D-----D	E-----E	F-----F	G-----G
H-----H	I-----I	J-----J	K-----K	L-----L	M-----M
N-----N	O-----O	P-----P	Q-----Q	R-----R	S-----S
T-----T	U-----U	V-----V	W-----W	X-----X	Y-----Y
Z-----Z	a1-----a1	b1-----b1	c1-----c1	d1-----d1	e1-----e1
f1-----f1	g1-----g1	h1-----h1	i1-----i1	j1-----j1	k1-----k1
l1-----l1	m1-----m1	n1-----n1	o1-----o1	p1-----p1	q1-----q1
r1-----r1	s1-----s1	t1-----t1	u1-----u1	v1-----v1	w1-----w1
x1-----x1	y1-----y1	z1-----z1	A1-----A1	B1-----B1	C1-----C1
D1-----D1	E1-----E1	F1-----F1	G1-----G1	H1-----H1	I1-----I1
J1-----J1	K1-----K1	L1-----L1	M1-----M1	N1-----N1	O1-----O1
P1-----P1	Q1-----Q1	R1-----R1	S1-----S1	T1-----T1	U1-----U1
V1-----V1	W1-----W1	X1-----X1	Y1-----Y1	Z1-----Z1	a2-----a2
b2-----b2	c2-----c2	d2-----d2	e2-----e2	f2-----f2	g2-----g2
h2-----h2	i2-----i2	j2-----j2	k2-----k2	l2-----l2	m2-----m2
n2-----n2	o2-----o2	p2-----p2	q2-----q2	r2-----f2	s2-----s2
t2-----t2	u2-----u2	v2-----v2	w2-----w2	x2-----x2	y2-----y2
z2-----z2	z2-----z2	z2-----z2	z2-----z2	z2-----z2	z2-----z2

Fields h through z2 are explained in DUMP RAM Field Definitions that follow.

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DUMP RAM Field Definitions

The following is the dump of the PIC RAM from the API that detected the error.

- h = Send COM/XCOM address offset
- i = Send COM/XCOM size
- j = Send COM/XCOM load pointer
- k = Send COM/XCOM unload pointer
- l = Receive COM/XCOM virtual offset
- m = Receive COM/XCOM size
- n = Receive COM/XCOM load pointer
- o = Receive COM/XCOM unload pointer
- p = Send job buffer state vector and number of words.
- q = Send job buffer DMA address
- r = Send job buffer client information
- s = Send job buffer from, time and number.
- t = Send auditing timing information
- u = Spare
- v = Spare
- w = Send job buffer checksum
- x = Receive job buffer state vector and number of words.
- y = Receive job buffer DMA address
- z = Receive job buffer client information
- A = Receive job buffer from, time, and number.
- B = Receive auditing timing information
- C = Spare
- D = Spare
- E = Receive job buffer checksum
- F = PIC status register.
- G = Error Status register.
- H = Send Mtce Buffer virtual address for 3B
- I = Receive Mtce Buffer virtual address for 3B
- J = Send Mtce Buffer address for 1B
- K = Receive Mtce Buffer address for 1B
- L = Send COM/XCOM Buffer virtual address for 3B

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M = Receive COM/XCOM Buffer virtual address for 3B
N = Send COM/XCOM Buffer address for 1B
O = Receive COM/XCOM Buffer address for 1B
P = Size of Mtce Buffer in 3B
Q = Size of Mtce Buffer in 1B
R = Size of COM/XCOM Buffer in 3B
S = Size of COM/XCOM Buffer in 1B
T = Mtce Job Buffer offset in 3B
U = Mtce Job Buffer address in 1B
V = COM/XCOM Job Buffer offset in 3B
W = COM/XCOM Job Buffer offset in 1B
X = Size of Mtce Job Buffer in 3B
Y = Size of COM/XCOM Job Buffer in 3B
Z = Size of Mtce Job Buffer in 1B
a1 = Size of COM/XCOM Job Buffer in 1B
b1 = Number of Mtce Job Buffers in 3B
c1 = Number of COM/XCOM Job Buffers in 3B
d1 = Number of Mtce Job Buffers in 1B
e1 = Number of COM/XCOM Job Buffers in 1B
f1 = Interprocessor Word sent by 3B
g1 = Interprocessor Word sent by 1B
h1 = PIC Detailed Error Information
i1 = API State word
j1 = Expanded DMA job number for Send Mtce Buffer
k1 = DMA Requested during CNI
l1 = DMA In
m1 = DMA Out
n1 = Direction of Interrupted DMA job
o1 = Common/CNI Buffer polling rate
p1 = Firmware version date
q1 = Current 1B DMA job number
r1 = Current 3B DMA job number
s1 = Memory integrity check word

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t1 = Send TB Headers address in 1B
u1 = Send TB Buffer address in 1B
v1 = Send TB Buffer end address in 1B
w1 = Send TB load pointer
x1 = Send TB unload pointer
y1 = Receive TB Headers address in 1B
z1 = Receive TB Buffer address in 1B
A1 = Receive TB Buffer end address in 1B
B1 = Receive TB load pointer
C1 = Receive TB unload pointer
D1 = Pointer state during TB pointer update
E1 = Spare
F1 = Spare
G1 = Spare
H1 = Spare
I1 = Spare
J1 = API scanning status in 3B
K1 = DLN scanning status in 3B
L1 = Incoming TB start virtual address in 3B
M1 = Incoming TB end virtual address in 3B
N1 = Outgoing TB start virtual address in 3B
O1 = Outgoing TB end virtual address in 3B
P1 = Outgoing TB load pointer in 3B
Q1 = Outgoing TB end pointer in 3B
R1 = Incoming TB unload pointer in 3B
S1 = Incoming TB load pointer in 3B
T1 = Incoming TB end pointer in 3B
U1 = Outgoing TB unload pointer in 3B
V1 = Spare
W1 = Spare
X1 = Spare
Y1 = Spare
Z1 = Send TB Virtual address in 1B

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a2 = Receive TB Virtual Address in 1B
b2 = Spare
c2 = Send and Receive TB Virtual Address in 3B
d2 = TB error threshold and TB DMA transfer size for 1B
e2 = TB DMA transfer size for 3B
f2 = TB Send Load and Receive Unload Error Count
g2 = TB Incoming Load and Outgoing Unload Error Count
h2 = Interprocessor Data Word going to 3B from 1B
i2 = Interprocessor Data Word going to 1B from 3B
j2 = TB Error and Status Word
k2 = TB DMA segment index
l2 = Spare
m2 = Spare
n2 = Spare
o2 = Spare

The following words are the contents of the last message processed by the API.

p2 = First word of APS message. (From, size, To)
q2 = Message AP Type and Sequence number
r2 = Message Client Identification
s2 = Spare
t2 = Message Checksum
u2 = Message Options Field
v2 = Message Time and number of words
w2 = Message Address
x2 = Message ETIME field
y2 = Spare
z2 = Message DATA

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DATA: AUXILIARY DATA - (TMS MEMPF)

a...a	b...b	c...c	d...d	e...e	f...f
g...g	h...h	i...i	j...j	0...0	0...0
k...k	l...l	0...0	0...0	m...m	0...0
n...n	o...o	p...p	q...q	r...r	s...s

Defined as:

a = Dump size/ type (All bits in 1460 OCTAL):

Bit	Meaning
-----	---------

0	Tag (0).
---	----------

1-7	Dump size (24 decimal).
-----	-------------------------

8-9	Dump type (MEMPF=3).
-----	----------------------

b = Software status for controller 0. See TABLE F.

c = Software status for controller 1. See TABLE F.

d = Hardware status for controller 0. See TABLE G.

e = Hardware status for controller 1. See TABLE G.

f = UTYPE TRANS (unit type translator):

Bit	Meaning
-----	---------

0-23	First word of unit type translator.
------	-------------------------------------

g = ASW ESR (all-seems-well failure) for controller 0. See TABLE H.

h = ASW ESR for controller 1. See TABLE H.

i = AINT ESR (autonomous interrupt) for controller 0. See TABLE I.

j = AINT ESR for controller 1. See TABLE I.

k = KCODE:

Bit	Meaning
-----	---------

0-6	Member number.
-----	----------------

7-11	Unit type (TMS=4).
------	--------------------

l = TSM (time slot memory):

Bit	Meaning
-----	---------

0-6	Time slot memory.
-----	-------------------

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m = Suspect controller:

Bit	Meaning
0-1	0 - Controller 0. 1 - Controller 1. 2 - Both controllers.

n = Network status:

Bit	Meaning
0-1	0 - Duplex failure 1 - Controller 0 only 2 - Controller 1 only 3 - Duplex operation

o = Time slot:

Bit	Meaning
0-6	Time slot.

p = Memory read for controller 0. See TABLE J.

q = Memory read for controller 1. See TABLE J.

r = Retry pass/fail flags:

Bit	Meaning
0-1	0 - Both controllers passed retry. 1 - Controller 0 only failed retry. 2 - Controller 1 only failed retry. 3 - Both controllers failed retry.

s = Memory correction flags:

Bit	Meaning
0-1	0 - No correction attempted. 1 - Correction attempted. 2 - Update via mate controller.

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TABLE F
SOFTWARE STATUS - CONTROLLER 0 OR 1

Bit	Meaning
0	Maintenance access bit.
1	Receive on (PU bus 0 or 1).
2	Send on PU bus 0.
3	Send on PU bus 1.
4	Divorce controller from mate.
5	Stop autonomous operation.
7	Diagnosis has been requested.
8	Controller to be restored only by teletypewriter (TTY).
12	Controller out-of-service.
13	Bus access circuit 0 power off.
14	Bus access circuit 1 power off.
15	Power off controller.
16	Controller cannot receive on PU Bus 0.
17	Controller cannot send on PU bus 0.
18	Controller cannot receive on PU bus 1.
19	Controller cannot send on PU bus 1.
20-23	PU maintenance code.

TABLE G
HARDWARE STATUS - CONTROLLER 0 or 1

Bit	Meaning
0	Maintenance access bit.
1	Receive on (PU bus 0 or 1).
2	Send on bus 0.
3	Send on bus 1.
4	Divorce controller from mate.
5	Stop autonomous operation.
6	Inhibit busy/idle bit checks.
7	Inhibit data matching on writes.
8	Inhibit interrupts.
9	Unit is synced with TDS (time division switch) subsystem.
10	Soft stop autonomous operation.
11	Inhibit gating to memory registers.
12	Allow self-start.
13	Soft stop at phase 6.
14	Forces zeros across matcher interface.
15	Forces ones across matcher interface.

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TABLE H
ASW ESR -CONTROLLER 0 or 1

Bit	Meaning
0	All-seems-well failure.
1	Autonomous interrupt.
2	Parity failure even (PUB).
3	Parity failure odd (PUB).
4	Mode failure.
5	Order sequencer sequence check.
6	Memory address failure.
7	Time slot memory parity failure.
8	Audit error.
9	Time slot address mismatch.
10	Memory write mismatch.
11	Order sequencer abort check.

TABLE I
AINT ESR - CONTROLLER 0 or 1

Bit	Meaning
0	Clock error (internal).
1	Time slot counter sequence check.
2	Time slot counter mismatch.
3	Clock mismatch.
4	Time slot memory parity failure.
6	Link of memory that failed.
7-13	Time slot memory that failed.
14	Overflow-multiple interrupts have occurred.
15-21	Time slot during which failure occurred.

TABLE J
MEMORY READ - CONTROLLER 0 or 1
(Bits 0-11 are odd TSM)

Bit	Meaning
0-3	Data (even side).
4	Busy / idle bit.
5	Parity bit.
6-9	Data (odd side).
10	Busy / idle bit.
11	Parity bit.
12-23	Same format as bits 0-11, but represents even TSM.

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DATA: AUXILIARY DATA (TSI TRPF,TMM;XTSI TRPF)

TRPF AUX DUMP					
DUMP SZ	TTSI SWSTAT C0	TTSI SWSTAT C1	TTSI HW STAT C0	TTSI HW STAT C1	TTSI PATH
ACTIVE TMS NTWK	TTSM ARRAY C0,C1	0....0	0....0	0....0	TMS ST2 PATH
	TTSM0 XTSI C0	TTSM0 XTSI C1	TTSM1 XTSI C0	TTSM1 XTSI C1	
TMS ACCESS RESULT	TMS SW STAT C0	TMS SW STAT C1	TMS HW STAT C0	TMS HW STAT C1	TMS ST1 PATH
TMS SW2 ARRAY C0	TMS SW2 ARRAY C1	TMS SW1 ARRAY C0	TMS SW1 ARRAY C0	TMS SW1 ARRAY C0	TMS SW1 ARRAY C0
TMS SW1 ARRAY C1	TMS SW1 ARRAY C1	TMS SW1 ARRAY C1	TMS SW1 ARRAY C1	0....0	RTSI PATH
RTSI ACCESS RESULT	RTSI SW STAT C0	RTSI SW STAT C1	RTSI HW STAT C0	RTSI HW STAT C1	PATH TIMESLOT
0....0	RTSI ASW ERR C0	RTSI ASW ERR C1	RTSI AINT ESR C0	RTSI AINT ESR C1	0....0
RTSI MA_RESP C0	RTSI MA_RESP C1	RTSI CESR C0	RTSI CESR C1	RTSI RECEIVE ESR C0 SUMMARY	RTSI RECEIVE ESR C1 SUMMARY
RTSM ARRAY C0	RTSM ARRAY C0	RTSM ARRAY C0	RTSM ARRAY C0	RTSM ARRAY C1	RTSM ARRAY C0
RTSM0 XTSI C0	RTSM0 XTSI C1	RTSM1 XTSI C0	RTSM1 XTSI C1	PEST C0	PEST C1
RTSM ARRAY C1	RTSM ARRAY C1	0....0	ORIGINAL SUSPECT LIST	TRACE OUTCOME	OUTCOME SUSPECT LIST
SPU C0	SPU C1				
TTSI UTYPE TRANS	TMS UTYPE TRANS	RTSI UTYPE TRANS	TTSI UTMN	TMS UTMN	RTSI UTMN
TTSI PCMIL C0	TTSI PCMIL C1	TTSI PCMIH C0	TTSI PCMIH C1	TTSI PCMOL C0	TTSI PCMOL C1
TTSI PCMOH C0	TTSI PCMOH C1	CHANNEL/SPU C0	CHANNEL/SPU C1	0....0	0....0

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Defined as:

DUMP SZ — Report Type and Block Size
TTSI SWSTAT C0 — Controller 0 SW Status
TTSI SWSTAT C1 — Controller 1 SW Status
TTSI HW STAT C0 — Controller 0 HW Status
TTSI HW STAT C1 — Controller 1 HW Status
TTSI PATH — TTSI Path Data
ACTIVE TMS NTWK — Active TMS Network
TTSM0 XTSM C0 — TTSM0 ARRAY Controller 0
TTSM0 XTSM C1 — TTSM0 ARRAY Controller 1
TTSM1 XTSM C0 — TTSM1 ARRAY Controller 0
TTSM1 XTSM C1 — TTSM1 ARRAY Controller 1
TMS ST2 PATH — TMS ST2 Path
TMS SW2 ARRAY C0 — TMS SW2 ARRAY Controller 0
TMS SW2 ARRAY C1 — TMS SW2 ARRAY Controller 1
TMS HW STAT C0 — TMS HW Status Controller 0
TMS HW STAT C1 — TMS HW Status Controller 1
TMS ST1 PATH — TMS ST1 Path
TMS SW1 ARRAY C0 — TMS SW1 ARRAY Controller 0
TMS SW1 ARRAY C1 — TMS SW1 ARRAY Controller 1
RTSI PATH — RTSI Path
RTSI ACCESS RESULT — RTSI Access Result
RTSI SW STAT C0 — RTSI SW Status Controller 0
RTSI SW STAT C1 — RTSI SW Status Controller 1
RTSI HW STAT C0 — RTSI HW Status Controller 0
RTSI HW STAT C1 — RTSI HW Status Controller 1
PATH TIMESLOT — Path Timeslot
RTSI MA_RESP C0 — RTSI MA Response Controller 0
RTSI MA_RESP C1 — RTSI MA Response Controller 1
RTSI CESR C0 — RTSI CESR Controller 0
RTSI CESR C1 — RTSI CESR Controller 1
RTSI RECEIVE ESR C0 SUMMARY — RTSI Receive ESR Controller 0 Summary
RTSI RECEIVE ESR C1 SUMMARY — RTSI Receive ESR Controller 1 Summary

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RTSM0 XTSM C0 — RTSM0 XTSM Controller 0
RTSM0 XTSM C1 — RTSM0 XTSM Controller 1
RTSM1 XTSM C0 — RTSM1 XTSM Controller 0
RTSM1 XTSM C1 — RTSM1 XTSM Controller 1
RTSI PEST C0 — RTSI Pest Register Controller 0
RTSI PEST C1 — RTSI Pest Register Controller 1
RTSM ARRAY C1 — RTSM Array Controller 1
ORIGINAL SUSPECT LIST — Original Suspect List
TACE OUTPUT — Trace Outcome
OUTCOME SUSPECT LIST — Outcome Suspect List
TTSI UTYPE TRANS — TTSI Utype Translation
TMS UTYPE TRANS — TMS Utype Translation
RTSI UTYPE TRANS — RTSI Utype Translation
TTSI UTMN — TTSI Unit Type and Member
TMS UTMN — TMS Unit Type and Member
RTSI UTMN — RTSI Unit Type and Member
TTSI PCMIL C0 — TTSI Input PCM Low Controller 0
TTSI PCMIL C1 — TTSI Input PCM Low Controller 1
TTSI PCMIL C0 — TTSI Input PCM High Controller 0
TTSI PCMIL C1 — TTSI Input PCM High Controller 1
TTSI PCMOL C0 — TTSI Output PCM Low Controller 0
TTSI PCMOL C1 — TTSI Output PCM Low Controller 1
TTSI PCMOL C0 — TTSI Output PCM High Controller 0
TTSI PCMOL C1 — TTSI Output PCM High Controller 1
CHANNEL XTSM C0 — TTSM Channel/LOD BI Bit SPU/Digroup for Controller 0
CHANNEL XTSM C1 — TTSM Channel/LOD BI Bit SPU/Digroup for Controller 1
SPU C0 — SPU/Digroup for controller 0
SPU C1 — SPU/Digroup for controller 1

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DATA: B-LEVEL (BLEV)

AC1FR	AC1GR	AC1JR	AC1KR	AC1LR	AC1XR
AC1YR	AC1ZR	AC1BR (H)	AC1BR (L)	AC1ASB (H)	AC1ASB (L)
AC1SCA	AC1SDA	AC1CSC	AC1CES	AC1FST	AC1FES
AC1ILA	AC1INS	AC1INH	AC1INJ	AC1SC	AC1SR
AC1SCTR	ST1INS	ELIT	AC1LPI	AC1ER	AC1PRM
AC1PRL	AC1PSC	AC1BRS (H)	AC1BRS (L)	AC1SAT	AC1PCR
AC1MCO	AC1MCP	AC1MCD (H)	AC1MCD (L)	AC1ITR	AC1ACT
AC1PSQ	AC1TAR	AC1BNCTL		ST1ASB (H)	ST1ASB (L)

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DATA: BLEV STANDBY CC REGISTERS (PCRVST)

ST1FR	ST1GR	ST1JR	ST1KR	ST1LR	ST1XR
ST1YR	ST1ZR	ST1BR (H)	ST1BR (L)	ST1ASB (H)	ST1ASB (L)
ST1SCA	ST1SDA	ST1CSC	ST1CES	ST1FST	ST1FES
ST1ILA	ST1INS	ST1INH	ST1INJ	ST1SC	ST1SR
ST1SCTR	ST1LIT	ELIT	ST1LPI	ST1ER	ST1PRM
ST1PRL	ST1PSC	ST1BRS (H)	ST1BRS (L)	ST1SAT	ST1PCR
ST1MCO	ST1MCP	ST1MCD (H)	ST1MCD (L)	ST1ITR	ST1ACT
ST1PSQ	ST1TAR	AC1BNCTL			

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DATA: C-LEVEL (CLEV)

AC1FR	AC1GR	AC1JR	AC1KR	AC1LR	AC1XR
AC1YR	AC1ZR	AC1BR (H)	AC1BR (L)	AC1ASC (H)	AC1ASC (L)
AC1SCA	AC1SDA	AC1CSC	AC1CES	AC1FST	AC1FES
AC1ILA	AC1INS	AC1INH	AC1INJ	AC1SC	AC1SR
AC1SCTR	ST1INS	ELIT	AC1LPI	AC1ER	AC1PRM
AC1PRL	AC1PSC	AC1BRS (H)	AC1BRS (L)	ST1ASC (H)	ST1ASC (L)
ST1SCA	ST1SDA	ST1BR (H)	ST1BR (L)	AC1ME0 (H)	AC1ME0 (L)
ST1LIT	ST1LPI	AC1MSR	AC1MMR	ST1MI0 (H)	ST1MI0 (L)
AC1MI0 (H)	AC1MI0 (L)	AC1ME1 (H)	AC1ME1 (L)	AC1MI1 (H)	AC1MI1 (L)
ST1ME0 (H)	ST1ME0 (L)	ST1MI1 (H)	ST1MI1 (L)	AC1ME1 (H)	AC1ME1 (L)
AC1SAT	AC1TAR	AC1BNCTL			

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DATA: CALL STORE IDENTIFICATION DATA (CSFRID)

FAILING H_ADDR	FAILING ADDR	RCES	ST1BRS_H	ST1BRS_L	AC1SAL
AC1SAR	ST1SAL	ST1SAR	SCES	FAILING MEMN	VBOOT
BFAILRT	SYSSTAT	IBUSSTAT	SAMEMN	MNSUSP	BUSBUFFGCPS (CS ONLY) (0 FOR PS)
GCPACT_L	GCPACT_H	CR01ACT	CR10ACT	RESERVE	FLAGS1
GCPSTBY_L	GCPSTBY_H	CR01STBY	CR10STBY	RESERVE	FAFTRACK
CINS	C_ACT_EVEN	C_ACT_ODD	C_STBY_EVEN	C_STBY_ODD	REP_STORE
BUSSTATER	C_H_ACT_EVEN	C_H_ACT_ODD	C_H_STBY_EVEN	C_H_STBY_ODD	ST1ABC
FAILING MCODE	RESERVE				

Defined as:

FAILING H_ADDR	— Bits 24-29 of the 30 bit failing address.
FAILING ADDR	— Bits 0-23 of the 30 bit failing address.
RCES	— CC error summary register actually used by the fault recovery program to recover the interrupt.
ST1BRS_H	— High 8 bits of the standby CC shadow B register.
ST1BRS_L	— Low 24 bits of the standby CC shadow B register.
AC1SAL	— Save even address reply on program fetches.
AC1SAR	— Save odd address reply on program fetches.
ST1SAL	— Save even address reply on standby CC program fetches.
ST1SAR	— Save odd address reply on standby CC program fetches.
SCES	— Standby CES used to recovery standby store when stores were duplexed.

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FAILING MEMN

— Failing member and software decisions:

Bit	Name	Description
0-5	PRDFMEMN	Suspected failing member. MEMN removed if bit 23 = 1
21	PRDFBTF	Bootstrap failed on first attempt (first bus)
22	PRDBOOT	Bootstrap has been entered
23	PRDRMVST	When set, the member indicated in bits 0-5 has been removed

VBOOT

— Variable bootstrap status after recovery.

Bit	Name	Description
0-3	MU1RBTCTR	Count of bootstrap entries
4	MU1RVFOUT	When set, the MEMN in VBOOT was forced out by VBOOT
9-14	MU1RVMEMN	MEMN forced out in current VBOOT state
15-17	MU1RVBSTATE	Variable boot state counter
18	MU1R2WPUMP	2 word pump performed as part of recovery

BFAILRT

— The return address in the recovery program for a bootstrap failure.

SYSSTAT

— System status at time of interrupt.

Bit	Name	Description
0	SPBO	PBO of standby CC at interrupt entry
1	SPBA	PBA of standby CC at interrupt entry
2	SPBT	PBT of standby CC at interrupt entry
3	SCBO	CBO of standby CC at interrupt entry
4	SCBA	CBA of standby CC at interrupt entry
5	SCBT	CBT of standby CC at interrupt entry
6	CS1RPRTBKZP	Indicates base MCODE (3=E-LEVEL/0=D-LEVEL) for community has been pumped when set

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Bit	Name	Description (SYSSTAT continued)
7	CS1RCCS	State of CC1CCS (CC software duplex status) at time of interrupt
15	SDIVA	Status of AC1DIV bit (CC divorce) in CSC prior to interrupt

IBUSSTAT (Call Store) — BUSSTAT at interrupt entry. Call store / D-LEVEL.

Bit	Name	Description
0	CS1RNDLEV	Non D-LEVEL entry flag
1	CS1ROFLC	Used to indicate to CALCONFIG that the CS community is to be set up in an off line configuration
2	CS1RREGEN	When set, call store memory was pumped from disk as part of recovery
3	CS1RCBO	When set, active CC sends over both buses
4	CS1RCBA	Defines the bus used by the active CC. Bus 1 is active when set
5	CS1RCBT	Both CCS will receive from the active bus when set
6	CS1RBUS0TBL	CS bus 0 is in trouble if set
7	CS1RBUS1TBL	CS bus 1 is in trouble if set
8	CS1RDGNB	When set indicates there has been a change in the bus configuration.
9	CS1RFROZEN	Set if one or more stores are in the frozen state.
11	CS1RPHINPR	Set at start of phase by application program. Reset at end of phase by application program. Used to alter recovery strategy
12	CS1RAUDF	If status audit fails in CALCONFIG this item is set before going to the hardware status update. When set, audit failure in CALCONFIG will not go to hard status
13	CS1RBREX	SET When a CS bus routine exercise has been requested
14	CS1RREX	SET When a CS bus or CS routine exercise has been requested

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Bit	Name	Description (IBUSSTAT continued)
15	CS1RNBKZ	A non-backed up store has failed without a duplicate
16	CS1RKEEPB	If set the standby bus is to be kept out of service until a manual restoral request (TTY)
17	CS1RSTPR	If set, stop REX before testing next store
18	CS1RBKZP	Set when block zero has been pumped
19	CS1RDGCU	If set, the DGN is performing critical tests in case an interrupt occurs, establish CONFIG found in status table
20	CS1RTAVL	Used in search through CS1RSTATUS table for available store
21	CS1RPASBOOT	CS bootstrap assembled a working configuration
22	CS1RBOOTNG	CS bootstrap failed to assemble a working configuration using in service stores and the selected bus.
23	CS1RFCBA	Used to save state of CBA/PBA (bit 4/1) prior to a bus store routine or REX

IBUSSTAT (Program Store) — BUSSTAT at interrupt entry. Program store.

Bit	Name	Description
0	PS1RPBO	When set, active CC sends over both program store buses
1	PS1RPBA	Defines the program store bus used by the active CC
2	PS1RPBT	Both CCS will receive from the active bus when set
3	PS1RNELEV	Non E-LEVEL entry flag
4	PS1ROFLC	Used to indicate to CALCONFIG that the PS community is To be set up in an off line configuration
5	PS1RREGEN	When set, PS memory was pumped from disk as part of recovery

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Bit	Name	Description (IBUSSTAT continued)
6	PS1RBUS0TBL	PS bus 0 is in trouble if set
7	PS1RBUS1TBL	PS bus 1 is in trouble if set
8	PS1RDGNB	When set indicates there has been a change in the bus CONFIG
9	PS1RFROZEN	Set if one or more stores are in the frozen state
11	PS1RPHINPR	Set at start of phase by application program. Reset at end of phase. Used to alter interrupt recovery strategy if in a phase.
12	PS1RAUDF	If status audit fails in CALCONFIG, this item is set before going to the hardware status update. When set, audit failures in CALCONFIG will not go to hardware status.
13	PS1RBREX	Set when a PS store bus routine has been requested
14	PS1RREX	Set when a PS store routine exercise has been requested
16	PS1RKEEPB	If set the standby bus is to be kept out of service until manually restored
17	PS1RSTPR	If set, stop the store routine. (1/2 hour has expired since exerciser was started) bit 14
18	PS1RBKZP	Set when block zero has been pumped
19	PS1RDGCU	If set, the DGN is performing critical tests. In case an interrupt occurs, establish configuration found in status table
20	PS1RTAVL	Used in search through PS1RSTATUS table for available store
21	PS1RPASBOOT	PS bootstrap assembled a working configuration
22	PS1RBOOTNG	Bootstrap failed to assemble a working configuration using all operational stores and one CS bus.
23	PS1RFPBA	Used to save state of PBA prior to a REX routine

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SAMEMN — Standby and active member numbers for failing MCODE (valid for non-bus related faults only).

Bit	Name	Description
0-5	PRDRAMEMN	Active member number supplying MCODE interrupting
6-9	PRDRAERRCNT	Error count for active unit at entry to interrupt
10	PRDRAMEMNF	Flag for active member number (set if in service)
12-17	PRDRSMEMN	standby member number supplying MCODE interrupting
18-21	PRDRSERRCNT	Error count for standby unit at entry to interrupt
22	PRDRSMEMNF	Flag for standby member number (set if in service)
23	PRDRSMEMNC	When set, copy was in progress on the standby unit when an interrupt occurred

MNSUSP — Suspect member list.

Bit	Name	Description
0-5	MU1RMNSUSP1	Last MEMN having ATP DGN after interrupt
6	MU1RSUSFL1	When set, bits 0-5 are valid
7-12	MU1RMNSUSP2	Next to last MEMN having ATP DGN
13	MU1RSUSFL2	When set, bits 7-12 are valid

BUSBUFFGCPS — Call store bus buffer GCP status information (call store only - value of 0 for PS).

Bit	Name	Description
0	CSB_00	GCP reply for call store bus 0 - frame 0 (active if set)
1	CSB_01	GCP reply for call store bus 0 - frame 1 (active if set)
2	CSB_10	GCP reply for call store bus 1 - frame 0 (active if set)
3	CSB_11	GCP reply for call store bus 1 - frame 1 (active if set)

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GCPACT_L — Low 24 bits of active store GCP response.

Bit	Name	Description
0	MU1GCPS01	Send on bus 0 FF
1	MU1GCPS11	Send on bus 1 FF
2	MU1GCPRO1	Receive on bus FF
3	MU1GCPRO0	Receive on bit complement
4-12	MU1GCPNO01-81	MCODE name bits
13	MU1GCPUPDT1	store update bit
14	MU1GCPTME1	Trap mode error
15	MU1GCPMCCAMD	MCC address match detected when set
16	MU1GCPTWVPV1	Trap write protect violation when set
17	MU1GCPTASWF1	Trap all seems well fail when set
18	MU1GCPTDPF1	Trap data parity failure when set
19	MU1GCPTAPF1	Trap address parity failure when set
20	MU1GCPAMD1	Address match detected when set
21	MU1GCPCRIO	Communications reply inhibit when 0
22	MU1GCPMTCE1	store in MTCE when 1
23	MU1GCPMTCE0	store maintenance complement bit

GCPACT_H — High 8 bits of active store GCP response.

Bit	Name	Description
2	MU1GCPIIB	When set, store was not listening to bus

CR01ACT — Control read 01 response active store.

Bit	Name	Description
0	MU1CR01S01	Send on bus 0 if set
1	MU1CR01S11	Send on bus 1 if set
2	MU1CR01RO1	Receive on bus
3	MU1CR01RO0	Receive on bus complement bit
4-12	MU1CR0(11-81)	store MCODE
13	MU1CR01UPDT1	Update bit - software controlled
14	MU1CR01TME1	Trap mode error bit
15	MU1CR01MCCAMD	MCC address match detected

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Bit	Name	Description (CR01ACT continued)
16	MU1CR01TWPV1	Trap write protect violation
17	MU1CR01TASWF1	Trap all seems well failure
18	MU1CR01TDPF1	Trap data parity fail
19	MU1CR01TAPF1	Trap address parity fail
20	MU1CR01AMD1	Address match detected
21	MU1CR01CRI0	Communications reply inhibit complement
22	MU1CR01MTCE1	Maintenance bit
23	MU1CR01MTCE0	Maintenance bit complement

CR10ACT

— Control read 10 response.

Bit	Name	Description
3	MU1CR10WPINH1	Write protect inhibit
4	MU1CR10WP1	Write protect
13	MU1CR10DPF01	Data parity failure byte 0
14	MU1CR10DPF11	Data parity failure byte 1
15	MU1CR10DPF21	Data parity failure byte 2
16	MU1CR10DPF31	Data parity failure byte 3
17	MU1CR10APF01	Address parity failure byte 0
18	MU1CR10APF11	Address parity failure byte 1
19	MU1CR10APF21	Address parity failure byte 2
20	MU1CR10APF31	Address parity failure byte 3
21-23	MU1CR10TYPE	Store hardware (1 = megaword)

FLAGS1

— Flags and data relevant to interrupt

Bit	Name	Description
0	PRDUNDUPACT	Unduplicated and suspect store interrupt
2	PRDRWPHS	Indicates the write protect program entered at MUFRWPHS - (memory not protected by WPAD)
3	PRDRLDCPYFL	MAC failed to accept the copy job
4	PRDRWPVOLY	Indicates a write protect violation has occurred on this interrupt and no other errors were indicated

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Bit	Name	Description (FLAGS1 continued)
5	PRDUPSTORES	MCODEs duplexed for the failing address
6	PRDSBYPCK	Standby store chosen as faulty by recovery
7	PRDACTPCK	Active store chosen as faulty by recovery
8	PRDPFOFLAG	Indicates parity failure only
9	PRDSEGMEMFLG	Segment Memory enabled at the time of interrupt
12	PRDSEGNO	(PS) Last segment number enabled at the time of interrupt
12-15	PRDSEGNO	(CS) Last segment number enabled at the time of interrupt

GCPSTBY_L — Same as GCPACT but for standby.
GCPSTBY_H — Same as GCPACT_H but for standby.
CR01STBY — Same as CR01ACT but for standby.
CR10STBY — Same as CR10ACT but for standby.
FAFTRACK — Full access failure tracking word.

Bit	Name	Description
0-2	PRDRFAFCNT	The number of times that the full access test failed
3-5	PRDRFAFRMVS	indicates which time through the full access failure that the standby store was removed
6-8	PRDRFAFRMVB	Indicates which time through the full access failure that the bus was removed to recover
9-11	PRDRFAFSWB	Indicates which time through the full access failure that the bus was switched to recover
12	PRDRFAFRMVBUS	Indicates that the standby bus was removed
13	PRDRFAFSWBUS	Indicates that the buses were switched
14	PRDRFAFPIPE	Indicates that the pipeline was suspected of error propagation. All store traps were cleaned and the full access tests were re-executed
15	PRDRFAFENTERED	Indicates that full access failure was entered

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Bit	Name	Description (FAFTRACK continued)
16	PRDRFAFRBUS0	Set if bus 0 removed by fault recovery
17	PRDRFAFRBUS1	Set if bus 1 removed by fault recovery
18	PRDRFINFILL	Disk pumping routine FINFILL was entered as part of recovery
19	PRDRFMCDER	2 Word pump inconsistency - failing address and MCODE do not match
20	PRDCCMTCH	CCs failed access tests when put in step
21	PRDRCPFAIL	Copying of store failed.

CINS	— Active interrupt error source (AC1INS) register or'ed with standby (ST1INS)
C_ACT_EVEN	— Contents of the active store at the failing address aligned on an even word boundary. (e.g 311 = 310, 310 = 310)
C_ACT_ODD	— Contents of the active store at the failing address aligned on an odd word boundary. (e.g 310 = 311, 311 = 311)
C_STBY_EVEN	— Same as C_ACT_EVEN except for the standby store when duplexed.
C_STBY_ODD	— Same as C_ACT_ODD except for the standby store when duplexed.
REP_STORE	— Replacement stores status.

Bit	Name	Description
0-5	PRDREPMEMN	Replacement member used when bit 23 = 1
6-14	PRDREPMCD	MCODE store was at when taken as a replacement
22	PRDREPLT	Attempt to find a substitute was made
23	PRDREPLV	Replacement found when bit = 1

BUSSTAT	— BUSSTAT at end of recovery. See IBUSSTAT.
C_H_ACT_EVEN	— Bit register contents for the active store on an even word boundary:

Bit	Description
0- 7	Contents of bits 24-31 in memory for the active store at the failing address aligned on an even word boundary. (e.g. 311 = 310, 310 = 310)
12-15	Stored parity bits for the B register.
18-21	Computed parity bits for associated 32 bit word.

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C_H_ACT_ODD — Bit register contents for the active store on an odd word boundary:

Bit	Description
0- 7	Contents of bits 24-31 in memory for the active store at the failing address aligned on an odd word boundary. (e.g. 311 = 310, 310 = 310)
12-15	Stored parity bits for the B register.
18-21	Computed parity bits for associated 32 bit word.

C_H_STBY_EVEN — Same as C_ACT_EVEN except for the standby store when duplexed.

C_H_STBY_ODD — Same as C_ACT_ODD except for the standby store when duplexed.

ST1ABC — Standby auxiliary buffer control containing the all-seems-well and parity bits for the reply words of an instruction fetch.

FAILING MCODE — Failing MCODE and software decisions:

Bit	Name	Description
0-9	PRDFMCODE	MCODE associated with PRDBUSTF, PRDFATF1, PRDFATF2 or PRDQACCF.
11	PRDFASWE	All seems well error.
12	PRDFASWF	All seems well failure response from MCODE in bits 0-9.
13	PRDFPARR	Parity error right for E-LEVEL, CS parity error for D-LEVEL.
14	PRDFPARL	Parity error left for E-LEVEL, not available for D-LEVEL.
19	PRDPQACCF	Set if the pre-qualify test failed.
20	PRDQACCF	Set if the single MCODE access test failed.
21	PRDFATF1	Set if the full access test failed the first time.
22	PRDFATF2	Set if the full access test failed the second time.
23	PRDBUSTF	When set, the bus test failed.

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DATA: CALL STORE TEST RESULTS (CSFRTR)

BOOTTAG	VBOTSTA	BR	FR	GR	JR
KR	LR	XR	YR	ZR	MEMN
.	.	.	.	.	.
.	.	.	.	.	.
BOOTTAG	VBOTSTA	BR	FR	GR	JR
KR	LR	XR	YR	ZR	MEMN

Defined as:

BOOTTAG = A program address which will identify the reason for the bootstrap entry.

VBOTSTA = The contents of the variable bootstrap status word at bootstrap entry after BTGTR has been incremented. It contains a bootstrap counter and a variable bootstrap state counter.

MEMN = Failing store member number.

BR, FR, GR,
JR, KR, LR, XR,
YR, ZR = CC register that contains the address of the failing test.

NOTE: Each two-line entry corresponds to a store that has failed a bootstrap test. The failing store's member number is MEMN and the failing test is identified by the address in the JR field.

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DATA: CCFR INTERRUPT DATA

CC1BLSTAT	CC1STATUS	CC1EADAT	CC1CLDAT	CC1EXDAT	CC1DGNCC
CC1BLDGN	CC1PSRDAT	CC1CPBDAT	CC1BRBDAT	CC1BLINV	CC1SWDAT
XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX
XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX
XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX
dddddddddd	dddddddddd	dddddddddd	dddddddddd	dddddddddd	dddddddddd
AC1INS	AC1INH	AC1CES	ST1INS	ST1INH	ST1CES

Defined as:

CC1BLSTAT — CCFR B-level status word. Failing member and software decisions:

Bit	Description
0	Active CC pulse source failure occurred
1	Active CC boot ROM parity failure occurred
2	Active CC control parity failure occurred
3	Standby CC pulse source failure occurred
4	Standby CC boot ROM parity failure occurred
5	Standby CC control parity failure occurred
9	CC switch occurred
10	CCFR CC switch escalation
11	Manual CC switch requested
12	CCFR attempted CC switch

CC1STATUS — CC status word.

Bit	Description
0	Run deferred CCFR on active CC only
1	Print results when deferred tests ATP
2	Switch CCs and re-Test if deferred tests ATP
3	Restore standby CC to service
4	Loop on deferred CCFR
5	Deferred CCFR in progress

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- 6 Software active CC member number
- 7 CCs are running in step
- 8 CCs are in a normal configuration (duplex)
- 9 Standby CC under test
- 10 Routine CC exercise in progress
- 11 Standby CC diagnosed due to high error rate
- 12 Active CC diagnosed due to high error rate
- 13 High error rate when CCs run in step
- 14 External fault recovery requested access tests
- 15 Request CC diagnostics
- 16 CCFR error analysis diagnostic request
- 17 Deferred tests run as part of diagnostics
- 18 Results of deferred CC tests during diagnostics
- 19 The standby CC was removed via TTY
- 20 Update CC out-Of-Service lamps
- 21 B-level occurred on standby CC
- 22 CC stopped by CC access test

CC1EADAT — CCFR long term error counter.

Bit	Description
0-13	Error timer
14	Counter enable flag (if set, counter active)
15-23	Error counter

CC1CLDAT — CCFR short term C-level error counter.

Bit	Description
0-13	Error timer
14	Counter enable flag (if set, counter active)
15-23	Error counter

CC1EXDAT — CCFR short term external entry error counter.

Bit	Description
0-13	Error timer
14	Counter enable flag (if set, counter active)
15-23	Error counter

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CC1DGNCC — CCFR short term C-/D-/E-/F-level DGN error counter.

Bit	Description
0-13	Error timer
14	Counter enable flag (if set, counter active)
15-23	Error counter

CC1BLDGN — CCFR short term B-level DGN error counter.

Bit	Description
0-13	Error timer
14	Counter enable flag (if set, counter active)
15-23	Error counter

CC1PSRDAT — CCFR short term pulse source failure error counter.

Bit	Description
0-13	Error timer
14	Counter enable flag (if set, counter active)
15-23	Error counter

CC1CPBDAT — CCFR short term control parity B-level error counter.

Bit	Description
0-13	Error timer
14	Counter enable flag (if set, counter active)
15-23	Error counter

CC1BRBDAT — CCFR short term boot ROM B-level error counter.

Bit	Description
0-13	Error timer
14	Counter enable flag (if set, counter active)
15-23	Error counter

CC1BLINV — CCFR short term invalid B-level entry error counter.

Bit	Description
0-13	Error timer
14	Counter enable flag (if set, counter active)
15-23	Error counter

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CC1SWDAT — CCFR short term switch CC B-level error counter.

Bit	Description
0-13	Error timer
14	Counter enable flag (if set, counter active)
15-23	Error counter

dddddddd — Active CC pulse source B-levels only, where any number of from 0 to 6 "dddddddd" lines of data can occur depending on how many GCP addresses are found in the bus node data. Each GCP address found will contain the GCP address in bits 0 thru 21 and a code two bit code in bits 22 and 23 as follows:

Bit	Description
00	Null entry
01	Retry of GCP address passed
10	Retry of GCP address failed (hardware error)
11	Invalid GCP address (software error)

AC1INS — Active CC interrupt register (CCFR B-levels only) .

AC1INH — Active CC inhibit register (CCFR B-levels only) .

AC1CES — Active CC error source register (CCFR B-levels only).

ST1INS — Standby CC interrupt register (CCFR B-levels only).

ST1INH — Standby CC inhibit register (CCFR B-levels only).

ST1CES — Standby CC error source register (CCFR B-levels only).

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DATA: COMMON AUXILIARY UNIT DATA (ADCOMM)

AU1REIW0	AU1REIW1	AU1REIW2	AU1REIW3	AU1RFADR	AU1RFDAT
AU1RRIW0	AU1RRIW1	AU1RRIW2	AU1RRIW3	AU1RAUIBA	AU1RFBAD
AU1CID	AU1MID	AU1STA	AU1CTL	AU1ESR	AU1LLA
AU1ULA	AU1RSDAT_U	AU1RSDAT_L	AU1ACM	AU1RSAAS_U	AU1RSAAS_L
AU1ARR	AU1AUAR	AU1AUB	AU1ADW	AU1AMW	AUIRPROGAD
AUIRTESTAD	AUIRTESTOP	AU1RTSAVF	AU1RTSAVG	AU1RTSAVJ	AU1RTSAVK
AU1RTSAVL	AU1RTSAVX	AU1RTSAVY	AU1RTSAVZ	AU1ESR0	AU1RFGCP
AU1RSTATE	AU1RERAT	AU1RERAC	AU1REMRG	AU1EAST	AU1RDTADR
AU1RLTTAT	AU1RLTTAC0	AU1RLTTAC1	AU1RLTTAC2	AU1RLTTAC3	76543210
76543210	AU1RSAPI0_BR	AU1RSAPI1_BR	AU1RSDUS0_BR	AU1RSDUS1_BR	AU1RBSTAT_BR
76543210	AU1RSAPI0_AR	AU1RSAPI1_AR	AU1RSDUS0_AR	AU1RSDUS1_AR	AU1RBSTAT_AR

Defined as:

AU1REIW0-AU1REIW3	Error information words
	Bit Meaning
	0-3 Error type
	6 Indicates API 0 involved in the error
	7 Indicates API 1 involved in the error
	8 Indicates DUS 0 involved in the error
	9 Indicates DUS 1 involved in the error
	12-13 Operation in progress at the time of the error
	15-16 Read or write indicator
	17 Control mode indicator
	18-20 In-service status of AUI 0
	21-23 In-service status of AUI 1
AU1RFADR	Failing address
AU1RFDAT	Failing data

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AU1RRIW0 - AU1RRIW3	Recovery information words Bit Meaning 0-2 Current recovery state 3 Indicates a status update was attempted 4 Indicates AUI tests were run 5 Indicates an attempt was made to remove an AUI 6 Indicates control was passed to unique AU recovery 7 Indicates an attempt was made to remove an AU 8 Indicates an attempt was made to remove an AU bus 9 Indicates an AUFR bootstrap was attempted 10 Indicates an IFFR bootstrap was requested 12 Indicates the attempt to update status failed 13 Indicates the AUI tests failed 14 Indicates the attempt to remove an AUI failed 16 Indicates the attempt to remove an AU failed 17 Indicates the attempt to remove an AU bus failed 21-23 Recovery state necessary for the next int/inj
AU1RAUIBA	Base address of AUI requesting/reporting the error
AU1RFBAD	Base address of failing AU
AU1CID	Client identification register of suspect AUI Bit Meaning 0-9 Circuit pack name
AU1MID	Microcode identification register of suspect AUI Bit Meaning 0-9 Microcode name
AU1STA	Status register of suspect AUI Bit Meaning 0 RCVD data parity bit 0 1 RCVD data parity bit 1 2 RCVD data parity bit 2 3 RCVD data parity bit 3 4 Last cycle was read 5 Last cycle was write

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AU1CTL

- 7 Last cycle was word DMA
 - 9 Operational interject active
 - 10 Maintenance interject active
 - 11 Maintenance interrupt active
 - 13 Word DMA request
 - 16 Interface busy
 - 17 All seems well from MMIO
 - 18 AU GCP or MMIO resp present
 - 19 AUI maintenance mode status
 - 20 AU activity status
- Control register of suspect AUI
- | Bit | Meaning |
|-----|-----------------------------------|
| 0 | Client IFB enable |
| 1 | Parity checking enable |
| 2 | Address limit checking enable |
| 3 | Operational interject enable |
| 4 | Maintenance interject enable |
| 5 | Maintenance interrupt enable |
| 6 | Operational interject clear |
| 7 | MTCE interject clear |
| 8 | MTCE interrupt clear |
| 9 | AUI is in-service - toggle ff |
| 10 | Update is in progress - toggle ff |
| 11 | AUI reset |
| 12 | Trouble AU bus 0 |
| 13 | Trouble AU bus 1 |
| 14 | Enable verify AU match |
| 15 | Enable all seems well fail chks |
| 16 | Enable AU request from API 0 |
| 17 | Enable AU request from API 1 |
| 18 | Enable AU request from DUS 0 |
| 19 | Enable AU request from DUS 1 |

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	20 Maintenance mode
	21 AU sequencer step
	22 AU sequencer init
	23 AU activity FF
AU1ESR	Error source register of suspect AUI
	Bit Meaning
	0 DMA lower limit exceeded
	1 DMA upper limit exceeded
	2 Detected no all seems well
	3 Detected all seems well failure
	4 Master detected data parity error
	5 Slave detected data parity error
	6 Slave detected command error
	7 Slave detected invalid address error
	8 Slave detected address parity error
	9 Sent all seems well failure
	10 AU bus detected error
	11 IFB error maintenance interrupt
	16 Command overwrite error
	17 AU verify mismatch error
	18 AU SAP verify mismatch error
	19 AU store address bus parity error
	20 AU reply bus parity error
AU1LLA	Lower DMA limit register of suspect AUI
	Bit Meaning
	8-23 Lowest DMA address - bits 14 to 29
AU1ULA	Upper DMA limit register of suspect AUI
	Bit Meaning
	8-23 High DMA address limit
AU1RSDAT_U	Data register (upper byte) of suspect AUI
AU1RSDAT_L	Data register (lower bytes) of suspect AUI

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AU1ACM	Communication register of suspect AUI Bit Meaning 0 AU enable verify expected bit 00 1 AU enable verify expected bit 01 2 AU enable verify expected bit 12 3 AU enable verify expected bit 13 4 Store access permitted expected bit 00 5 Store access permitted expected bit 01 6 Store access permitted expected bit 12 7 Store access permitted expected bit 13 8 AU request bit 00 9 AU request bit 01 10 AU request bit 12 11 AU request bit 13 12 AU enable verify bit 00 13 AU enable verify bit 01 14 AU enable verify bit 12 15 AU enable verify bit 13
AU1RSAAS_U	Store address register (upper byte) of suspect AUI Bit Meaning 0-5 Upper address bits 24-29 0 AU store address register read bit
AU1RSAAS_L	Store address register (lower bytes) of suspect AUI Bit Meaning 0-23 AU store address 22 AU store address parity bit 23 AU store address write bit
AU1ARR	AU reply register of suspect AUI Bit Meaning 0-23 AU reply register bits 0-23 0 AU reply register all seems well 1 AU reply register parity bit 1 2 AU reply register parity bit 2

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AU1AUAR	AU address register of suspect AUI
Bit	Meaning
0-15	AU address register
16	AU address register read bit
17	AU address register write bit
18	AU address register control bit
19	AU address register parity bit
AU1AUB	AUB register of suspect AUI
Bit	Meaning
0	AU store address parity bit AU store address write bit
2	AU store address read bit
3	AU reply parity bit 1
4	AU reply parity bit 2
5	AU reply all seems well
6	AU bus 0 operational interject
7	AU bus 1 operational interject
8	AU bus 0 maintenance interject
9	AU bus 1 maintenance interject
10	P1 parity on AMW register
11	P2 parity on the AMW register
12	P1 parity on the ADW register
13	P2 parity on the ADW register
14	Invert data parity on DMA transaction
15	Enable AU bus drivers
AU1ADW	DMA write register of suspect AUI
AU1AMW	MMIO write register of suspect AUI
AUIRPROGAD	Program address at test failure
AUIRTESTAD	Test address at test failure
AUIRTESTOP	Test options and flags
AU1RTSAVF	F register returned from failing tests or bootstrap
AU1RTSAVG	G register returned from failing tests or bootstrap
AU1RTSAVJ	J register returned from failing tests or bootstrap
AU1RTSAVK	K register returned from failing tests or bootstrap

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AU1RTSAVL	L register returned from failing tests or bootstrap
AU1RTSAVX	X register returned from failing tests or bootstrap
AU1RTSAVY	Y register returned from failing tests or bootstrap
AU1RTSAVZ	Z register returned from failing tests or bootstrap
AU1ESR0	Error source register of failing AU
AU1RFGCP	GCP response of failing AU
AU1RSTATE	AUFR state timing word Bit Meaning 0-8 State timer 12-20 Value of state timer before recovery 23 State timing enable
AU1RERAT	AUFR error analysis timing word Bit Meaning 0-5 Error analysis timer 12-17 Value of error analysis timer before recovery 23 Error analysis timing enable
AU1RERAC	AUFR error analysis counters Bit Meaning 0-2 ERA counter for passing status updates 3-5 ERA counter for unique AU recovery no fault found returns
AU1REMRG	AUFR emergency action timing word Bit Meaning 0-10 Emergency action state timer 12-22 Value of emergency action timer before recovery 23 Emergency action timing enable
AU1EAST	Save AUFR emergency action state counter Bit Meaning 0-4 AUFR emergency action state counter
AU1RDTADR	Program address where bootstrap was called
AU1RLTTAT	Long-term trouble analysis timing word Bit Meaning 0-11 Long term trouble analysis timer 23 Long term trouble analysis timing enable
AU1RLTTAC0	Long-term trouble analysis counter for AUI 0
AU1RLTTAC1	Long-term trouble analysis counter for AUI 1

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AU1RLTTAC2	Long-term trouble analysis counter for AUB 0
AU1RLTTAC3	Long-term trouble analysis counter for AUB 1
AU1RSAPI0_BR	API 0 status word before recovery
AU1RSAPI1_BR	API 1 status word before recovery
	Bit Meaning
	0 AU marked in trouble
	1 AU in offline configuration
	2 AU stopped and in maintenance mode
	4 Diagnosis to be requested for AU
	5 AU KCODE trouble
	6 AU is active unit, for API
	7 AU is standby unit, for API
	8 API is being restored
	18 Do not restore AU
AU1RSDUS0_BR	DUS 0 status word before recovery
AU1RSDUS1_BR	DUS 1 status word before recovery
	Bit Meaning
	0 AU marked in trouble
	1 AU in offline configuration
	2 AU stopped and in maintenance mode
	4 Diagnosis to be requested for AU
	5 AU KCODE trouble
	8 API is being restored
	18 Do not restore AU
AU1RBSTAT_BR	AU bus status word before recovery
	Bit Meaning
	0 AU bus 0 trouble f/f in active AUI
	1 AU bus 1 trouble f/f in active AUI
	2 AU bus 0 trouble f/f in standby AUI
	3 AU bus 1 trouble f/f in standby AUI
	4 AU bus 0 system in offline configuration
	5 AU bus 1 system in offline configuration
	6 AU bus stopped and in maintenance mode
	7 Do not restore AU bus

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AU1RSAPI0_AR	API 0 status word after recovery
AU1RSAPI1_AR	API 1 status word after recovery
	Bit Meaning
	0 AU marked in trouble
	1 AU in offline configuration
	2 AU stopped and in maintenance mode
	4 Diagnosis to be requested for AU
	5 AU KCODE trouble
	6 AU is active unit, for API
	7 AU is standby unit, for API
	8 API is being restored
	18 Do not restore AU
AU1RSDUS0_AR	DUS 0 status word after recovery
AU1RSDUS1_AR	DUS 1 status word after recovery
	Bit Meaning
	0 AU marked in trouble
	1 AU in offline configuration
	2 AU stopped and in maintenance mode
	4 Diagnosis to be requested for AU
	5 AU KCODE trouble
	8 API is being restored
	18 Do not restore AU
AU1RBSTAT_AR	AU bus status word after recovery
	Bit Meaning
	0 AU bus 0 trouble f/f in active AUI
	1 AU bus 1 trouble f/f in active AUI
	2 AU bus 0 trouble f/f in standby AUI
	3 AU bus 1 trouble f/f in standby AUI
	4 AU bus 0 system in offline configuration
	5 AU bus 1 system in offline configuration
	6 AU bus stopped and in maintenance mode
	7 Do not restore AU bus

NOTE 1: Octal data 76543210 means that the word was not used by interject or D-level control.

NOTE 2: See PA-4A002-01, No. 4ESSTM *User's Manual* for more detailed interpretations of the AU data.

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DATA: COMMON IFB RECOVERY DATA

IF1RSTAT_BR0	IF1RSTAT_BR1	IF1RSTAT_BR2	IF1RSTAT_BR3	IF1RSTAT_BR4	IF1RSTAT_BR5
IF1RSTAT_BR6	IF1RSTAT_BR7	IF1RSTAT_BR8	IF1RSTAT_BR9	IF1RSTAT_BR10	IF1RSTAT_BR11
IF1RSTAT_BR12	IF1RSTAT_BR13	IF1RSTAT_BR14	IF1RSTAT_BR15	IF1RSTAT_BR16	IF1RSTAT_BR17
IF1RSTAT_BR18	IF1RSTAT_BR19	IF1RSTAT_BR20	IF1RSTAT_BR21	IF1RSTAT_BR22	IF1RSTAT_BR23
IF1RBSTAT_BR	IF1RSRW	IF1RSSW	IF1RECW	IF1RLTW	IF1RRAW
IF1RAFCT	IF1RAFCE	IF1RAFES	IF1RAFEE	IF1RAFER	IF1RAFIP
IF1RSFCT	IF1RSFCE	IF1RSFES	IF1RSFEE	IF1RSFER	IF1RSFIP
IF1RAFRU_U	IF1RAFRU_L	IF1RAFRL_U	IF1RAFRL_L	IF1RACSC	IF1RCR01
IF1RSFRU_U	IF1RSFRU_L	IF1RSFRL_U	IF1RSFRL_L	IF1RRQESR	IF1RCLSTA
IF1RFADR_U	IF1RFADR_L	IF1RFDAT_U	IF1RFDAT_L	IF1RMCADR	IF1RSCADR
IF1RRCADR	IF1RDCADR	IF1RRCERA	IF1RDCERA	IF1RBSERA	IF1RERATW
IF1RLTPASAV	IF1RLTTASAV	IF1RLTTOSAV	IF1RLTFSAV	IF1RLTGSAV	IF1RLTJSAV
IF1RLTKSAV	IF1RLTLSAV	IF1RLTXSAV	IF1RLTYSAV	IF1RLTZSAV	RESERVED
IF1RICRAA	IF1RBSRAA	IF1RRAATW	IF1RDTW	IF1RDTADR	IF1RSEMRG
IF1RB0ANALX	IF1RB1ANALX	IF1RBANAL	IF1RBLW	IF1RBLADR	RESERVED
IF1RSTAT_AR0	IF1RSTAT_AR1	IF1RSTAT_AR2	IF1RSTAT_AR3	IF1RSTAT_AR4	IF1RSTAT_AR5
IF1RSTAT_AR6	IF1RSTAT_AR7	IF1RSTAT_AR8	IF1RSTAT_AR9	IF1RSTAT_AR10	IF1RSTAT_AR11
IF1RSTAT_AR12	IF1RSTAT_AR13	IF1RSTAT_AR14	IF1RSTAT_AR15	IF1RSTAT_AR16	IF1RSTAT_AR17
IF1RSTAT_AR18	IF1RSTAT_AR19	IF1RSTAT_AR20	IF1RSTAT_AR21	IF1RSTAT_AR22	IF1RSTAT_AR23
IF1RBSTAT_AR					

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Defined as:

IF1RSTAT_BR0 - IF1RSTAT_BR23 IFB client status prior to recovery

Bit	Meaning
0	IFB client is OOS
1	IFB client is stopped
3	IFB client is active
4	IFB client is standby
5	IFB client is forced
6	Request DGN for IFB client
8	IFB client is being restored
9	Do not restore IFB client

IF1RSTAT_BR IFB status prior to recovery

Bit	Meaning
0	IFBC activity in active CC
1	IFB 0 trouble set in active CC
2	IFB 1 trouble set in active CC
3	IFBC activity in standby CC
4	IFB 0 trouble set in standby CC
5	IFB 1 trouble set in standby CC
8	IFB subsystem is stopped
9	Do not restore IFB

IF1RSRW IFB subsystem recovery word

Bit	Meaning
0	Current entry resulted from a D-level interrupt
1	Current entry resulted from an interject
2	Current entry resulted from a BLM
3	Standby CC is available for use during testing
4	Standby CC was in service at entry
5	Multiple client maintenance requests present
6	Requesting client bins loaded

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- 7 Driving client bins loaded
- 8 Common bins loaded
- 9 Plant measurement counts must be updated
- 10 Active IFBC stack bins loaded
- 11 Standby IFBC stack bins loaded

IF1RSSW

IFB shadow stack word

Bit Meaning

0-1 Indicates the stack utilized during recovery (octal)

1 Bus node stack

2 IFBC stack

3-7 Stack depth utilized during recovery

9 Indicates the standby CC's stacks were utilized

IF1RECW

IFB error classification word

Bit Meaning

0-2 Error class (octal)

1 Indiscernible error

2 Discernible error

3 Memory unit error

4 Client-specific error

5 Software error

3-5 Error sub-class (octal)

1 Address parity error

2 Data parity error

3 Control parity error

4 Invalid slave reply error

5 Invalid master reply error

6 All seems well error

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6-9 Requesting unit (octal)

- 1 Active CC
- 2 Standby CC
- 3 Active CC's IFBC
- 4 Standby CC's IFBC
- 5 Memory unit
- 6 Master client
- 7 Slave client
- 10 Uninvolved client

12-14 In-progress operation (octal)

- 1 MMIO
- 2 Word DMA
- 3 Block DMA
- 4 Client to client

15-17 Read / Write Indicator (octal)

- 1 Read operation
- 2 Write operation

18-21 Driving unit (octal)

- 1 Active CC
- 2 Standby CC
- 3 Active CC's IFBC
- 4 Standby CC's IFBC
- 5 Memory unit
- 6 Master client
- 7 Slave client
- 10 Uninvolved client

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IF1RLTW

IFB logical test word

Bit Meaning

0-3 Type of logical test requested (octal)

- 1 IFBC test
- 2 Client MMIO test
- 3 Client DMA test
- 5 False responder test
- 6 All tests with respect to all clients on IFB 0
- 7 All tests with respect to all clients on IFB 1
- 10 All tests with respect to a given client
- 11 All tests with respect to all clients

9-11 Indicates which client was tested (octal)

- 1 Requesting client tested
- 2 Driving client tested

21-23 Logical test disposition (octal)

- 1 Logical tests failed
- 2 Logical tests passed

IF1RRAW

IFB recovery action word

Bit Meaning

0-5 Recovery action (octal)

- 1 Active CC implicated
- 2 Standby CC implicated
- 3 Active CC's IFBC implicated
- 4 Standby CC's IFBC implicated
- 5 Memory unit implicated by first look
- 6 Master client implicated by first look
- 7 Slave client implicated by first look
- 10 Uninvolved client implicated by first look
- 26 Memory unit implicated by logical tests

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- 27 Client implicated by logical tests
- 30 IFB 0 implicated
- 31 IFB 1 implicated
- 32 Client-specific problem implicated
- 33 Software implicated
- 34 IFB subsystem status implicated
- 35 IFB subsystem configuration implicated
- 36 Transient error implicated
- 37 Inconclusive error implicated

21-23 Recovery action disposition (octal)

- 1 Recovery action failed or was denied
- 2 Recovery action completed

IF1RAFCT	Active CC's IFBC control register (AC1FCT)
IF1RAFCE	Active CC's IFBC client enable register (AC1FCE)
IF1RAFES	Active CC's IFBC error source register (AC1FES)
IF1RAFEE	Active CC's IFBC error enable register (AC1FEE)
IF1RAFER	Active CC's IFBC error request register (AC1FER)
IF1RAFIP	Active CC's IFBC poll register (AC1FIP)
IF1RSFCT	Standby CC's IFBC control register (ST1FCT)
IF1RSFCE	Standby CC's IFBC client enable register (ST1FCE)
IF1RSFES	Standby CC's IFBC error source register (ST1FES)
IF1RSFEE	Standby CC's IFBC error enable register (ST1FEE)
IF1RSFER	Standby CC's IFBC error request register (ST1FER)
IF1RSFIP	Standby CC's IFBC poll register (ST1FIP)
IF1RAFRU_U	Upper byte of active CC's IFBC upper relocation register (AC1FRU)
IF1RAFRU_L	Lower bytes of active CC's IFBC upper relocation register (AC1FRU)
IF1RAFRL_U	Upper byte of active CC's IFBC lower relocation register (AC1FRL)
IF1RAFRL_L	Lower bytes of active CC's IFBC lower relocation register (AC1FRL)

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IF1RACSC	Active CC's CC status register (AC1CSC)
IF1RCR01	Memory unit's CR01 register
IF1RSFRU_U	Upper byte of standby CC's IFBC upper relocation register (ST1FRU)
IF1RSFRU_L	Lower bytes of standby CC's IFBC upper relocation register (ST1FRU)
IF1RSFRL_U	Upper byte of standby CC's IFBC lower relocation register (ST1FRL)
IF1RSFRL_L	Lower bytes of standby CC's IFBC lower relocation register (ST1FRL)
IF1RRQESR	Requesting client's error summary register

Bit Meaning

- 0 Lower DMA limit exceeded
- 1 Upper DMA limit exceeded
- 2 Master detected no all seems well
- 3 Master detected all seems well failure
- 4 Master detected data parity error
- 5 Slave detected data parity error
- 6 Slave detected control error
- 7 Slave detected unused address error
- 8 Slave detected address parity error
- 9 Slave sent ASWF (summary bit for slave errors)
- 10 Client error (summary bit for maintenance interject)
- 11 IFB error (summary bit for master errors)
- 12-15 Reserved
- 16-23 Client options

IF1RCLSTA	Client's status register
-----------	--------------------------

Bit Meaning

- 0-3 Data parity received by client
- 4 Last cycle was a read
- 5 Last cycle was a write
- 6 Last cycle was block DMA
- 7 Last cycle was word DMA

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- 8 Last cycle was client to client
- 9 Operational interject active
- 10 Maintenance interject active
- 11 Maintenance interrupt active
- 12 Block DMA request
- 13 Word DMA request
- 14 Client to client request
- 15 Reserved
- 16-23 Client options

IF1RFADR_U	Upper byte of failing address
IF1RFADR_L	Lower bytes of failing address
IF1RFDAT_U	Upper byte of failing data
IF1RFDAT_L	Lower bytes of failing data
IF1RMCADR	Base address of master client
IF1RSCADR	Base address of slave client
IF1RRCADR	Base address of requesting client
IF1RDCADR	Base address of driving client
IF1RRCERA	Requesting client's error analysis counters

Bit Meaning

- 0-2 CC access error count
- 3-5 Store access error count
- 6-8 Client access error count
- 9-11 IFBC error count
- 12-14 Total error count

IF1RDCERA	Driving client's error analysis counters
-----------	--

Bit Meaning

- 0-2 CC access error count
- 3-5 Store access error count
- 6-8 Client access error count
- 9-11 IFBC error count
- 12-14 Total error count

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IF1RBSERA	Bus and subsystem error analysis counters
	Bit Meaning
	0-5 IFB 0 error count
	6-11 IFB 1 error count
	12-17 IFB subsystem error count
IF1RERATW	IFB error analysis timing word
	Bit Meaning
	0-11 Error analysis timer
	23 Error analysis timing enable
IF1RLTPASAV	Program address at logical test failure
IF1RLTTASAV	Test address at logical test failure
IF1RLTTOSAV	Test options and flags
IF1RLTFSAV	F register at point of logical test failure
IF1RLTGSAV	G register at point of logical test failure
IF1RLTJSAV	J register at point of logical test failure
IF1RLTKSAV	K register at point of logical test failure
IF1RLTLSAV	L register at point of logical test failure
IF1RLTXSAV	X register at point of logical test failure
IF1RLTYSAV	Y register at point of logical test failure
IF1RLTZSAV	Z register at point of logical test failure
IF1RICRAA	Implicated client's recovery action analysis counters
	Bit Meaning
	15-17 Client removal denied counter
	18-20 Client program no action counter
	21-23 Client tests run counter

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IF1RBSRAA Bus and subsystem recovery action analysis counters

Bit Meaning

0-2 IFB removal denied counter

3-5 IFB 0 test run counter

6-8 IFB 1 test run counter

9-11 CC removal denied counter

12-14 Successful status update counter

15-17 Subsystem tests run counter

18-20 Memory unit recovery failure counter

IF1RRAATW Recovery action analysis timing word

Bit Meaning

0-5 Recovery action analysis timer

23 Recovery action analysis timing enable

IF1RDTW IFB double trouble word

Bit Meaning

0-5 Reason for double trouble (octal)

1 Client program requested a bootstrap

2 Status update was attempted and failed

3 Invalid configuration detected

4 Client program no action threshold exceeded

5 Client remove denied threshold exceeded

6 Client tests run threshold exceeded

7 IFB 0 tests run threshold exceeded

10 IFB 1 tests run threshold exceeded

11 IFB remove denied threshold exceeded

12 CC remove denied threshold exceeded

13 Status update threshold exceeded

14 Subsystem tests run threshold exceeded

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	15 Pre-termination access test failed
	16 Memory unit recovery failure threshold exceeded
	23 Indicates a bootstrap is necessary
IF1RDTADR	Program address where double trouble condition was detected
IF1RSEMERG	IFB emergency action word
	Bit Meaning
	0-3 Emergency action state
	6-17 Emergency action timer
	23 Emergency action timing enable
IF1RB0ANALX	IFB 0 long term trouble analysis counter
IF1RB1ANALX	IFB 1 long term trouble analysis counter
IF1RBANAL	IFB long term trouble analysis timing word
	Bit Meaning
	0-11 Long term trouble analysis timer
	23 Long term trouble analysis timing enable
IF1RBLW	IFB base level maintenance word
	Bit Meaning
	0-6 Member number of suspect unit
	7-13 Unit type number of suspect unit
	18-20 BLM client ID
	21-23 BLM client error code
IF1RBLADR	Program address where BLM was called

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IF1RSTAT_AR0 - IF1RSTAT_AR23 IFB client status following recovery

Bit Meaning

- 0 IFB client is OOS
- 1 IFB client is stopped
- 3 IFB client is active
- 4 IFB client is standby
- 5 IFB client is forced
- 6 Request DGN for IFB client
- 8 IFB client is being restored
- 9 Do not restore IFB client

IF1RBSTAT_AR

IFB status following recovery

Bit Meaning

- 0 IFBC activity in active CC
- 1 IFB 0 trouble set in active CC
- 2 IFB 1 trouble set in active CC
- 3 IFBC activity in standby CC
- 4 IFB 0 trouble set in standby CC
- 5 IFB 1 trouble set in standby CC
- 8 IFB subsystem is stopped
- 9 Do not restore IFB

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DATA: CONTENTS OF STACK (STACK)

CS1STACK +IN1SC+1	CS1STACK+2	CS1STACK+3	CS1STACK+4	CS1STACK+5
		.		
		.		
		.		
CS1STACK+60	CS1STACK+61	CS1STACK+62	CS1STACK+63	

DATA: D-LEVEL (DLEV)

AC1FR	AC1GR	AC1JR	AC1KR	AC1LR	AC1XR
AC1YR	AC1ZR	AC1BR(H)	AC1BR(L)	AC1ASD(H)	AC1ASD(L)
AC1SCA	AC1SDA	AC1CSC	AC1CES	AC1FST	AC1FES
AC1ILA	AC1INS	AC1INH	AC1INJ	AC1SC	AC1SR
AC1SCTR	ST1INS	ELIT	AC1LPI	AC1ER	AC1PRM
AC1PRL	AC1PSC	AC1BRS(H)	AC1BRS(L)	ST1CES	ST1ILA
AC1AP	AC1ABC	AC1IBR	ST1IBR	AC1TAR	AC1BNCTL

DATA: D-LEVEL SOFTWARE FAILURE RESULTS (CSFRPG)

IB1D_H_ADDR	IB1D_ADDR	IB1D_LHIN	IB1D_RHIN	IN1UPA	IN1LPA
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DATA: DATA ID FOR REPORTING CCIS CRITICAL REG (CCISCR)

SSTAT_C0	HSTAT_C0	ERSRC_C0	CONTM_C0	TERMM_C0	12345670
SSTAT_C1	HSTAT_C1	ERSRC_C1	CONTM_C1	TERMM_C1	12345670
SSREG_C0	MODER_C0	ESRCR_C0	CONTR_C0	INSTA_C0	12345670
SSREG_C1	MODER_C1	ESRCR_C1	CONTR_C1	INSTA_C1	00000000

DATA: DIF AUXILIARY DATA (for Base Level Maintenance)

BSIZE	KIND	HEADER	DATA0	DATA1	DATA2
DATA3	DATA4	DATA5	DATA6	DATA7	DATA8
DATA9	DATA10	DATA11	DATA12	DATA13	DATA14
DATA15	MBPTRS*	MPBSTAT*	CCPSTO*	CCPST1*	DIUOS0*
DIUOS1*					

*Only present for illegitimate reports; otherwise, all zeros.

Defined as:

BSIZE	Block size.
KIND	Kind of report (illegitimate or autonomous).
HEADER	Frame report header word (from the maintenance buffer).
DATA0-DATA15	Frame report data words 00-15 (From the maintenance buffer).
MBPTRS	Maintenance buffer pointers.
MPBSTAT	Maintenance (processor) buffer status.
CCPST0	Common alarm pest 0 (for DIUs 00-23).
CCPST1	Common alarm pest 1 (for DIUs 24-33).
DIUOS0	Out of service DIU summary 0 (for DIUs 00-23).
DIUOS1	Out of service DIU summary 1 (for DIUs 24-33).

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DATA: DIF / DIF-E1 CRITICAL REGISTERS (for F-level and interject)

CSTATUS	HWSTATR	MADATA	FSTATUS	DIUOS0	DIUOS1
CESR	PEST	MPESRH *MPESR	MPESRF *MPRETE	DIUSUM0	DIUSUM1
CLKESR	SPESR	IBIR	EXR	PSRL	PSRH
PSVL	PSVH	0...0 *MAPESR	0...0 *EXCFESR	AUDR EXCMASK	TRKCNTR
BSTATR	HPPTRS	LPPRTS	DBPTRS	SZPTRS	MBPTRS
SPSTATR	LUSPD0 *MAPCNTRS **ESCNCNTL	LUSPD1 *MAPREGS	LUSPP0 *MPSTKPTR	LUSPP1 *MPPMCNT	MPBSTAT
URD1	URD2	URD3	URD4	URD5	URD6
URD7	URD8	URD9	URD10	URD11	URD12
CCPST0	CCPST1	MPIES	MPRTIS	MPMBSF *EXECSMW	0...0
DACPST0	DACPST1	DRFPST0	DRFPST1	PSSSL	PSSSH
CALOW	CAHIGH	INTJ	0...0	0...0	0...0
MEMN	XLATE	FIRMWARE	5...5	5...5	5...5

NOTE: UPPER HALF = CONTROLLER 0
 LOWER HALF (not shown) = CONTROLLER 1
 *DIFE1 REGISTERS
 **DIFE1 MF / DTMF 4ST REGISTERS

Defined as:

CSTATUS	Controller software status.
HWSTATR	Controller hardware status.
MADATA	Maintenance access data.
FSTATUS	Frame software status.
DIUOS0	DIU software OOS status 0 (for DIUs 00-23).
DIUOS1	DIU software OOS status 1 (for DIUs 24-33).

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CESR	Controller primary error source register.
PEST	Controller pest register.
MPESRH	Maintenance processor error source register for hardware errors (domestic DIF only).
*MPESR	Maintenance processor ESR and halt pest bit (DIF-E1 only).
MPESRF	Maintenance processor error source register for firmware errors (domestic DIF only).
*MPRETE	Maintenance processor reset enable bit (DIF-E1 only).
DIUSUM0	DIU error source register summary 0 (for DIUs 00-23).
DIUSUM1	DIU error source register summary 1 (for DIUs 24-33).
CLKESR	Clock error source register.
SPESR	Signal processor error source register (domestic DIF only)
IBIR	Internal bus error source register.
EXR	Exercise register.
PSRL	Protection switch request register (for DIUs 00-15) - lower half.
PSRH	Protection switch request register (for DIUs 16-31) - higher half.
PSVL	Protection switch verify (for DIUs 00-15) -lower half.
PSVH	Protection switch verify (for DIUs 16-31) - high half.
*MAPESR	Message accounting processor error source register and status register (DIF-E1 only).
*EXCFESR	Exec processor firmware error source register (DIF-E1 only).
AUDR	Arithmetic unit data register (domestic DIF only).
*EXCMASK	Exec processor interrupt masks (DIF-E1 only).
TRKCNT	Signal processor trunk counters.
BSTATR	Buffer status register.
HPPTRS	High priority buffer pointers.
LPPTS	Low priority buffer pointers.
DBPTRS	Digit buffer pointers.
SZPTRS	Seizure buffer pointers.
MBPTRS	Maintenance buffer pointers.
SPSTATR	Signal processor status register.
LUSPD0	Look up signal processor link error data 0 (domestic DIF only).
*MAPCNTRS	Message accounting processor trunk counters (DIF-E1 only).

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**ESCNCNTL	E-scanner control register (DIF-E1 DTMF / 4-state and MF / 4-state only).
LUSPD1	Look up signal processor link error data 1 (domestic DIF only).
*MAPREGS	Message accounting processor initial pulsing interval register and pulse width register (DIF-E1 only).
LUSPP0	Look up signal processor pest data 0 (domestic DIF only).
*MPSTKPTR	Maintenance processor stack pointer (DIF-E1 only).
LUSPP1	Look up signal processor pest data 1 (domestic DIF only).
*MPPMCNT	Maintenance processor program counter (DIF-E1 only).
MPBSTAT	Maintenance processor buffer status.
URD1	Unit raw data common format for DIUs 0-2.
URD2	Unit raw data common format for DIUs 3-5.
URD3	Unit raw data common format for DIUs 6-8.
URD4	Unit raw data common format for DIUs 9-11.
URD5	Unit raw data common format for DIUs 12-14.
URD6	Unit raw data common format for DIUs 15-17.
URD7	Unit raw data common format for DIUs 18-20.
URD8	Unit raw data common format for DIUs 21-23.
URD9	Unit raw data common format for DIUs 24-26.
URD10	Unit raw data common format for DIUs 27-29.
URD11	Unit raw data common format for DIUs 30-32.
URD12	Unit raw data common format for DIUs 33.
CCPST0	Common alarm pest 0 (for DIUs 00-23).
CCPST1	Common alarm pest 1 (for DIUs 24-33).
MPIES	Maintenance processor interrupt enable status bits
MPRTIS	Maintenance routine task inhibit status.
MPMBSF	Maintenance processor maintenance buffer seizure flag (domestic DIF only).
*EXECSMW	Exec processor saved mask word (DIF-E1 only).
DACPST0	Digroup alarm pest 0 (For DIUs 00-23).
DACPST1	Digroup alarm pest 1 (For DIUs 24-33).
DRFPST0	Digroup report function pest 0 (For DIUs 00-23).
DRFPST1	Digroup report function pest 1 (For DIUs 24-33).

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PSSSL	Protection switch firmware status (for DIUs 00-15) - lower half.
PSSSH	Protection switch firmware status (for DIUs 16-33) - upper half.
CALOW	Common alarms (for DIUs 00-15) - lower half.
CAHIGH	Common alarms (for DIUs 16-33) - upper half.
INTJ	Interject register.
MEMN	Member number.
XLATE	First word of the DIF / DIF-E1 unit type translator.
FIRMWARE	Work 48 (octal 60) of DIF / DIF-E1 unit type translator.

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DATA: E-LEVEL (ELEV)

AC1FR	AC1GR	AC1JR	AC1KR	AC1LR	AC1XR
AC1YR	AC1ZR	AC1BR(H)	AC1BR(L)	AC1ASE(H)	AC1ASE(L)
AC1SCA	AC1SDA	AC1CSC	AC1CES	AC1FST	AC1FES
AC1ILA	AC1INS	AC1INH	AC1INJ	AC1SC	AC1SR
AC1SCTR	ST1INS	ELIT	AC1LPI	AC1ER	AC1PRM
AC1PRL	AC1PSC	AC1BRS(H)	AC1BRS(L)	ST1CES	ST1ILA
AC1AP	AC1ABC	AC1IBR	ST1IBR	AC1TAR	AC1BNCTL

DATA: E-LEVEL SOFTWARE FAILURE RESULTS (PSFRPG)

IB1E_H_ADDR	IB1E_ADDR	IB1E_LHIN	IB1D_RHIN
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DATA: ERROR ANALYSIS RECENT HISTORY TABLE (RCNTHIST)

ER4RCNT+0	ER4RCNT+1	ER4RCNT+2	ER4RCNT+3	ER4RCNT+4	ER4RCNT+5
ER4RCNT+6	ER4RCNT+7	ER4RCNT+8	ER4RCNT+9	ER4RCNT+10	ER4RCNT+11
ER4RCNT+12	ER4RCNT+13	ER4RCNT+14	ER4RCNT+15	ER4RCNT+16	ER4RCNT+17
ER4RCNT+18	ER4RCNT+19	ER4RCNT+20	ER4RCNT+21	ER4RCNT+22	ER4RCNT+23
ER4RCNT+24	ER4RCNT+25	ER4RCNT+26	ER4RCNT+27	ER4RCNT+28	ER4RCNT+29
ER4RCNT+30	ER4RCNT+31	ER4RCNT+32	ER4RCNT+33	ER4RCNT+34	ER4RCNT+35
ER4RCNT+36	ER4RCNT+37	ER4RCNT+38	ER4RCNT+39	ER4RCNT+40	ER4RCNT+41
ER4RCNT+42	ER4RCNT+43	ER4RCNT+44	ER4RCNT+45	ER4RCNT+46	ER4RCNT+47
ER4RCNT+48	ER4RCNT+49	ER4RCNT+50	ER4RCNT+51	ER4RCNT+52	ER4RCNT+53
ER4RCNT+54	ER4RCNT+55	ER4RCNT+56	ER4RCNT+57	ER4RCNT+58	ER4RCNT+59
ER4RCNT+60	ER4RCNT+61	ER4RCNT+62	ER4RCNT+63		

NOTE: ER4RCNT+63 is the first word of the unit type translator for the interrupting frame.

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DATA: ERROR ANALYSIS STRATEGY DATA (TSI/TS)

W0	W1	W2	W3	W4	W5
W6					

Defined as:

W0	Time of interrupt.
W1	Number of interrupts.
W2	Leaky bucket count.
W3	Sequence table number.
W4	Interrupt state number.
W5	Diagnostic sequence state.
W6	How to return.

DATA: ERROR STOP (ERSP)

AC1FR	AC1GR	AC1JR	AC1KR	AC1LR	AC1XR
AC1YR	AC1ZR	AC1BR(H)	AC1BR(L)	-----	-----
AC1SCA	AC1SDA	AC1CSC	AC1CES	AC1FST	AC1FES
AC1ILA	AC1INS	AC1INH	AC1INJ	AC1SC	AC1SR
AC1SCTR	ST1INS	ELIT	AC1LPI	AC1ER	AC1PRM
AC1PRL	AC1PSC	AC1BRS(H)	AC1BRS(L)		

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DATA: EST CREG

CSTATUS	STATR	USTATUS	USTAR	CESR1	CESR2
CESR3	CESR4	PEST12	PEST34	USR	UPR
EXR	PSR	PCM	UPA	LLSSR	TSSSR
CSTATUS	STATR	USTATUS	USTAR	CESR1	CESR2
CESR3	CESR4	PEST12	PEST34	USR	UPR
EXR	PSR	PCM	UPA	LLSSR	TSSSR

NOTE 1: Upper half of message applies to controller 0; lower half to controller 1.

NOTE 2: All words prefixed with ES4.

Defined as:

CSTATUS	Software status.
STATR	Hardware status.
USTATUS	Unit software status.
USTAR	Unit status.
CESR1	Error source register 1.
CESR2	Error source register 2.
CESR3	Error source register 3.
CESR4	Error source register 4.
PEST12	Pest register 12.
PEST34	Pest register 34.
USR	Unit error summary.
UPR	Unit pest.
EXR	Exercise.
PSR	Protection switch request.
PCM	Protection switch relay contact monitor.
UPA	Unit power alarm.
LLSSR	Last look store status.
TSSSR	Trunk status store status.

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DATA: EST LLS MEMORY (for Interject Printouts)

ESU0ESR1	ESU0ESR0	ESU1ESR1	ESU1ESR0	ESU2ESR1	ESU2ESR0
ESU3ESR1	ESU4ESR0	ESU4ESR1	ESU4ESR0	ESU5ESR1	ESU5ESR0
ESU6ESR1	ESU6ESR0	ESU7ESR1	ESU7ESR0	ESU8ESR1	ESU8ESR0
ESU9ESR1	ESU9ESR0	ESU10ESR1	ESU10ESR0	ESU11ESR1	ESU11ESR0
ESU12ESR1	ESU12ESR0	ESU13ESR1	ESU13ESR0	ESU14ESR1	ESU14ESR0
ESU15ESR1	ESU15ESR0	CESR1	USR	UPR	UPA

Defined as:

ESU0ESR1 to
ESU15ESR1 High-half error source register (ESR) for error
source unit (ESU) 1.

ESU0ESR0 to
ESU15ESR0 Low-half ESR bits for ESU 0.

CESR1 Controller ESR (CESR) 1.

USR Unit pest register.

UPA Unit power alarm.

NOTE: This data block dumps at time of interject via active controller. The data block dump repeats after clearing all errors and hit timing for 10 ms.

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DATA: F-LEVEL (FLEV)

AC1FR	AC1GR	AC1JR	AC1KR	AC1LR	AC1XR
AC1YR	AC1ZR	AC1BR(H)	AC1BR(L)	AC1ASF(H)	AC1ASF(L)
AC1SCA	AC1SDA	AC1CSC	AC1CES	AC1FST	AC1FES
AC1ILA	AC1INS	AC1INH	AC1INJ	AC1SC	AC1SR
AC1SCTR	ST1INS	ELIT	AC1LPI	AC1ER	AC1PRM
AC1PRL	AC1PSC	AC1BRS(H)	AC1BRS(L)	ST1LR	
AC1PSQ	AC1ULR	AC1PES	ST1PES	ST1ER	ST1PRM
ST1PRL	ST1PSC	AC1RP0	AC1RP1	ST1RP0	ST1RP1
ST1CSC	ST1INH	PU1RFLCO0	PU1RFLCO1	PU1RFLCO2	PU1RFLCO3
PUQRFLCO4	PUQRFLCO5	PUQRFLCO6	PUQRFLCO7		

Defined as (Peripheral F-Levels):

IB1ULR	Unsuccessful response in LR from PU list.
PU1RFLC00	Controller 0 pulse point reply.
PU1RFLC01	Controller 1 pulse point reply.
PU1RFLC02	Controller 0 status register.
PU1RFLC03	Controller 1 status register.
PU1RFLC04	Controller 0 error source register.
PU1RFLC05	Controller 1 error source register.
PU1RFLC06	Controller 0 reply bus register.
PU1RFLC07	Controller 1 reply bus register.

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Defined as (I/O frame and MCC F-Levels):

IB1ULR	Unsuccessful response in LR from PU list.
PU1RFLC00	Pulse point reply. (Layout for pulse point reply is the same as the IOUS status register, except that the uppermost two bits are parity bits, but not parity failure indications.)
PU1RFLC01	Unit software status: MC1RSTATUS for MCC F-Levels, IO1RSTIOUS for I/O F-Levels.
PU1RFLC02	Unit status register (hardware status).
PU1RFLC03	Subunit software status: (Not used for MCC F-Levels.) IO1RSTIOUC for Phase III channel F-Levels, IO1RSTIOMP for Phase I channel F-Levels.
PU1RFLC04	Error summary register: (Not used for MCC F-Levels.)
PU1RFLC05	PFLR action word (PU1RESULT).
PU1RFLC06	Subunit status reg. (hardware status). (Used only on Phase II IOP channels.)
PU1RFLC07	Test results.

NOTE: Layouts for IO1RSTIOUS, IO1RSTIOUC, IOUS status register, IOUC status register and error summary register can be found in layouts under DATA: IO STATUS (IOSTAT) in this part.

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MC1RSTATUS = PPPP-O-N-MLKJ--IHGFEDCBA

A = MC1RMA	–	Image of MA flip-flop
B = MC1RROO	–	Image of RO flip-flop
C = MC1RS0	–	Image of S0 flip-flop
D = MC1RS1	–	Image of S1 flip-flop
E = MC1RTBL	–	MCC trouble bit
F = MC1RBDGNRQ0	–	No GBT when dgn. req. on IPUB 0
G = MC1RBDGNRQ1	–	No GBT when dgn. req. on IPUB 1
H = MC1RDGNRQ	–	No GBT when dgn. req. on MCC
I = MC1RRMVTTY	–	MCC removed by TTY
J = MC1RBYPASS	–	Bypass MCC
K = MC1ROS	–	MCC OOS
L = MC1RBRMTTY0	–	IPUB 0 access removed by TTY
M = MC1RBRMTTY1	–	IPUB 1 access removed by TTY
N = MC1RRECTBL0	–	IPUB 0 access removed
O = MC1RRECTBL1	–	IPUB 1 access removed
P = MC1RSMaint	–	PU maintenance code

MCC STATUS REG = MCC status register

Bit

0	MC1MAFF	Maintenance flip-flop
1	MC1ROFF	Receive on bus flip-flop
2	MC1S0	Send on bus 0
3	MC1S1	Send on bus 1
4-23	Unused.	

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PU1RESULT = QQPPSR--ONMLKJIHGFEDCBA

A = PU1CC0	–	CC 0 BLAMED OR FOUND FAULTY
B = PU1CC1	–	CC 1 BLAMED OR FOUND FAULTY
C = PU1C0	–	CONTROLLER 0 FOUND FAULTY
D = PU1C1	–	CONTROLLER 1 FOUND FAULTY
E = PU1MAT0	–	PU BUS 0 FOUND FAULTY
F = PU1MAT1	–	PU BUS 1 FOUND FAULTY
G = PU1MIN0	–	BUS 0 AT UNIT FOUND FAULTY
H = PU1MIN1	–	BUS 1 AT UNIT FOUND FAULTY
I = PU1RMDIG	–	FAULT REC. REMD & ISSUED DGN RESTORE
J = PU1REMV	–	FAULT REC. REMOVED UNIT (NO DGN)
K = PU1QU	–	FAULT REC. COULD NOT FIND FAULT
L = PU1SOFT	–	FAULT REC. FOUND SOFTWARE ERROR
M = PU1TRANS	–	F-LEVEL BLAMED ON TRANSIENT ERROR
N = PU1HANG	–	FAULT REC. RESTARTED CHANNEL
O = PU1REST	–	FAULT REC. DEFERRED RESTORED UNIT.
P = PU1FAULT	–	FAULT TYPE (CONTAINS 2 FOR F-LEVELS)
Q = PU1GRP	–	GROUP NUMBER OF UNIT
R = PU1FRESP	–	FALSE RESPONDER FOUND ON PU BUS
S = PU1BABL	–	BABBLING DETECTED ON PU BUS

TEST RESULTS (PU1RFLCO7) = -----NMLKJIHHGFEDCBA

A = INVCCON	–	Invalid CC configuration.
B = SHSTE	–	Software-Hardware configuration mismatch.
C = INVDMODE	–	Unit addressed in wrong mode.
D = INVDFROW	–	Invalid row addressed in MCC.
E = UPOT	–	Unit software configuration state not compatible with PU bus configuration.
F = INVI	–	ID invalid instruction.
G = RECOVER	–	Interrupt can be unwound.
H = BUSFAIL	–	Unit failed on PU bus 0/1.
I = SKIPRETRY	–	Skip instruction retry.
J = SUBUNEQ	–	Subunit addressed is unequipped.
K = SUBOP	–	Subunit addressed.
L = MSORD	–	MTCE substitute order.
M = FRESP	–	False responder found on PU bus.
N = IOUS_FLAG	–	Flag set when IOUS fails test.

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DATA: FAULT RECOGNITION ISOLATION DATA

W0 W1 W2 W3 W4 W5

Defined as:

W0 Sequence table number.
W1 Interrupt state number.
W2 PMD number.
W3 Resolution class.
W4 Fault class.
W5 Number of isolation attempts.

DATA: FILE STORE ERROR CORRECTION DATA (FSECD)

WORDS DISKADD ID FLAGS

Defined as:

WORDS Number of words corrected by status failure control.
DISKADD Start disk address of correction.
ID ID tag associated with record.
FLAGS Correction control flags:
 Bit 1 Disk write is for copy.
 2 Disk job being dispensed as cancel request.
 3 Reread failed.
 4 ID is provided by client.
 5 Client requests all writes be verified.
 6 Buffer choice; 0 = Priv buf, 1=mac paging area.
 7 Data transfer in progress.
 8 Data transfer is waiting for completion of disk write.
 9 Data transfer is delayed by no DRRs.
 10 Request pending completion by FSC.
 11 Give client an immediate return.
 13 DF is in update mode.

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14	Task dispenser loaded DRR for data transfer.
18	About copy operation at first opportunity.
19-20	Priority of copy client.
21	Rewrite same file.
22-23	Error correction code: 0 Copy mode. 1 IDMM. 2 UTRAMM. 3 Exerciser error.

DATA: FILE STORE STATUS FAILURE REPORT DATA (FSSTAT)

DRB0	DRB1	DRB2	DRB3	CAB0*	CAB1*
SAVEJ*	DRR*				

NOTE: SAVEJ program address+1 where failure detected (printed only when an FS or DF is removed or when an attempt to remove was made).

DATA: H-LEVEL CC REGISTERS (HLEV)

IN1FR	IN1GR	IN1JR	IN1KR	IN1LR	IN1XR
IN1YR	IN1ZR				

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DATA: IFB BOOTSTRAP FAILURE DATA

FAIL_NUM	PROGADDR	TESTADDR	TESTOPTS	SAVF	SAVG
SAVJ	SAVK	SAVL	SAVX	SAVY	SAVZ
.					
.					
.					

Defined as:

FAIL_NUM - SAVZ — One failure block, in which:

FAIL_NUM — Number of access test failures.

PROGADDR — Program address at failure.

TESTADDR — Test address at failure or:

- Base address of client if client is implicated.
- Address of memory if store failure.
- 0 for CC0 or 1 for CC1.
- 0 for IFB0 or 1 for IFB1.

TESTOPTS — Test options and flags at failure. Also indicates failing unit:

Bit	Description
0	Active CC failed.
1	Standby CC failed.
2	Store failed.
3	An IFB failed.
4	An IFB client failed.

SAVF - SAVZ — The save of register content when the failure was reported.

NOTE: The failure block consists of one or more instances of failure information with the size of decimal 12. The failure information was filled to the last one.

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DATA: INTERJECT

IN1INJ

DATA: INTERNAL DUS REGISTERS AND TEST RESULTS (DUSREG)

DS1OBR	DS1IBR	DS1OAR	DS1IRA	DS1SELREG	DS1SVRM
DS1OIRA	DS1MCR	DS1PCR	DS1ESR	GCPA	GCPR
DS1R_TFWRD	DS1R_TADDR	DS1R_TVCTR	DS1R_TRSLT	DS1R_XFRWD0	DS1R_SVR1
DS1R_TFWRDB	DS1R_TADDRB	DS1R_TVCTRB	DS1R_TRSLTB	DS1R_XFRWD1	DS1R_SVR2
DS1ROVSTAT+0	DS1RSTAT0+0	DS1RSTAT0+1	DS1RSTAT1+0	DS1RSTAT1+1	DS1R_SVR3
DC1RSTAT0+0	DC1RSTAT0+1	DC1RSTAT0+2	DC1RSTAT0+3	DC1RSTAT0+4	DC1RSTAT0+5
DC1RSTAT0+6	DC1RSTAT0+7	DC1RSTAT0+8	DC1RSTAT0+9	DC1RSTAT0+10	DC1RSTAT0+11
DC1RSTAT0+12	DC1RSTAT0+13	DC1RSTAT0+14	DC1RSTAT0+15	DC1RSTAT+12	AU1RSTAT+13
DC1RSTAT0*+0	DC1RSTAT0*+1	DC1RSTAT0*+2	DC1RSTAT0*+3	DC1RSTAT0*+4	DC1RSTAT0*+5
DC1RSTAT0*+6	DC1RSTAT0*+7	DC1RSTAT0*+8	DC1RSTAT0*+9	DC1RSTAT0*+10	DC1RSTAT0*+11
DC1RSTAT0*+12	DC1RSTAT0*+13	DC1RSTAT0*+14	DC1RSTAT0*+15	AU1RSTAT*+12	AU1RSTAT*+13
DC1RSTAT1+0	DC1RSTAT1+1	DC1RSTAT1+2	DC1RSTAT1+3	DC1RSTAT1+4	DC1RSTAT1+5
DC1RSTAT1+6	DC1RSTAT1+7	DC1RSTAT1+8	DC1RSTAT1+9	DC1RSTAT1+10	DC1RSTAT1+11
DC1RSTAT1+12	DC1RSTAT1+13	DC1RSTAT1+14	DC1RSTAT1+15	XR	XR
TU1AREG	TU1DR	TU1CCREG	TU1DBR	TU1COM	TU1PCREG
TU1MR	TU1CBREG	23-12 TU1ECREG 11-0 TU1WDCREG	23-12 TU1RCRCREG 11-0 TU1WCRCREG	TU1MIS	TU1OIS
TU1TTS	23-18 TU1SRR 17-0 TU1LTCR	TU1CIBG	TU1HLSB		

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Defined as:

DS10BR	DUS output buffer register which contains output data for CC-DUS reads and DUS-CORE writes; also contains the read / write data after a CC-DUC read / write operation.
DS1IBR	DUS input buffer register (buffers input data for CC-DUS/DUC writes and DUS-CORE reads).
DS10AR	DUS output address register (contains core address for DUS-CORE reads and writes).
DS1IRA	DUS inhibit register (controls which DUCs the DUS polls: 0 = Do not poll associated DUC, 1 = Poll associated DUC).
DS1SELREG	DUS select register (indicates which DUC the DUS is polling at this time as controlled by the DUS inhibit register).
DS1SVRM	DUS select verify register (contains the select verify response of the DUC just accessed).
DS10IRA	DUS operational interject register (indicates which DUC(s) are requesting operational interject).
DS1MCR	DUS maintenance and control register (applies nonoperational conditions to the DUS for maintenance purposes).
DS1PCR	DUS pest control register (allows internal DUS errors to be inhibited).
DS1ESR	DUS error summary register (contains summary of DUS error conditions if they exist).
GCPA	GCP address of DUS.
GCPR	GCP results of DUS.
DS1R_TFWRD	Test failure word (contains unique identification of the test that the DUS/DUC failed during fault recovery - for the suspected faulty DUS/DUC).
DS1R_TADDR	Test address (contains the internal DUS/DUC address where the test failed - for the suspected faulty DUS/DUC).
DS1R_TVCTR	Test vector (contains the input test data - test vector - applied to the DUS/DUC - for the suspected faulty DUS/DUC).
DS1R_TRSLT	Test result (contains the output test results received from the DUS/DUC - for the suspected faulty DUS/DUC).
DS1R_XFRWD0	Transfer trace word 0 (contains a point by point trace of the program flow through the PIDENT DUFRTADM).
DS1R_SVR1	Contains the identity of the DUC (in 1/N format) that is to be used in diagnosing the DUS just removed from service.
DS1R_TFWRDB	Test failure word buffer (contains unique identification of the test that the DUS/DUC failed during fault recovery - for the DUS/DUC used in alternate route testing).

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DS1R_TADDRB	Test address buffer (contains the internal DUS/DUC address where the test failed - for the DUS/DUC used in alternate route testing).
DS1R_TVCTRB	Test vector buffer (contains the input test data - test vector - applied to the DUS/DUC - for the DUS/DUC used in alternate route testing).
DS1R_TRSLTB	Test result buffer (contains the output test results received from the DUS/DUC - for the DUS/DUC used in alternate route testing).
DS1R_XFRWD1	Transfer trace word 1 (contains a point by point trace of the program flow through the PIDENT DUFRPCDU).
DS1R_SVR2	Contains the identity of the DUC (in 1/N format) used for alternate route testing by the fault recovery program.
DS1R0VSTAT	Overall status for ADS COMMUNITY 0 or ADS COMMUNITY 1 (status that applies to the ADS).
DS1RSTAT0	Status word 0 for DUSs 0 and 1 (ADS COMMUNITY 0) or DUSs 2 and 3 (ADS COMMUNITY 1) (contains control and status flags).
DS1RSTAT1	Status word 1 for DUSs 0 and 1 (ADS COMMUNITY 0) or DUSs 2 and 3 (ADS COMMUNITY 1) (contains error history information).
DS1R_SVR3	Contains the identity of the DUC (in 1/N format) with which the DUS was communicating at the time of failure.
DC1RSTAT0	Status word 0 for DUCs 0 - 15 (ADS COMMUNITY 0) or DUCs 16 - 31 (ADS COMMUNITY 1) at INTERJECT or D-Level entry (contains control and status flags).
AU1RSTAT	Common AU status word for DUSs 0 and 1 (ADS COMMUNITY 0) or DUSs 2 and 3 (ADS COMMUNITY 1) at INTERJECT or D-Level entry (contains control and status flags).
DC1RSTAT0*	Status word 0 for DUCs 0 - 15 (ADS COMMUNITY 0) or DUCs 16 - 31 (ADS COMMUNITY 1) after INTERJECT or D-Level recovery (contains control and status flags).
AU1RSTAT*	Common AU status word for DUSs 0 and 1 (ADS COMMUNITY 0) or DUSs 2 and 3 (ADS COMMUNITY 1) after INTERJECT or D-Level recovery (contains control and status flags).
DC1RSTAT1	Status word 1 for DUC 0 - 15 (ADS COMMUNITY 0) or DUC 16 - 31 (ADS COMMUNITY 1) (contains control and status flags).
DC1RSTAT2	Status word 2 for DUCs 0 - 15 (ADS COMMUNITY 0) or DUCs 16 - 31 (ADS COMMUNITY 1) (contains error history information).
XR	Contains the actual KCODE of the DUS involved in the INTERJECT or D-Level failure.
TU1AREG	TUC store address register (contains core address for TUC-CORE reads and writes).
TU1DR	TUC data register (contains output/input data for TUC-CORE writes/reads).

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TU1CCREG	TUC character count register (contains 1's complement of number of 8-bit characters to be read / written from / to tape).
TU1DBR	TUC data buffer register (buffers the data that is read / written from / to tape between the data register and the tape for writes onto tape. It divides the 24 bits of data into three 8-bit tape characters; for tape reads, it generates a 24-bit data word from the three 8-bit tape characters read from tape).
TU1COM	TUC command register (contains the TUC tape transport operational command, i.e., write, read, backspace).
TU1PCREG	TUC pest control register (allows internal TUC and/or tape transport errors to be inhibited).
TU1MR	TUC maintenance register (applies nonoperational conditions to the TUC for maintenance purposes).
TU1CBREG	TUC control bus register (contains internal TUC maintenance interject, operational interject, read, write status).
TU1ECREG	TUC error correct register - 9 bits (contains the bit to be corrected when operating in the error correct read mode).
TU1WDCREG	TUC write driver register - 9 bits (contains the 8-bit character and parity being written onto tape).
TU1RCRCREG	TUC read CRC register - 9 bits (generates and accumulates the CRC character from data being read from tape).
TU1WCRCREG	TUC write CRC register - 9 bits (generates and accumulates the CRC character from data being written onto tape).
TU1MIS	TUC maintenance interject status register (contains the source of the TUC maintenance interject request).
TU10IS	TUC operational interject status register (contains the source of the TUC operational interject request).
TU1TTS	TUC and tape transport status register (contains internal TUC and tape transport hardware status indications).
TU1SRR	TUC system reinitialization sequence register (contains the state flip-flops of the TUC system reinitialization sequencer).
TU1CIBG	TUC write clock and IBG detector register (TUC interblock gap detector register).
TU1LTCR	TUC long timer counter register (TUC hardware timer).
TU1HLSB	TUC hotline scan back results (TUC front end error indicators received on every TUC hotline address).

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DATA: INTERRUPT SOURCE DATA

W0 W1 W2 W3 W4

Defined as:

W0 PRM.
W1 PRL.
W2 E register.
W3 GI data.
W4 MI data.

DATA: INVALID G-LEVEL

AC1FR	AC1GR	AC1JR	AC1KR	AC1LR	AC1XR
AC1YR	AC1ZR	AC1BR(H)	AC1BR(L)	AC1ASG(H)	AC1ASG(L)
AC1SCA	AC1SDA	AC1CSC	AC1CES	AC1FST	AC1FES
AC1ILA	AC1INS	AC1INH	AC1INJ	AC1SC	AC1SR
AC1SCTR	AC1SINS	AC1ELIT	AC1LPI	AC1ER	AC1PRM
AC1PRL	AC1PSC	AC1BRS(H)	AC1BRS(L)		

DATA: INVALID INTERRUPT INTERNAL REGISTER (INVINT)

IN1BR IN1CAR IN1ILA IN1INS IN1INH IN1SC
IN1SR

DATA: I/O OPERATIONAL FAILURE DATA (IOOFD)

ERROR CODE	CHANNEL NUMBER	IO1CHAN- STAT0	IO1CHAN- STAT1	IOUS* REGISTER	IOUC STATUS* REGISTER
SUPPLEMEN- TARY DATA		IO4SLST*			

*IOUS error summary register (SD-5A021), or IOP IOUS status register (SD-5A049, 5A052, or 4C049), SUPPLEMENTARY DATA, or IO4SLST. See layouts under DATA: I/O STATUS AND INTERNAL DATA.

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Defined as:

ERROR CODE (OCTAL) =

- 1 — Buffer empty indicator not set after 24 characters.
- 2 — Timeout (20 sec) of constant break signal.
- 3 — No service request after ?T acknowledgment.
- 4 — Timeout of channel.
- 5 — Service request but channel has no state.
- 12 — CMS channel removed from service.
- 13 — Timeout of CMS channel in output state.

CHANNEL No. = COMPOOL Assigned.

IO1CHANSTAT = HHHHHHHHHG GGGFFEDDCBAAAAA, where:

- A IO1STATUS - Channel state (Octal):
- 0 - Channel is unequipped
 - 1 - Channel idle
 - 2 - Channel status is input
 - 3 - Channel status is output
 - 6 - Channel status is input start
 - 7 - Channel is waiting for acknowledgement
 - 10 - Acknowledgement loaded.
 - 11 - Channel status is last output
 - 12 - Waiting for output idle SR
 - 13 - Break control characters loaded
 - 14 - Waiting for link reset
 - 15 - Waiting for protocol handler analysis
 - 16 - Waiting for input segment
 - 17 - Waiting for next segment
 - 20 - Tape timing
 - 21 - Enquiry loaded
 - 22 - Waiting for start of tape
 - 30 - Channel disconnected (dial-up port)
 - 31 - Received outside call (dial-up port)
 - 32 - Making a call (dial-up port)
 - 36 - Waiting for output acknowledgement
 - 37 - Channel is out of service
- B IO1TRANP - Channel in transparent mode.
- C IO1TCONNECT - Temporary dial up connection.

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- D IO1SATYPE - Special application type (TN82 only)
- 0 - 1IOINON - Input normal, output normal.
 - 1 - 1IOINONC - Input normal, output normal or customized.
 - 2 - 1IOINCONC - Input normal or customized, output normal or customized.
 - 3 - 1IOITOT - Input transparent, output transparent.
- E IO1SAIMB - Channel has special application input buffer (TN82 only)
- F IO1STIME - Secondary timer counter.
- G IO1TOIND - Timeout index:
- 0 - Unassigned
 - 1 - Private line data set in disconnect state
 - 2 - Input timing
 - 3 - Output timing
 - 4 - Break timing
 - 5 - Acknowledgement timing
 - 6 - Timeout characters sent
 - 7 - Dial-up timing
- H IO1TOTIME - Timeout time.

IO1CHANSTAT = FFFFFFFFEEEDD---CBAAAAA, where:

- A IO1OSTATUS - Channel output status, same as IO1STATUS
- B IO1TOERR -Output timeout error on full duplex channel
- C IO1PGTOUT - Toggle if issued GTOUT command
- D IO1OSTIME - Secondary output timeout timer
- E IO1TOIND - Output timeout index
- F IO1TOTIME - Output timeout time

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DATA: I/O STATUS AND INTERNAL DATA - MAINTENANCE REQUEST

IO1RSTIOUS	IO1RSTIOMP	IO1RSTIOUC	IOUS STATUS REG	IOUC STATUS REG	SUPPLEMENTARY DATA
------------	------------	------------	-----------------------	-----------------------	-----------------------

-OR-

DATA: I/O STATUS AND INTERNAL DATA - MAINTENANCE REQUEST

IO1RSTIOUS	IO1RSTIOMP	IO1RSTIOUC	IOUS STATUS REG	IOUC STATUS REG	SUPPLEMENTARY DATA
------------	------------	------------	-----------------------	-----------------------	-----------------------

DATA: SUPPLEMENTARY ERROR DATA

IO1CHANSTAT* IO1CHANSTAT+1* IO4LST

* See layouts under DATA: I/O OPERATIONAL FAILURE DATA (IOOFD)

DATA: I/O STATUS AND INTERNAL DATA - POLL FAILURE

IO1RSTIOUS	IO1RSTIOMP	IO1RSTIOUC	IOUS STATUS REGISTER	ERROR SUMMARY REGISTER
------------	------------	------------	----------------------------	------------------------------

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IO1RSTIOUS = IOUS software status:

0	MAS*	IOUS maintenance state
1	RO	Receive bus for IOUS
2	S0	Send on bus 0
3	S1	Send on bus 1
4	STBL	IOUS removed by fault recovery action
5	BDGNRQ0	Diagnostic requested for IPUB 0 but no GBT
6	BDGNRQ1	Diagnostic requested for IPUB 1 but no GBT
7	DGNRQ	Diagnostic requested for IOUS but no GBT
8	RMVTTY	IOUS removed by TTY request
9-11		Unused
12	OOS	IOUS out of service
13	BRMTTY0	IPUB 0 removed by TTY request
14	BRMTTY1	IPUB 1 removed by TTY request
15		Unused
16	RECTBL0	IPUB 0 out of service
17		Unused
18	RECTBL1	IPUB 1 out of service
19		Unused
20-23	SMAIN	PU MTCE code

* All item names prefixed by IO1R.

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IO1RSTIOMP = IOMP software status:

0-3		Unused
4	MTBL*	IOMP removed by fault recovery action
5-6		Unused
7	MDGNRQ	Diagnostic requested for IOMP but no GBT
8	MRMVTTY	IOMP removed by TTY request
9-11		Unused
12	MOS	IOMP out of service
13-19		Unused
20-23	MMAIN	PU MTCE code

IO1RSTIOUC = IOUC software status:

0-2	CPFC*	Character parity failure counter
3	CHANPEST	F level pested for I/O KCODE
4	CTBL	IOUC removed by fault recovery action (trouble bit)
5-6	BOF	Input buffer overflow counter
7	CDGNRQ	Diagnostic requested for IOUC but not GBT
8	CRMVTTY	IOUC removed by TTY request
9-10	CHOVR	Character overrun counter
11	MA	Maintenance state of IOUC
12	COS	IOUC out of service
13-15	TIMEOUT	Intercharacter time-out counter
16-17	ERRCNT	BLM protocol error count
18		Unused
19	CRJRQ	Restoral runjob requested
20-23	MAIN	PU MTCE code

* All item names prefixed by IO1R.

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IOUS STATUS REG = IOUS status register (SD-5A021 I/O):

0	MAS*	Maintenance flip-flop
1	RO	'Receive on' bus flip-flop
2	S0	Send on bus 0
3	S1	Send on bus 1
4-23		Unused

IOUS STATUS REG = IOUS status register (SD-5A052 I/O):

0	MAS**	Maintenance flip-flop
1	RO	'Receive on' bus flip-flop
2	S0	Send on Bus 0
3	S1	Send on Bus 1
4	MP0OOS	IOMP 0 out of service
5	MP1OOS	IOMP 1 out of service
6	HACKM	Hold acknowledge monitor
7	MPSELM	IOMP select monitor
8	MP1HAF	IOMP 1 hold acknowledge failure
9	MP0HAF	IOMP 0 hold acknowledge failure
10	MP1DSRF	IOMP 1 data store request failure
11	MP0DSRF	IOMP 0 data store request failure
12	INVLDI	Invalid instruction received
13	MP0INVA	IOMP 0 invalid access (power problem)
14	MP1INVA	IOMP 1 invalid access (power problem)
15	DPF	DMAC parity failure
16		Unused
17	MPOORMF	IOMP out of range memory address
18	ROMPF	ROM parity failure
19	DSF	DMAC sanity failure
20	CCUF	Character counter underflow
21	CHIDMF	Channel ID match failure
22	PPO	PU bus parity failure over odds bits
23	PPE	PU bus parity failure over even bits

* All item names prefixed by IO1.

** All item names prefixed by IO1P.

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ESR = Error summary register (SD-5A021 I/O):

0	ASWF*	All seems well fail
1		Unused
2	PFE	Parity failure over even PU write bus bits
3	PFO	Parity failure over odd PU write bus bits
4		Unused
5	MKM	Multiple KCODE match detected
6	INVI	Invalid instruction detected by IOUS
7-18		Unused
19	CRSF	Channel response failure
20	CBPF	Channel buffer parity failure
21	HCM	High speed (7.7 microseconds) clock monitor bit
22	LCM	Low speed (71.4 microseconds) clock monitor bit
23	CLKF	Clock failure

ESR = Error summary register (SD-4C049):

0	PC error summary**
1	PC sanity failure**
2	PC routine maintenance failure**
3	PC clock failure**
4	PC RAM parity failure**
5	Enable gate through error**
6	Invert parity**
7	PC dual port memory parity error**
8-13	Unused
14	IOMP 1 error summary
15	IOMP 0 error summary
16	PC 0 error
17	PC 1 error
18	PC 2 error
19	PC 3 error
20	PC 4 error
21	PC 5 error
22	PC 6 error
23	PC 7 error

* All item names prefixed by IO1.

** Active zero.

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ESR = Error summary register (IOMP status and error register)
(SD-5A049/5A052 I/O):

0	DMPG*	DMAC-IOMP gate through bit
1	CLKF	IOMP clock failure
2	SF	IOMP sanity failure
3	MPF	Memory parity failure
4	MMPPF	Memory - IOMP parity failure
5	RME	Routine maintenance error
6	FPWRF	Force power failure
7	LUMPPF	LIU - IOMP parity failure
8	RRMCODE	DMAC routine maintenance failure code
9	RRMCODE	DMAC routine maintenance failure code
10	RRMCODE	DMAC routine maintenance failure code
11	RRMCODE	DMAC routine maintenance failure code
12	RRMCODE	DMAC routine maintenance failure code
13	RRMCODE	DMAC routine maintenance failure code
14	RMP1ES	IOMP 1 error summary bit
15	RMP0ES	IOMP 0 error summary bit
16-23		Unused at this time

* All item names prefixed by IO1P.

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IOUC STATUS REG = IOUC status register (SD-5A021 I/O):

0-7		Unused
8	BUFE *	Channel buffer is empty
9	CFA	Carrier failure alarm
10	LPA	Low paper alarm
11	MA	Channel maintenance state
12	IDLE	Channel is in idle state
13	INPUT	Channel is in input state
14	OUTPUT	Channel is in output state
15	BRKREC	Channel is in break received state
16	LODBUF	Channel buffer should be loaded
17	UNLBUF	Channel buffer should be unloaded
18	SOI	Start of input message
19	MR	Maintenance request
20	IMR	Inhibit maintenance request
21	OBO	Output buffer overflow
22	CPF	Character parity failure
23	IBO	Input buffer overflow

* All item names prefixed by IO1P.

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IOUC STATUS REG = IOUC status register (IOP - SD-5A052/5A049/4C049):

0	CONNECT**	Channel is connected (SD 4C049 Only)
1-4		PC state (SD-4C049 TN 82 channel only)
		0000 Bootstrap
		0001 OOS
		0010 Disconnect
		0011 Connect
		0100 XID waiting
		0101 XID response
		0110 XID receive
		0111 XID reply
		1000 Super-disconnect
		1001 Link Setup
5-7		Protocol state (SD-4C049 TN 82 channel only)
		000 Super - disconnect
		001 Disconnect
		010 Link setup
		011 Frame reject
		100 Disconnect requested
		101 Information transfer
8	OOS	Channel is out of service
9	IDLE	Channel is in idle state
10	EOMREC	Channel is in end of message RCVD state
11	BRKREC	Channel is in break received state
12	INPUT	Channel is in input state
13	OUTPUT	Channel is in output state
14	FDPLX	Channel operation is full duplex
15	BUFE	Channel buffer is empty
16	LODBUF	Channel buffer should be loaded
17	UNLBUF	Channel buffer should be unloaded
18	TRANSP	Channel is in transparent mode
19	GTOUTPR	Toggle bit toggled when channel processes a GTOUT command (SD-4C049 TN 82 channel only)
20		XID (Exchange identification) received by channel (SD-4C049 TN 82 channel only)
21	INVCCMD	Invalid channel command RCVD
22	SFTCERR	Software error detected
23	HRDCERR	Hardware error detected

** All item names prefixed by IO1P.

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CHANNEL MAINTENANCE REGISTER for SD-5A021 I/O:

If the system has this piece of equipment, no meaningful information is reported on the REPT: output message in this word at this time. The word will be zero filled and bits 0-23 are currently unused.

SUPPLEMENTARY DATA (CHANNEL MAINTENANCE REGISTER)
= Layout if bit 23 of channel status is set
(IOP - SD-5A052/5A049):

0-11		Unused at this time
12	TIMEOUT*	Intercharacter timeout (>45 seconds)
13		Unused
14	CHOVRN	Character Overrun
15	IBO	Input buffer overflow
16	SERPF	Serial parity failure
17	MPLUPF	MP to LU parity failure
18	CLUMPPF	LU to MP parity failure
19	LOWPAPR	Low Paper
20	NOCTS	No clear to send
21	CARRF	Carrier failure
22	ACUERR	Automatic call unit failure
23		Unused

* All item names prefixed by IO1P.

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CHANNEL MAINTENANCE REGISTER = Layout if bit 23 of channel status
is set (IOP - SD - 4C049):

0		Frame reject (sent)
1		Reject (sent)
2		Receiver not ready (sent)
3		Frame reject (received)
4		Cyclical redundancy check (received)
5		Reject (received)
6		Receiver not ready (received)
7		N2 counter exceeded
8-10		Unused
11	GTOUT*	Output rejected (GTOUT rejected because link is disconnected)
12	LINKRESET	Link reset from channel (TN82 channel only)
13	PROTOHALT	Protocol halt
14-18		Unused
19	BUFFULL	Buffer full (TN82 channel only)
20	DS_XMITERR	Data set transmit error
21	DS_RECERR	Data set receive error
22	ACUERR	Automatic Call Unit (ACU) error
23	PROTOERROR	Protocol error

NOTE: Bits 0-7 are only used if bit 23 (PROTOERROR) is set and used only on the TN82 channel.

* All item names prefixed by IO1.

SUPPLEMENTARY DATA (CHANNEL MAINTENANCE REGISTER)

Layout if bit 23 of channel status is reset
IOP - SD 5A049/5A052/4C049):

0-7	Unused
8-15	High byte of failing address
16-23	Low byte of failing address

SPECIAL APPLICATION CHANNEL LINK STATUS (TN82/4C049)

IO4SLST = F--E-----DDDCBAAAA

A	IO4LST - LSTAT Link Status
	0 - 4LST_UNEQ Link is enequipped
	2 - 4LST_DGNOOS Link is diagnostic OOS
	3 - 4LST_MANOOS Link is manual OOS
	5 - 4LST_DSNCT Link is in service but disconnected
	7 - 4LST_TEST Link is in prove-in state
	9 - 4LST_WFLR Trying to reset link
	10 - 4LST_CONNECT Link is connected and operational
	12 - 4LST_OUTPUT Link is downloading characters to PC
B	IO4LST - REXIP - Rex in progress on link
C	IO4LST - LINH - Link is inhibited
D	IO4LST - TSTAT - Fault recovery prove-in status
	0 - 4IOSNOTEST Not in test state
	1 - 4IOSTSENT Prove-in message sent
	2 - 4IOSTREC Prove-in message received from far end
	3 - 4IOSCSENT Connect message sent to far end
	4 - 4IOSCREC Connect message received from far end
E	IO4LST - REQAUD - Audit requested for this link
F	IO4LST - TRAFF - Data sent or received on this link

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DATA: IOUC PROTOCOL ERROR COUNTER DATA

IO1RMR- DATA0	IO1RMR- DATA1	IO1RMR- DATA2	IO1RMR- DATA3	IO1RMR- DATA4	IR1RMR- DATA5
IO1RMR- DATA6	IO1RMR- DATA7	IO1RMR- DATA8	IO1RMR- DATA9	IO1RMR- DATA10	

Defined as:

IO1MR_DATA0	=	23-16	-	Total number of NAKs received.
		15-8	-	Counter of 'header CRC error' NAKs received.
		7-0	-	Counter of 'data CRC error' NAKs received.
IO1MR_DATA1	=	23-16	-	Counter of 'REP'.
		15-0	-	Unused.
IO1MR_DATA2	=	23-16	-	Counter of "BLOCK TOC Big' NAKs received.
		15-8	-	Counter of 'header TOC big' NAKs received.
		7-0	-	Counter of 'buffer temporarily unavailable NAKs received.
IO1MR_DATA3	=	23-16	-	Counter of 'receiver overrun' NAKs received.
		15-8	-	Total number of NAKs transmitted.
		7-0	-	Counter of 'header CRC error' NAKs transmitted.

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IO1MR_DATA4	=	23-16	-	Counter of 'data CRC error' NAKs transmitted.
		15-8	-	Counter of 'REP' NAKs transmitted.
		7-0	-	Unused.
IO1MR_DATA5	=	23-16	-	Unused.
		15-8	-	Counter of 'block too big' NAKs.
		7-0	-	Counter of 'header format error' NAKs transmitted.
IO1MR_DATA6	=	23-16	-	Counter of 'buffer temporarily unavailable' NAKs received.
		15-8	-	Counter of 'receiver overrun' NAKs transmitted.
		7-0	-	Counter of 'REP' blocks received.
IO1MR_DATA7	=	23-16	-	Counter of 'REP' blocks transmitted.
		15-8	-	Counter of select timeouts in half duplex.
IO1MR_DATA8	=	23-0	-	Unused.
IO1MR_DATA9	=	23-0	-	Unused.
IO1MR_DATA10	=	23-0	-	Unused.

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DATA: J-LEVEL CC REGISTERS (JLEV)

IN1FR	IN1GR	IN1JR	IN1KR	IN1LR	IN1XR
IN1YR	IN1ZR				

DATA: K-LEVEL (KLEV)

AC1FR	AC1GR	AC1JR	AC1KR	AC1LR	AC1XR
AC1YR	AC1ZR	AC1BR(H)	AC1BR(L)	AC1ASK(H)	AC1ASK(L)
AC1SCA	AC1SDA	AC1CSC	AC1CES	AC1FST	AC1FES
AC1ILA	AC1INS	AC1INH	AC1INJ	AC1SC	AC1SR
AC1SCTR	ST1INS	ELIT	AC1LPI	AC1ER	AC1PRM
AC1PRL	AC1PSC	AC1BRS(H)	AC1BRS(L)	AC1SAT	

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DATA: MAC CONTROL MEMORY (MACCM)

CNTL+0	CNTL+1	CNTL+2	CNTL+3	CNTL+4	CNTL+5
CNTL+6	CNTL+7	CNTL+8	CNTL+9	CNTL+10	CNTL+11
CNTL+12	CNTL+13	CNTL+14	CNTL+15	CNTL+16	CNTL+17
CNTL+18	CNTL+19	CNTL+20	CNTL+21	CNTL+22	CNTL+23
CNTL+24	INFO+0	INFO+1	INFO+2	INFO+3	INFO+4

NOTE: Prefix all words with MA1.

Defined as:

CNTL+0 = 0-18 - Job type_program_task.
 19-21 - Class wait states.
 22 - CPSECT loaded.
 23 - Scratch pad activity flag (IE SCR pad is assigned).

CNTL+0 = 0-14 - Program task.

CNTL+0 = 0-6 - Task number.
 7-14 - Program number.
 15-18 - Job type.

CNTL+1 = 0 - MASK AUINJ interject source.
 1 - Mask invalid interrupts.
 2 - Mask APINJ interject source.
 3 - Mask out-of-range interrupts.
 4 - Mask APUFS interject source.
 5 - Mask PUFS interrupt source.
 6 - Mask ELS interrupt source.
 7 - Mask SCDS interrupt source.
 8 - Mask PADS interrupt source.
 9 - Mask AUDS interrupt source.
 10 - Mask CSDS interrupt source.
 11 - Mask CLIS interrupt source.
 12 - Mask SCUFS interrupt source.
 13 - Mask ORDS interrupt source.
 14 - Mask all interrupts.
 15 - Mask PSBSO interrupt source.
 16 - Mask error stop.
 17 - Mask AU base level maintenance.
 18 - Mask IO base level.
 19 - Mask PU base level.
 20 - Mask KL0S interrupt source.
 21 - Mask KL1S interrupt source.
 22 - Mask KL2S interrupt source.
 23 - Mask KL3S interrupt source.

CNTL+2 = 0-21 - Client's next segment address.
 23 - PS36 required for this client or inhibit call interrupt.

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CNTL+3 =	0-21 - Client's abort address. 22 - Client's abort leg in progress.
CNTL+4 =	0-6 - Member number. 0-13 - Unit type number-member number. 7-13 - Unit type number. 14 - Unit type blockage flag has been set. 15 - Page loading completed flag. 16 - Client has been aborted by an interrupt. 17-19 - Abort states. 20-22 - Count of interrupts during client execution. 23 - Unit type blockage check was okay.
CNTL+5 =	0-10 - Segment counter. 11-13 - Job init state. 14-22 - GBT number. 23 - Client in progress flag.
CNTL+6 =	0-13 - LKPGSECT relative address. 16-23 - LKPGSECT page number.
CNTL+6 =	0-23 - LKPGSECT absolute address.
CNTL+7 =	0-7 - LKPGSECT program number. 8-15 - RETNSECT program number. 16 - Inhibit G, H, and J-level interrupts. 17 - Stop AU audits. 18 - Inhibit AU communications option. 19 - Inhibit interrupts option. 20 - Save registers option. 21 - Break option. 22 - Bypass CPSECT option. 23 - Return address saved in CNTL.
CNTL+8 =	0-13 - RETNSECT relative address. 16-23 - RETNSECT page number.
CNTL+8 =	0-23 - RETNSECT absolute address.
CNTL+9 =	0-23 - Save L shadow register.
CNTL+10 =	0-23 - Save F shadow register.
CNTL+11 =	0-23 - Save G shadow register.
CNTL+12 =	0-23 - Save K shadow register.
CNTL+13 =	0-23 - Save X shadow register.
CNTL+14 =	0-23 - Save Y shadow register.
CNLT+15 =	0-23 - Save Z shadow register.
CNTL+16 =	0-23 - Save J shadow register.

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CNTL+17 = 0-13 - Relative address following last paging subroutine.
14-17 - Disk ID for client.
18-19 - Outstanding disk requests.
20-23 - Page loading state.

CNTL+18 = 0-9 - Relative address next subroutine in table.
10-15 - Number of partial disk blocks left to read.
16-23 - Count of remaining subroutines.
0-23 - Disk address of page directory table for page.
0-23 - Beginning intsub address.

CNTL+19 = 0-23 - Link to next control table on load list.

CNTL+20 = 0-23 - Client delay return address (APMH).

CNTL+21 = 0-23 - Save MACP-APS clients scratch pointer.

CNTL+22 = Unused.

CNTL+23 = Unused.

CNTL+24 = Unused.

INFO+0 = 0-11 - Sub class of active client.
12-22 - Class of active client.
23 - Output blocks not saved.

INFO+1 = Unused.

INFO+2 = Unused.

INFO+3 = Unused.

INFO+4 = Unused.

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DATA: MUP INTERNAL RAW DATA

aabbcc+0	aabbcc+1	aabbcc+2	aabbcc+3	aabbcc+4	aabbcc+5
aabbcc+6	aabbcc+7	aabbcc+8	aabbcc+9	aabbcc+10	aabbcc+11
.	.	.	.	.	.
.	.	.	.	.	.
.	.	.	.	.	.
aabbcc+84	aabbcc+85	aabbcc+86	aabbcc+87	aabbcc+88	aabbcc+89
aabbcc+90	aabbcc+91	aabbcc+92	aabbcc+93	aabbcc+94	-----
--aaaa+96	--aaaa+97	--aaaa+98	--aaaa+99	--aaaa+100	--aaaa+101
--aaaa+102	--aabb+103	--aaaa+104	--aaaa+105	--aaaa+106	--aaaa+107
--aaaa+108	--aaaa+109	--aaaa+110	--aaaa+111	--aaaa+112	--aaaa+113
--aaaa+114	--aaaa+115	--aaaa+116	--aaaa+117	--aaaa+118	--aaaa+119
--aaaa+120	--aaaa+121	--aaaa+122	--aaaa+123	--aaaa+124	-----
--aaaa+126	--aaaa+127	--aaaa+128	--aaaa+129	--aaaa+130	--aaaa+131
--aaaa+132	--aaaa+133	--aaaa+134	--aaaa+135	--aaaa+136	--aaaa+137
--aaaa+138	--aaaa+139	--aaaa+140	--aaaa+141	--aaaa+142	--aaaa+143
--aaaa+144	--aaaa+145	--aaaa+146	--aaaa+147	--aaaa+148	--aaaa+149
--aaaa+150	--aaaa+151	--aaaa+152	--aaaa+153	--aaaa+154	--aaaa+155
--aaaa+156	--aaaa+157	-----	-----	-----	-----

NOTE: All characters represent hexadecimal numbers. A dash indicated that digit is not used. The number following the hexadecimal number indicates the word position in the message.

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Defined as:

Word	Name	Description
aa---- +0	MIJ00	Number of MTCE interject zero type interjects generated.
--bb-- +0	MIJ01	Number of MTCE interject one type interjects generated.
----cc +0	MMUIJ	Number of memory management unit type interjects generated.
aa---- +1	RAMIJ	Number of DRAM type interjects generated.
--bb-- +1	BUSIJ	Number of M68010(e) bus type interjects generated.
----cc +1	SANIJ	Number of sanity type interjects generated.
aa---- +2	RIJ00	Number of interjects requested by MUP process identifier 00.
--bb-- +2	RIJ01	Number of interjects requested by MUP process identifier 01.
----cc +2	RIJ02	Number of interjects requested by MUP process identifier 02.
aa---- +3	RIJ03	Number of interjects requested by MUP process identifier 03.
--bb-- +3	RIJ04	Number of interjects requested by MUP process identifier 04.
----cc +3	RIJ05	Number of interjects requested by MUP process identifier 05.
aa---- +4	RIJ06	Number of interjects requested by MUP process identifier 06.
--bb-- +4	RIJ07	Number of interjects requested by MUP process identifier 07.
----cc +4	RIJ08	Number of interjects requested by MUP process identifier 08.
aa---- +5	RIJ09	Number of interjects requested by MUP process identifier 09.
--bb-- +5	RIJ10	Number of interjects requested by MUP process identifier 10.
----cc +5	RIJ11	Number of interjects requested by MUP process identifier 11.

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Word	Name	Description (continued)
aa---- +6	RIJ12	Number of interjects requested by MUP process identifier 12.
--bb-- +6	RIJ13	Number of interjects requested by MUP process identifier 13.
----cc +6	RIJ14	Number of interjects requested by MUP process identifier 14.
aa---- +7	RIJ15	Number of interjects requested by MUP process identifier 15.
--bb-- +7		M68010 VEC 0
----cc +7		M68010 VEC 1
aa---- +8		M68010 VEC 2
--bb-- +8		M68010 VEC 3
----cc +8		M68010 VEC 4
aa---- +9		M68010 VEC 5
--bb-- +9		M68010 VEC 6
----cc +9		M68010 VEC 7
aa---- +10		M68010 VEC 8
--bb-- +10		M68010 VEC 9
----cc +10		M68010 VEC 10
aa---- +11		M68010 VEC 11
--bb-- +11		M68010 VEC 12
----cc +11		M68010 VEC 13
aa---- +12		M68010 VEC 14
--bb-- +12		M68010 VEC 15
----cc +12		M68010 VEC 16
aa---- +13		M68010 VEC 17
--bb-- +13		M68010 VEC 18
----cc +13		M68010 VEC 19
aa---- +14		M68010 VEC 20
--bb-- +14		M68010 VEC 21
----cc +14		M68010 VEC 22
aa---- +15		M68010 VEC 23
--bb-- +15		M68010 VEC 24
----cc +15		M68010 VEC 25

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Word	Name	Description (continued)
aa---- +16		M68010 VEC 26
--bb-- +16		M68010 VEC 27
----cc +16		M68010 VEC 28
aa---- +17		M68010 VEC 29
--bb-- +17		M68010 VEC 30
----cc +17		M68010 VEC 31
aa---- +18		M68010 VEC 32
--bb-- +18		M68010 VEC 33
----cc +18		M68010 VEC 34
aa---- +19		M68010 VEC 35
--bb-- +19		M68010 VEC 36
----cc +19		M68010 VEC 37
aa---- +20		M68010 VEC 38
--bb-- +20		M68010 VEC 39
----cc +20		M68010 VEC 40
aa---- +21		M68010 VEC 41
--bb-- +21		M68010 VEC 42
----cc +21		M68010 VEC 43
aa---- +22		M68010 VEC 44
--bb-- +22		M68010 VEC 45
----cc +22		M68010 VEC 46
aa---- +23		M68010 VEC 47
--bb-- +23		M68010 VEC 48
----cc +23		M68010 VEC 49
aa---- +24		M68010 VEC 50
--bb-- +24		M68010 VEC 51
----cc +24		M68010 VEC 52
aa---- +25		M68010 VEC 53
--bb-- +25		M68010 VEC 54
----cc +25		M68010 VEC 55

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Word	Name	Description (continued)
aa---- +26		M68010 VEC 56
--bb-- +26		M68010 VEC 57
----cc +26		M68010 VEC 58
aa---- +27		M68010 VEC 59
--bb-- +27		M68010 VEC 60
----cc +27		M68010 VEC 61
aa---- +28		M68010 VEC 62
--bb-- +28		M68010 VEC 63
----cc +28		M68010 VEC 64
aa---- +29		M68010 VEC 65
--bb-- +29		M68010 VEC 66
----cc +29		M68010 VEC 67
aa---- +30		M68010 VEC 68
--bb-- +30		M68010 VEC 69
----cc +30		M68010 VEC 70
aa---- +31		M68010 VEC 71
--bb-- +31		M68010 VEC 72
----cc +31		M68010 VEC 73
aa---- +32		M68010 VEC 74
--bb-- +32		M68010 VEC 75
----cc +32		M68010 VEC 76
aa---- +33		M68010 VEC 77
--bb-- +33		M68010 VEC 78
----cc +33		M68010 VEC 79
aa---- +34		M68010 VEC 80
--bb-- +34		M68010 VEC 81
----cc +34		M68010 VEC 82
aa---- +35		M68010 VEC 83
--bb-- +35		M68010 VEC 84
----cc +35		M68010 VEC 85

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Word	Name	Description (continued)
aa---- +36		M68010 VEC 86
--bb-- +36		M68010 VEC 87
----cc +36		M68010 VEC 88
aa---- +37		M68010 VEC 89
--bb-- +37		M68010 VEC 90
----cc +37		M68010 VEC 91
aa---- +38		M68010 VEC 92
--bb-- +38		M68010 VEC 93
----cc +38		M68010 VEC 94
aa---- +39		M68010 VEC 95
--bb-- +39		M68010 VEC 96
----cc +39		M68010 VEC 97
aa---- +40		M68010 VEC 98
--bb-- +40		M68010 VEC 99
----cc +40		M68010 VEC 100
aa---- +41		M68010 VEC 101
--bb-- +41		M68010 VEC 102
----cc +41		M68010 VEC 103
aa---- +42		M68010 VEC 104
--bb-- +42		M68010 VEC 105
----cc +42		M68010 VEC 106
aa---- +43		M68010 VEC 107
--bb-- +43		M68010 VEC 108
----cc +43		M68010 VEC 109
aa---- +44		M68010 VEC 110
--bb-- +44		M68010 VEC 111
----cc +44		M68010 VEC 112
aa---- +45		M68010 VEC 113
--bb-- +45		M68010 VEC 114
----cc +45		M68010 VEC 115

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Word	Name	Description (continued)
aa---- +46		M68010 VEC 116
--bb-- +46		M68010 VEC 117
----cc +46		M68010 VEC 118
aa---- +47		M68010 VEC 119
--bb-- +47		M68010 VEC 120
----cc +47		M68010 VEC 121
aa---- +48		M68010 VEC 122
--bb-- +48		M68010 VEC 123
----cc +48		M68010 VEC 124
aa---- +49		M68010 VEC 125
--bb-- +49		M68010 VEC 126
----cc +49		M68010 VEC 127
aa---- +50		M68010 VEC 128
--bb-- +50		M68010 VEC 129
----cc +50		M68010 VEC 130
aa---- +51		M68010 VEC 131
--bb-- +51		M68010 VEC 132
----cc +51		M68010 VEC 133
aa---- +52		M68010 VEC 134
--bb-- +52		M68010 VEC 135
----cc +52		M68010 VEC 136
aa---- +53		M68010 VEC 137
--bb-- +53		M68010 VEC 138
----cc +53		M68010 VEC 139
aa---- +54		M68010 VEC 140
--bb-- +54		M68010 VEC 141
----cc +54		M68010 VEC 142
aa---- +55		M68010 VEC 143
--bb-- +55		M68010 VEC 144
----cc +55		M68010 VEC 145

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Word	Name	Description (continued)
aa---- +56		M68010 VEC 146
--bb-- +56		M68010 VEC 147
----cc +56		M68010 VEC 148
aa---- +57		M68010 VEC 149
--bb-- +57		M68010 VEC 150
----cc +57		M68010 VEC 151
aa---- +58		M68010 VEC 152
--bb-- +58		M68010 VEC 153
----cc +58		M68010 VEC 154
aa---- +59		M68010 VEC 155
--bb-- +59		M68010 VEC 156
----cc +59		M68010 VEC 157
aa---- +60		M68010 VEC 158
--bb-- +60		M68010 VEC 159
----cc +60		M68010 VEC 160
aa---- +61		M68010 VEC 161
--bb-- +61		M68010 VEC 162
----cc +61		M68010 VEC 163
aa---- +62		M68010 VEC 164
--bb-- +62		M68010 VEC 165
----cc +62		M68010 VEC 166
aa---- +63		M68010 VEC 167
--bb-- +63		M68010 VEC 168
----cc +63		M68010 VEC 169
aa---- +64		M68010 VEC 170
--bb-- +64		M68010 VEC 171
----cc +64		M68010 VEC 172
aa---- +65		M68010 VEC 173
--bb-- +65		M68010 VEC 174
----cc +65		M68010 VEC 175

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Word	Name	Description (continued)
aa---- +66		M68010 VEC 176
--bb-- +66		M68010 VEC 177
----cc +66		M68010 VEC 178
aa---- +67		M68010 VEC 179
--bb-- +67		M68010 VEC 180
----cc +67		M68010 VEC 181
aa---- +68		M68010 VEC 182
--bb-- +68		M68010 VEC 183
----cc +68		M68010 VEC 184
aa---- +69		M68010 VEC 185
--bb-- +69		M68010 VEC 186
----cc +69		M68010 VEC 187
aa---- +70		M68010 VEC 188
--bb-- +70		M68010 VEC 189
----cc +70		M68010 VEC 190
aa---- +71		M68010 VEC 191
--bb-- +71		M68010 VEC 192
----cc +71		M68010 VEC 193
aa---- +72		M68010 VEC 194
--bb-- +72		M68010 VEC 195
----cc +72		M68010 VEC 196
aa---- +73		M68010 VEC 197
--bb-- +73		M68010 VEC 198
----cc +73		M68010 VEC 199
aa---- +74		M68010 VEC 200
--bb-- +74		M68010 VEC 201
----cc +74		M68010 VEC 202
aa---- +75		M68010 VEC 203
--bb-- +75		M68010 VEC 204
----cc +75		M68010 VEC 205

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Word	Name	Description (continued)
aa---- +76		M68010 VEC 206
--bb-- +76		M68010 VEC 207
----cc +76		M68010 VEC 208
aa---- +77		M68010 VEC 209
--bb-- +77		M68010 VEC 210
----cc +77		M68010 VEC 211
aa---- +78		M68010 VEC 212
--bb-- +78		M68010 VEC 213
----cc +78		M68010 VEC 214
aa---- +79		M68010 VEC 215
--bb-- +79		M68010 VEC 216
----cc +79		M68010 VEC 217
aa---- +80		M68010 VEC 218
--bb-- +80		M68010 VEC 219
----cc +80		M68010 VEC 220
aa---- +81		M68010 VEC 221
--bb-- +81		M68010 VEC 222
----cc +81		M68010 VEC 223
aa---- +82		M68010 VEC 224
--bb-- +82		M68010 VEC 225
----cc +82		M68010 VEC 226
aa---- +83		M68010 VEC 227
--bb-- +83		M68010 VEC 228
----cc +83		M68010 VEC 229
aa---- +84		M68010 VEC 230
--bb-- +84		M68010 VEC 231
----cc +84		M68010 VEC 232
aa---- +85		M68010 VEC 233
--bb-- +85		M68010 VEC 234
----cc +85		M68010 VEC 235

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Word	Name	Description (continued)
aa---- +86		M68010 VEC 236
--bb-- +86		M68010 VEC 237
----cc +86		M68010 VEC 238
aa---- +87		M68010 VEC 239
--bb-- +87		M68010 VEC 240
----cc +87		M68010 VEC 241
aa---- +88		M68010 VEC 242
--bb-- +88		M68010 VEC 243
----cc +88		M68010 VEC 244
aa---- +89		M68010 VEC 245
--bb-- +89		M68010 VEC 246
----cc +89		M68010 VEC 247
aa---- +90		M68010 VEC 248
--bb-- +90		M68010 VEC 249
----cc +90		M68010 VEC 250
aa---- +91		M68010 VEC 251
--bb-- +91		M68010 VEC 252
----cc +91		M68010 VEC 253
aa---- +92		M68010 VEC 254
--bb-- +92		M68010 VEC 255
----cc +92	SSTKOV	Number of supervisor stack overflows.
aa---- +93	PUTS	Number of error messages requested for output.
--bb-- +93	NOUT	Number of error mess. actually outputted to line 24 of MCC.
----cc +93		Undefined
aa---- +94		Undefined
--bb-- +94	PID	The process identifier associated with the last error.
----cc +94		Fill
----- +95		Empty
--aaaa +96		M68010 Status Register - at the time of last error.

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Word	Name	Description (continued)
--aaaa +97		Program counter, high word - at the time of last error.
--aaaa +98		Program counter, low word
--aaaa +99		Format (bits 15-12) - if zero, disregard words 99-123. M68010 Vector (bits 9-2) - vector number of last fault exception or interrupt. h bit (bit 1) - MUP error request flag. If h=1, PID is the process identifier of a process that requested a fault. i bit (bit 0) - Supervisor stack overflow flag. If i=1, the operating system detected stack overflow.
--aaaa +100		M68010 special status word - type of operation being attempted which caused a bus or address error.
--aaaa +101		Fault address, high word - bus/segment fault address.
--aaaa +102		Fault address, low word - bus/segment fault address.
--aa-- +103		INTR source - MUP interrupt source register.
----bb +103		INTR mask - MUP interrupt mask register.
--aaaa +104		M68010 data output buffer.
--aaaa +105		Request address, high word - points to the location where an interject was requested.
--aaaa +106		M68010 data input buffer.
--aaaa +107		Request address, low word - points to the location where an interject was requested.
--aaaa +108		TM68010 instruction input buffer.
--aaaa +109		M68010 internal status word.
--aaaa +110		M68010 internal status word.
--aaaa +111		M68010 internal status word.
--aaaa +112		M68010 internal status word.
--aaaa +113		M68010 internal status word.
--aaaa +114		M68010 internal status word.
--aaaa +115		M68010 internal status word.
--aaaa +116		M68010 internal status word.
--aaaa +117		M68010 internal status word.
--aaaa +118		M68010 internal status word.
--aaaa +119		M68010 internal status word.

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Word	Name	Description (continued)
--aaaa +120		M68010 internal status word.
--aaaa +121		M68010 internal status word.
--aaaa +122		M68010 internal status word.
--aaaa +123		M68010 internal status word.
--aaaa +124		M68010 internal status word.
--aaaa +125		Undefined
--aaaa +126		Data register zero (%d0), bits 31-16.
--aaaa +127		Data register zero (%d0), bits 15-0.
--aaaa +128		Data register one (%d1), bits 31-16.
--aaaa +129		Data register one (%d1), bits 15-0.
--aaaa +130		Data register two (%d2), bits 31-16.
--aaaa +131		Data register two (%d2), bits 15-0.
--aaaa +132		Data register three (%d3), bits 31-16.
--aaaa +133		Data register three (%d3), bits 15-0.
--aaaa +134		Data register four (%d4), bits 31-16.
--aaaa +135		Data register four (%d4), bits 15-0.
--aaaa +136		Data register five (%d5), bits 31-16.
--aaaa +137		Data register five (%d5), bits 15-0.
--aaaa +138		Data register six (%d6), bits 31-16.
--aaaa +139		Data register six (%d6), bits 15-0.
--aaaa +140		Data register seven (%d7), bits 31-16.
--aaaa +141		Data register seven (%d7), bits 15-0.
--aaaa +142		Address register zero (%a0), bits 31-16.
--aaaa +143		Address Register zero (%a0), bits 15-0.
--aaaa +144		Address register one (%a1), bits 31-16.
--aaaa +145		Address register one (%a1), bits 15-0.
--aaaa +146		Address register two (%a2), bits 31-16.
--aaaa +147		Address register two (%a2), bits 15-0.
--aaaa +148		Address register three (%a3), bits 31-16.
--aaaa +149		Address register three (%a3), bits 15-0.
--aaaa +150		Address register four (%a4), bits 31-16.
--aaaa +151		Address register four (%a4), bits 15-0.
--aaaa +152		Address register five (%a5), bits 31-16.
--aaaa +153		Address register five (%a5), bits 15-0.
--aaaa +154		Frame pointer, bits 31-16.
--aaaa +155		Frame pointer, bits 15-0.
--aaaa +156		Stack pointer, bits 31-16.
--aaaa +157		Stack pointer, bits 15-0.

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DATA: NETWORK CLOCK DATA (NETCLK)

A...A	B...B	C...C	D...D	E...E	F...F
G...G	H...H	I...I	J...J	K...K	L...L

Defined as:

- A Register 0 chain 0.
- B Register 1 chain 0.
- C Software status chain 0.
- D Register 0 chain 1.
- E Register 1 chain 1.
- F Software status chain 1.
- G Register 0 chain 2.
- H Register 1 chain 2.
- I Software status chain 2.
- J Register 0 chain 3.
- K Register 1 chain 3.
- L Software status chain 3.

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DATA: PCRV TEST RUN AND HASH SUM RESULTS (PCRVHS)

PC1HISTORY	PC1OVERRIDE(H)	PC1OVERRIDE(L)	M_ADDRH	M_ADDRL	M_DATA
M_ADDRH	M_ADDRL	M_DATA	M_ADDRH	M_ADDRL	M_DATA
.	.	.	.	.	.
.	.	.	.	.	.
.	.	.	.	.	.

NOTE: This data block may have up to 195 words.

Defined as:

PC1HISTORY Tests executed during last PC state or activate override:

- | Bit | Description |
|-----|---|
| 0 | 1 - PU bus was switched by PC peripheral tests. |
| 1 | 1 - CPD bus was switched by PC peripheral tests. |
| 2 | 1 - Some transient CS was zeroed. |
| 3 | 1 - PC was executed as part of a system reinitialization. |
| 4 | 1 - Call store bootstrap was requested. |
| 5 | 1 - Program store bootstrap was requested. |
| 6 | 1 - AU bootstrap was requested. |
| 7 | 1 - Hash sums were pumped due to a failure in the hash over hash check. |
| 8 | 0 - AU BUS 0 was forced active by PC or activate override. |
| 8 | 1 - AU BUS 1 was forced active by PC or activate override. |
| 9 | 1 - AU tests found a bad call store. Call store bootstrap was reexecuted. |
| 10 | 1 - AU tests found a bad program store. Program store bootstrap was reexecuted. |
| 11 | 1 - IFB bootstrap was requested. |
| 12 | 1 - Transient data in CS 0 was zeroed by the PC. |
| 13 | 1 - Transient data in PS 0 was zeroed by the PC. Always true for PC pump state or activate override. |
| 14 | 1 - Core pump actions have been executed (entry was activate override, PC pump state, or phase of memory reinitialization). |
| 15 | 1 - Phase entry to PC. PC circuit enabled. |
| 16 | 1 - Phase entry to PC. PC circuit was inhibited. |

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- 17 1 - Phase entry to hash and correct memory. Returns to phase program.
- 18 1 - Peripheral loop around test failures have occurred.
- 19 1 - PCRIV has used the TTY to print entry or fail data.
- 20 1 - The active API has been reinitialized during this PC.
- 21 1 - The essential AU unit is duplex failed.
- 22 1 - The PC program has completed all of its tasks.

PC10OVERRIDES(H) Tests bypassed or overrides requested in last PC state or activate override:

Bit	Description
-----	-------------

- | | |
|---|---|
| 0 | 1 - Inhibit MUP restart on A-level and B-level. |
| 1 | 1 - Supervisory mode in utility SR. |
| 2 | 1 - Skip interface bus (IFB) access tests. |
| 3 | 1 - Inhibit diagnostic tests. |

PC10OVERRIDES(L) Tests bypassed or overrides requested in last PC state or activate override:

Bit	Description
-----	-------------

- | | |
|----|---|
| 15 | 1 - SR completed using combined generic tape and a separate office data tape. |
| 16 | 1 - All nonbacked-up memory was zeroed. |
| 17 | 1 - The hash sum check of core data was bypassed. |
| 18 | 1 - CC sanity tests were bypassed. |
| 19 | 1 - Tape error correction inhibited during SR. |
| 20 | 1 - Map audits inhibited during SR. |
| 21 | 1 - Store maintenance tests were bypassed. |
| 22 | 1 - File stores were unconditionally restored with internal pests set. |
| 23 | 1 - Duplex file store failure specified during SR. |

M_ADDRH Upper byte of mutilated fixed core data address and indicator bits:

Bit	Description
-----	-------------

- | | |
|-----|--|
| 23 | 0 - Indicates there may have been additional addresses that were mutilated and part of this same BINK. |
| 0-5 | Upper byte of address of mutilated fixed core data. |

M_ADDRL Lower 24 bits of address of mutilated fixed core data.

M_DATA Invalid contents of address mutilation.

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DATA: PERIPHERAL SYSTEM DATA

W0	W1	W2	W3	W4	W5
W6	W7	W8	W9	W10	W11
W12					

Defined as:

- W0 PUB hardware status.
- W1 PUB 0 software status.
- W2 PUB 1 software status.
- W3 Failing data.
- W4 Failing test.
- W5 Base SP 0 controller 0 software status.
- W6 Base SP 0 controller 1 software status.
- W7 Base SP 1 controller 0 software status.
- W8 Base SP 1 controller 1 software status.
- W9 NCLK chain 0 software status.
- W10 NCLK chain 1 software status.
- W11 NCLK chain 2 software status.
- W12 NCLK chain 3 software status.

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DATA: PERIPHERAL FAULT RECOGNITION RESULTS

PU4RESULT	PU4UTMN0	PU4FRPMD	PU4FRJRG	PBFR0000	TRINDEX
FAILTEST1	FAILDATA1	RELADDR1	FAILTEST2	FAILDATA2	RELADDR2
FAILTEST3	FAILDATA3	RELADDR3	FAILTEST4	FAILDATA4	RELADDR4
FAILTEST5	FAILDATA5	RELADDR5	FAILTEST6	FAILDATA6	RELADDR6
FAILTEST1	FAILDATA1	RELADDR1	FAILTEST2	FAILDATA2	RELADDR2
FAILTEST3	FAILDATA3	RELADDR3	FAILTEST4	FAILDATA4	RELADDR4
FAILTEST5	FAILDATA5	RELADDR5	FAILTEST6	FAILDATA6	RELADDR6

Defined as:

PU4RESULT	Fault recognition summary register.
PU4UTMNO	Unit and member ID register.
PU4FRPMD	Terminal FR program register.
PU4FRJRG	Save J register.
PBFR0000	Address of PBFR.
TRINDEX	Number of words appearing in this result printout.
FAILTESTn	Failing test information.
FAILDATAn	Failing test data. Nonzero bits represent failing bits. Look in PBFR for more detail on failing tests and bits.
RELADDRn	Relative address in PBFR where the bus looptest or controller access test was called.

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DATA: PROGRAM STORE IDENTIFICATION DATA (PSFRID)

FAILING H_ADDR	FAILING ADDR	RCES	ST1BRS_H	ST1BRS_L	AC1SAL
AC1SAR	ST1SAL	ST1SAR	SCES	FAILING MEMN	VBOOT
BFAILRT	SYSSTAT	IBUSSTAT	SAMEMN	MNSUSP	BUSBUFFGCPS (CS ONLY) (0 FOR PS)
GCPACT_L	GCPACT_H	CR01ACT	CR10ACT	RESERVE	FLAGS1
GCPSTBY_L	GCPSTBY_H	CR01STBY	CR10STBY	RESERVE	FAFTRACK
CINS	C_ACT_EVEN	C_ACT_ODD	C_STBY_EVEN	C_STBY_ODD	REP_STORE
BUSSTATER	C_H_ACT_EVEN	C_H_ACT_ODD	C_H_STBY_EVEN	C_H_STBY_ODD	ST1ABC
FAILING MCODE	RESERVE				

Refer to the Call Store Identification Data data block for word definitions.

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DATA: PROGRAM STORE TEST RESULTS (PSFRTR)

BOOTTAG	VBOTSTA	BR	FR	GR	JR
KR	LR	XR	YR	ZR	MEMN
BOOTTAG	VBOTSTA	BR	FR	GR	JP
KR	LR	XR	YR	ZR	MEMN
BOOTTAG	VBOTSTA	BR	FR	GR	JR
KR	LR	XR	YR	ZR	MEMN

Defined as:

BOOTTAG	A program address which will identify the reason for the bootstrap entry.
VBOTSTA	The contents of the variable bootstrap status word which contains a bootstrap counter and a variable bootstrap state counter.
MEMN	Failing store member number.
BR,FR,GR,JR, KR,LR,XR, YR,ZR	CC register which contains the address of failing test.

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DATA: PSC AUXILIARY DATA (XTSI AUXILIARY DATA FOR PSC PROBLEMS)

DUMP SZ (SUBUNIT)	CLIENT_ID	0...0	0...0	0...0	FAULT_TYPE
D3U0	D3U0 USTAT	D3U0 STAT	D3U0 CESR	D3U0 CTL	D3U0 EXR
D3U1	D3U1 USTAT	D3U1 STAT	D3U1 CESR	D3U1 CTL	D3U1 EXR
D3U2	D3U2 USTAT	D3U2 STAT	D3U2 CESR	D3U2 CTL	D3U2 EXR
D3U3	D3U3 USTAT	D3U3 STAT	D3U3 CESR	D3U3 CTL	D3U3 EXR
D3U4	D3U4 USTAT	D3U4 STAT	D3U4 CESR	D3U4 CTL	D3U4 EXR
D3U5	D3U5 USTAT	D3U5 STAT	D3U5 CESR	D3U5 CTL	D3U5 EXR
D3U6	D3U6 USTAT	D3U6 STAT	D3U6 CESR	D3U6 CTL	D3U6 EXR
D3U7	D3U7 USTAT	D3U7 STAT	D3U7 CESR	D3U7 CTL	D3U7 EXR
SPU0	SPU0 USTAT	SPU0 STAT	SPU0 CESR	SPU0 CTL	SPU0 EXR
SPU1	SPU1 USTAT	SPU1 STAT	SPU1 CESR	SPU1 CTL	SPU1 EXR
SPU2	SPU2 USTAT	SPU2 STAT	SPU2 CESR	SPU2 CTL	SPU2 EXR
SPU3	SPU3 USTAT	SPU3 STAT	SPU3 CESR	SPU3 CTL	SPU3 EXR
SPU4	SPU4 USTAT	SPU4 STAT	SPU4 CESR	SPU4 CTL	SPU4 EXR
SPU5	SPU5 USTAT	SPU5 STAT	SPU5 CESR	SPU5 CTL	SPU5 EXR
SPU6	SPU6 USTAT	SPU6 STAT	SPU6 CESR	SPU6 CTL	SPU6 EXR
SPU7	SPU7 USTAT	SPU7 STAT	SPU7 CESR	SPU7 CTL	SPU7 EXR
SPU8	SPU8 USTAT	SPU8 STAT	SPU8 CESR	SPU8 CTL	SPU8 EXR
SPU9	SPU9 USTAT	SPU9 STAT	SPU9 CESR	SPU9 CTL	SPU9 EXR
SPU10	SPU10 USTAT	SPU10 STAT	SPU10 CESR	SPU10 CTL	SPU10 EXR
SPU11	SPU11 USTAT	SPU11 STAT	SPU11 CESR	SPU11 CTL	SPU11 EXR
IBU0	IBU0 USTAT	IBU0 STAT	IBU0 CESR	IBU0 CTL	IBU0 EXR
0...0	0...0	0...0	0...0	0...0	0...0
0...0	0...0	0...0	0...0	0...0	0...0
0...0	0...0	0...0	0...0	0...0	0...0

DUMP SZ => octal 6454

Subunit or D3Ux, SPUx, IBUx word layout:

Bit Description

23-12 Not used.

11-9 Unit Type (UT)

- 0 Digital Signal Level 3 Unit (D3U)
- 1 Signal Processing Unit (SPU)
- 2 In-Band Unit (IBU)
- 3 Reserved

8-0 Unit Type Member Number (UTMEM). D3U member number range 0-7. SPU member number range 0-11. IBU member number is 0.

Print all 21 PSCs for CB Error.

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Defined as:

DUMP SZ	Report Type and Block Size
CLIENT_ID	Suspect client identification number
D3Ux	Subunit Type Indicator
D3Ux USTAT	D3U Hardware Status
D3Ux STAT	D3U Software Status
D3Ux CESR	D3U Error Source Register
D3Ux CTL	D3U Control Register
D3Ux EXR	D3U Exercise Register
SPUx	Subunit Type Indicator
SPUx USTAT	SPU Hardware Status
SPUx STAT	SPU Software Status
SPUx CESR	SPU Error Source Register
SPUx CTL	SPU Control Register
SPUx EXR	SPU Exercise Register
IBUx	Subunit Type Indicator
IBUx USTAT	IBU Hardware Status
IBUx STAT	IBU Software Status
IBUx CESR	IBU Error Source Register
IBUx CTL	IBU Control Register
IBUx EXR	IBU Exercise Register
FAULT_TYPE	Internal value for development only

NOTE: Where x is the register number of the subunit.

DATA: PSC CIRCUIT PACK AUXILIARY DATA (XTSI AUXILIARY DATA FOR PSC CIRCUIT PACK ERRORS)

DUMP SZ	0....0	0....0	0....0	0....0	0....0
unit	unit USTAT	unit STAT	unit CESR	unit CTL	unit EXR

Where unit is either D3Ux, SPUx or IBUx.

DUMP SZ for D3U => octal 10030
DUMP SZ for SPU => octal 11030
DUMP SZ for IBU => octal 12030

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This auxiliary block is printed if a D3U/SPU/IBU hardware fault is detected.

Defined as:

DUMP SZ	Report Type and Block Size.
D3UX/SPUX/IBUX	Subunit type indicator.
D3UX/SPUX/IBUX STAT	D3U/SPU/IBU Software Status.
D3UX/SPUX/IBUX USTAT	D3U/SPU/IBU Hardware Status.
D3UX/SPUX/IBUX CESR	D3U/SPU/IBU Error Register.
D3UX/SPUX/IBUX CTL	D3U/SPU/IBU Control Register.
D3UX/SPUX/IBUX EXR	D3U/SPU/IBU Exercise Register.

DATA: PSC SOFTWARE ERROR AUXILIARY DATA (XTSI auxiliary data for D3U shared memory)

D3U subunit shared memory auxiliary data dump.

DUMP SZ	0...0	ER_CODE_HIGH	ER_CODE_LOW	RTN_ADR_HIGH	RTN_ADR_LOW
D3UX	D3UX USTAT	D3UX STAT	D3UX CESR	D3UX CTL	D3UX EXR
WTT WD1	WTT WD2	WTT WD3	WTT WD4	WTT WD5	WTT WD6
WTT WD7	WTT WD8	WTT WD9	WTT WD10	WTT WD11	WTT WD12
WTT WD13	WTT WD14	WTT WD15	WTT WD16	WTT WD17	WTT WD18
WTT WD19	WTT WD20	WTT WD21	WTT WD22	WTT WD23	WTT WD24
WTT WD25	WTT WD26	WTT WD27	WTT WD28	WTT WD29	WTT WD30
WTT WD31	WTT WD32	WTT WD33	WTT WD34	WTT WD35	WTT WD36
WTT WD37	WTT WD38	WTT WD39	WTT WD40	WTT WD41	WTT WD42
WTT WD43	WTT WD44	WTT WD45	WTT WD46	WTT WD47	WTT WD48
WTT WD49	WTT WD50	WTT WD51	WTT WD52	WTT WD53	WTT WD54
WTT WD55	WTT WD56	WTT WD57	WTT WD58	WTT WD59	WTT WD60
WTT WD61	WTT WD62	WTT WD63	WTT WD64	WTT WD65	WTT WD66
WTT WD67	WTT WD68	TASK_ID	ERR_DATA1	ERR_DATA2	ERR_DATA3
ERR_DATA4	ERR_DATA5	ERR_DATA6	ERR_DATA7	ERR_DATA8	ERR_DATA9
ERR_DATA10	ERR_DATA11	ERR_DATA12	ERR_DATA13	ERR_DATA14	ERR_DATA15
STACK WD1	STACK WD2	STACK WD3	STACK WD4	STACK WD5	STACK WD6
STACK WD7	STACK WD8	STACK WD9	STACK WD10	STACK WD11	STACK WD12
STACK WD13	STACK WD14	STACK WD15	STACK WD16	STACK WD17	STACK WD18

DUMP SZ => 10344

Each row of Work Task Table (WTT) Data Dump Block represents 4 32 bits Data Words packed into 6 24 bits AUX Dump printout. Following shows the layout of WTT Data Words packed into the AUX DUMP.

11111111 111XX222 22222222 33333333 333XX444 44444444

Each number represent one 32 bits WTT Data Word. X will be printed as 0 in the printout.

NOTE: Not all the data in this printout is relevant to the craft. Many of the data in this printout

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is for development to debug error. Refer to the Maintenance Reference Handbook for relevant data on this printout.

NOTE: Working Task Table takes up 68 words in the AUX DUMP. This section of the report involves some data repacking to fit the 32-bits words in the printout into some easily readable form. Each line in the AUX DUMP can have a maximum of 4 32-bits words. See example in the table on how the data words are repacked.

The Working Task Table holds a maximum of 15 entries. There are 3 words per entry.

1st 32-bit word - Task Address

2nd 32-bit word - Time of Execution

3rd 32-bit word - Previous Time of Execution

Defined as:

DUMP SZ — Report Type and Block Size

ER_CODE_HIGH — High 8 bits of a 32-bit Error Code

ER_CODE_LOW — Low 24 bits of a 32-bit Error Code

RTN_ADR_HIGH — High 8 bits of a 32-bit Return Address

RTN_ADR_LOW — Low 24 bits of a 32-bit Return Address

WTT WDXX — Working Task Table

TASK_ID — Task Executing at the time of interrupt

ERR_DATAYY — Specific Error information for a particular fault

STACK WDZZ — First 12 words in the PSC's Stack

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DATA: PSC SOFTWARE ERROR AUXILIARY DATA (XTSI auxiliary data for SPU shared memory)

SPU subunit shared memory auxiliary data dump.

DUMP SZ	0....0	ER_CODE_HIGH	ER_CODE_LOW	RTN_ADR_HIGH	RTN_ADR_LOW
SPUX	SPUX CSTAT	SPUX STAT	SPUX ESR	SPUX CTL	SPUX EXR
WTT WD1	WTT WD2	WTT WD3	WTT WD4	WTT WD5	WTT WD6
WTT WD7	WTT WD8	WTT WD9	WTT WD10	WTT WD11	WTT WD12
WTT WD13	WTT WD14	WTT WD15	WTT WD16	WTT WD17	WTT WD18
WTT WD19	WTT WD20	WTT WD21	WTT WD22	WTT WD23	WTT WD24
WTT WD25	WTT WD26	WTT WD27	TASK_ID	ERR_DATA1	ERR_DATA2
ERR_DATA3	ERR_DATA4	ERR_DATA5	ERR_DATA6	ERR_DATA7	ERR_DATA8
ERR_DATA9	ERR_DATA10	ERR_DATA11	ERR_DATA12	ERR_DATA13	ERR_DATA14
ERR_DATA15	ERR_DATA16	ERR_DATA17	ERR_DATA18	ERR_DATA19	ERR_DATA20
ERR_DATA21	ERR_DATA22	ERR_DATA23	ERR_DATA24	ERR_DATA25	ERR_DATA26
ERR_DATA27	ERR_DATA28	ERR_DATA29	ERR_DATA30	ERR_DATA31	ERR_DATA32
ERR_DATA33	ERR_DATA34	ERR_DATA35	ERR_DATA36	ERR_DATA37	ERR_DATA38
ERR_DATA39	ERR_DATA40	ERR_DATA41	ERR_DATA42	ERR_DATA43	ERR_DATA44
ERR_DATA45	ERR_DATA46	ERR_DATA47	ERR_DATA48	ERR_DATA49	ERR_DATA50
ERR_DATA51	ERR_DATA52	ERR_DATA53	ERR_DATA54	ERR_DATA55	ERR_DATA56
ERR_DATA57	ERR_DATA58	ERR_DATA59	ERR_DATA60	ERR_DATA61	ERR_DATA62
ERR_DATA63	ERR_DATA64	ERR_DATA65	ERR_DATA66	ERR_DATA67	ERR_DATA68
ERR_DATA69	ERR_DATA70	ERR_DATA71	ERR_DATA72	ERR_DATA73	ERR_DATA74

DUMP SZ => octal 11344

Each row of Work Task Table (WTT) Data Dump Block represents 4 32 bits Data Words packed into 6 24 bits AUX Dump printout. Following shows the layout of WTT Data Words packed into the AUX DUMP.

11111111 111XX222 22222222 33333333 333XX444 44444444

Each number represent one 32 bits WTT Data Word. X will be printed as 0 in the printout.

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DATA: PSC SOFTWARE ERROR AUXILIARY DATA (XTSI auxiliary data for IBU shared memory)

IBU subunit shared memory auxiliary data dump.

DUMP SZ	0....0	ER_CODE_HIGH	ER_CODE_LOW	RTN_ADR_HIGH	RTN_ADR_LOW
IBUX	IBUX CSTAT	IBUX STAT	IBUX ESR	IBUX CTL	IBUX EXR
WTT WD1	WTT WD2	WTT WD3	WTT WD4	WTT WD5	WTT WD6
WTT WD7	WTT WD8	WTT WD9	WTT WD10	WTT WD11	WTT WD12
WTT WD13	WTT WD14	WTT WD15	WTT WD16	WTT WD17	WTT WD18
WTT WD19	WTT WD20	WTT WD21	WTT WD22	WTT WD23	WTT WD24
WTT WD25	WTT WD26	WTT WD27	TASK_ID	ERR_DATA1	ERR_DATA2
ERR_DATA3	ERR_DATA4	ERR_DATA5	ERR_DATA6	ERR_DATA7	ERR_DATA8
ERR_DATA9	ERR_DATA10	ERR_DATA11	ERR_DATA12	ERR_DATA13	ERR_DATA14
ERR_DATA15	ERR_DATA16	ERR_DATA17	ERR_DATA18	ERR_DATA19	ERR_DATA20
ERR_DATA21	ERR_DATA22	ERR_DATA23	ERR_DATA24	ERR_DATA25	ERR_DATA26
ERR_DATA27	ERR_DATA28	ERR_DATA29	ERR_DATA30	ERR_DATA31	ERR_DATA32
ERR_DATA33	ERR_DATA34	ERR_DATA35	ERR_DATA36	ERR_DATA37	ERR_DATA38
ERR_DATA39	ERR_DATA40	ERR_DATA41	ERR_DATA42	ERR_DATA43	ERR_DATA44
ERR_DATA45	ERR_DATA46	ERR_DATA47	ERR_DATA48	ERR_DATA49	ERR_DATA50
ERR_DATA51	ERR_DATA52	ERR_DATA53	ERR_DATA54	ERR_DATA55	ERR_DATA56
ERR_DATA57	ERR_DATA58	ERR_DATA59	ERR_DATA60	ERR_DATA61	ERR_DATA62
ERR_DATA63	ERR_DATA64	ERR_DATA65	ERR_DATA66	ERR_DATA67	ERR_DATA68
ERR_DATA69	ERR_DATA70	ERR_DATA71	ERR_DATA72	ERR_DATA73	ERR_DATA74

DUMP SZ => octal 12344

Each row of Work Task Table (WTT) Data Dump Block represents 4 32 bits Data Words packed into 6 24 bits AUX Dump printout. Following shows the layout of WTT Data Words packed into the AUX DUMP.

11111111 111XX222 22222222 33333333 333XX444 44444444

Each number represent one 32 bits WTT Data Word. X will be printed as 0 in the printout.

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DATA: SCLK CRITICAL REGISTERS (SCFR)

SK4STAT*	SK4STAT	SK4ASWF	SK4PASWF	SK4HTSF+	SK4HTSF**	CONT 0
SK4STAT*	SK4STAT	SK4ASWF	SK4PASWF	SK4HTSF+	SK4HTSF**	CONT 1

* Software Status
+ Counter A (HIGH)
** Counter B (HIGH)

DATA: SCS AUXILIARY DATA (for base level maintenance)

BSIZE	KIND	HEADER	DATA0	DATA1	DATA2
DATA3	DATA4	DATA5	DATA6	DATA7	DATA8
DATA9	DATA10	DATA11	DATA12	DATA13	DATA14
DATA15	MBPTRS*	SDMPTR*	MBSTAT*	SOFTPST0*	0...0
SCUOS0*					

NOTE: Only present for illegitimate reports, otherwise all zeros.

BSIZE	Block size.
KIND	Kind of report (illegitimate or autonomous).
HEADER	Frame report header word (from the maintenance buffer).
DATA0 - DATA15	Frame report data words 00-15 (from the maintenance buffer).
MBPTRS*	Maintenance buffer pointers.
SDMPTR*	Shadow maintenance buffer pointer.
MBSTAT*	Maintenance processor buffer status.
SOFTPST0*	Software service circuit unit (SCU) pest 0 (for SCUs 00-15).
SCUOS0*	Out of SCU summary (for SCUs 00-15).

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DATA: SCS CRITICAL REGISTERS (for F-level and Interject)

CSTATUS	HWSTATR	MADATA	FSTATUS	SCUOS	CESR
PEST	CONTROL	EBLKSTATL	EBLKDATAH	EBLKADR	GRESR
GRCNTRM	GADRM0	GADRM1	EXESR	EXCSTATML	EXCSTATMH
EXFPTR	EXPC	EXSANTIM	EXSTKBL	EXSTKBH	EXSTRPTR
EXINTR	RLBPTR	WLPBPTR	RDBPTR	WDBPTR	MTC
SDOWMTC	MBSTAT	SCU0ESR	SCU1ESR	SCU2ESR	SCU3ESR
SCU4ESR	SCU5ESR	SCU6ESR	SCU7ESR	SCU8ESR	SCU9ESR
SCU10ESR	SCU11ESR	SCU12ESR	SCU13ESR	SCU14ESR	SCU15ESR
FWERRBUF0	FWERRBUF1	FWERRBUF2	FWERRBUF3	FWERRBUF4	FWERRBUF5
FWERRBUF6	FWERRBUF7	FWERRBUF8	FWERRBUF9	EBMEMRST	EBLNKADR
EBLNKSTATL	EBLNKSTATH	0...0	0...0	0...0	0...0
MEMN	XLATE	5...5	5...5	5...5	5...5

NOTE: UPPER HALF = CONTROLLER 0
LOWER HALF (not shown) = CONTROLLER 1

Defined as:

CSTATUS	Controller software status.
HWSTATR	Controller hardware status.
MADATA	MA data response.
FSTATUS	Frame software status.
SCUOS	Service circuit unit (SCU) software out-of-service (OOS) status.
CESR	Controller primary error source register (ESR).
PEST	Controller programmable error source trigger (PEST) register.
CONTROL	Controller control register.
EBLKSTATL	Extended bus link status low register.
EBLKDATAH	Extended bus link status high register.
EBLKADR	Extended bus link address register.

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GRESR	Global ram esr.
GRCNTRM	Global ram control register memory.
GADRM0	Global address memory 0.
GADRM1	Global address memory 1.
EXESR	Execute (EXEC) ESR.
EXCSTATML	EXEC control/status register memory low.
EXCSTATMH	EXEC control/status register memory high.
EXFPTR	EXEC frame pointer.
EXPC	EXEC program counter.
EXSANTIM	EXEC sanity timer.
EXSTKBL	EXEC stack boundary register low.
EXSTKBH	EXEC stack boundary register high.
EXSTRPTR	EXEC stack pointer.
EXINTR	EXEC interrupt/mask register.
RLBPTR	LP buffer read pointer.
WLPBPTR	LP buffer write pointer.
RDBPTR	Digit buffer read pointer.
WDBPTR	Digit buffer write pointer.
MTC	Maintenance buffer pointer.
SDOWMTC	Shadow maintenance buffer pointer.
MBSTAT	Maintenance buffer status.
SCU0ESR-SCU15ESR	Service circuit unit (SCU) 0-15 primary ESRs.
FWERRBUF0-FWERRBUF9	Firmware error register and buffer words 0-9. FWERRBUF0 contains the F-level/interject level error code. FWERRBUF1-FWERRBUF9 contains additional information based on the error code.
EBMEMRST	Extended bus memory reset.
EBLNKADR	Extended bus link address memory.
EBLNKSTATL	Extended bus link status low memory.
EBLNKSTATH	Extended bus link status high memory.
MEMN	Service circuit system (SCS) member number.
XLATE	Base translation address.

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DATA: SP INTERNAL REGISTERS (SPIR)

SP4ESR2	SP4ESR2	SP4WPEST	SP4WPEST	SP4MAR	SP4MAR
SP4MDR	SP4MDR	SP4CDR	SP4CDR	SP4MXAR	SP4MXAR
SP4MXWR	SP4MXWR	SP4MXHR	SP4MXHR	SP4MFWR	SP4MFWR
SP4DPWR	SP4DPWR	SP4DPWAUX	SP4DPWAUX	SP4TBSR	SP4TBSR
SP4PLSR	SP4PLSR	SP4EDST	SP4EDST	SP4EDSTM	SP4EDSTM
SP4SDST	SP4SDST	SP4AP33	SP4AP33	SP4SDSTM	SP4SDSTM
SP4MMST	SP4MMST	SP4MMSTM	SP4MMSTM	SP4MSEC	SP4MSEC
SP4XMC	SP4XMC	SP4PSTAT	SP4PSTAT	SP4FHPB	SP4FHPB
SP4FSZB	SP4FSZB	SP4FLPB	SP4FLPB	SP4FDGB	SP4FDGB
10SP4FDPI	SP4FDPI	SP4FDPO	SP4FDPO	SP4MALLO	SP4MALIO
SP4MALLZ	SP4MALLZ	SP4MZOZ	SP4MZOZ	SP4MOZO	SP4MOZO
SP4MEMZ	SP4MEMZ	SP4MEMO	SP4MEMO	SP4SPECT	SP4SPECT
SP4SVMEMA	SP4SVMEMA	SP4SVMEMD	SP4SVMEND		

The following is additional data if unit was an SP2:

				SP4ESR3	SP4ESR3
SP4DTARA	SP4DTARA	SP4DTARB	SP4DTARB	SP4DTDOPA	SP4DTDOPA
SP4DTDOPB	SP4DTDOPB	SP4DTBST	SP4DTBST	SP4DTCNT	SP4DTCNT
SP4DTSQFF	SP4DTSQFF	SP4DTSANT	SP4DTSANT	SP4DTRCVL	SP4DTRCVL
SP4DTRCVU	SP4DTRCVU				

NOTE 1: Columns 1, 3, and 5 are devoted to controller 0; columns 2, 4, and 6 are devoted to controller 1.

NOTE 2: SP2 words are printed in an SP1 printout but the data is not usable.

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DATA: STANDBY CC BUS NODE DATA PART 1 (PART 2, PART 3, PART 4)

BNA_WD0(000)	BNA_WD1(000)	BNA_WD2(000)	BNA_WD0(001)	BNA_WD1(001)	BNA_WD2(001)
.	.	.	.	.	.
.	.	.	.	.	.
.	.	.	.	.	.
BNA_WD0(040)	BNA_WD1(040)	BNA_WD2(040)	BNA_WD0(041)	BNA_WD1(041)	BNA_WD2(041)

NOTE: Each part contains a variable list report from entry 000 to 041 where entry 000 is the oldest in time and entry 041 is the most recent in time.

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Defined as:

BNA_WD0 Bus Node Arbiter Word 0.

Bit Meaning

0-5 Upper bits of the port address.

6 Read control signal.

7 Control parity signal.

8-9 Port identification information.

Number Port Identification

0 = DNA

1 = XNA

2 = FNA

3 = IBA

10-17 Control bits for CC or IFB based on active port identification information.

BUS NODE CONTROL BITS - CENTRAL CONTROL

Bit Meaning

10 Write control signal from the data node.

11 Maintenance control signal from the data node.

12 Control signal from the data node.

13 GCP control signal from the data node.

14 Control signal from the index node.

15 Write request signal from the data node.

16 Interface Bus grant to data node.

17 Not used.

BUS NODE CONTROL BITS - INTERFACE BUS

Bit Meaning

10 Write control signal from the Interface Bus Controller.

11 Maintenance control signal from the Interface Bus Controller.

12 Control signal from the Interface Bus Controller.

13 Word DMA request from the Interface Bus Controller.

14 Not used.

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18-20 Access identification information.

Number Identification

0 = NA

1 = CS

2 = PS

3 = PROM

4 = MMIO

5 = Buffer Bus

23 Entry valid bit used by software.

Number Identification

0 = Invalid

1 = Valid

BNA_WD1 Bus Node Arbiter Word 1.

Bit Meaning

0-23 Address on the port.

BNA_WD2 Bus Node Arbiter Word 2.

Bit Meaning

Bus Node operation results (0-5).

0 All Seems Well (ASW).

1 Data Parity Failure (DPF).

2 All Seems Well Failure (ASWF).

3 Node Attempted Illegal Access (NAIA).

4 Control Parity B Source (CPBS)

5 Controller or Client D Source (CLIDS).

6-13 Number of the entry in the raw data bin. This number can be used to identify what ports were active at the same time.

14-16 Internal fault recovery results.

17 PS segment number

18-21 CS segment number

22 PS segmenting enabled

23 CS segmenting enabled

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DATA: STANDBY CC EXECUTION PIPELINE HISTORY

SCA(00)	SDA_H(00)	SDA(00)	EPH_RESULT(00)
.	.	.	.
.	.	.	.
.	.	.	.
SCA(15)	SDA_H(15)	SDA(15)	EPH_RESULT(15)

NOTE: Entry 00 is the oldest in time and entry 15 is the most recent in time.

Defined as:

SCA Saved Current Address.

Bit Meaning

0-23 The address of an instruction that left indexing.

SDA_H Saved Data Address. (High order bits)

Bit Meaning

0-6 The high order bits of the 30 bit Saved Data Address (SDA). The complete data address is determined by concatenating SDA_H with SDA.

SDA Saved Data Address. (Low order bits)

Bit Meaning

0-23 The low order bits of the 30 bit SDA. The complete data address is determined by concatenating SDA_H with SDA.

NOTE: The data address (from concatenation of SDA_H and SDA) applies only when the SDA/EPH valid bit is set in the EPH_RESULT field. A valid SDA entry must be confirmed with the source listing to verify that the SDA applies to the SCA.

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EPH_RESULT Execution pipeline history (EPH) result. Applies only when the SDA/EPH valid bit is set in the EPH_RESULT field.

This word represents the different pipeline states and completion of an instruction located at SCA.

Bit Meaning

0 Instruction completion bit. If set, instruction was determined to have completed. If not set, instruction completion could not be determined.

3-7 Final pipeline state of the instruction. (Refer to TABLE E for a list of pipeline states).

9-13 Initial pipeline state of the instruction. (Refer to TABLE E for a list of pipeline states).

15-17 Operation type of the instruction.

0 = The instruction that left indexing was an INDEX ONLY operation and does not require a decoded instruction register to execute.

1 = The instruction that left indexing was a READ operation and requires at least 1 decoded instruction register to execute.

2 = The instruction that left indexing was a WRITE operation and requires at least 1 decoded instruction register to execute.

3 = The instruction that left indexing was a NON-MEMORY operation and requires at least 1 decoded instruction register to execute.

4 = The instruction that left indexing was a GCP operation and does not require a decoded instruction register to execute.

5 = The instruction that left indexing was a STACK operation and requires at least 1 decoded instruction register to execute.

23 SDA/EPH data is valid if set.

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DATA: STANDBY CC REGISTERS (CLEVST)

ST1FR	ST1GR	ST1JR	ST1KR	ST1LR	ST1XR
ST1YR	ST1ZR	ST1SR	ST1SC	ST1CES	ST1IBR
ST1INS	ST1INJ	ST1ILA	ST1ILR	ST1ITR	ST1INH
ST1CSC	ST1SAT	ST1PCR	ST1MCLK	ST1LIT	ST1DLR
ST1LPA	ST1UPA	ST1ACT	ST1ER	ST1PRM	ST1PRL
ST1LPI	ST1PES	ST1PSC	ST1PSQ	ST1RP0	ST1RP1
ST1PM0	ST1PM1	ST1ABC	ST1SAL	ST1SAR	ST1FIS
ST1EPS	ST1IFR	ST1MMR	ST1MSR	ST1MCO(H)	ST1MCO(L)
ST1MCD(H)	ST1MCD(L)	ST1MCP	ST1CCS(H)	ST1CCS(L)	ST1CUI
ST1FCT	ST1FCE	ST1FES	ST1FEE	ST1FER	ST1FST
ST1FLA(H)	ST1FLA(L)	ST1FLD(H)	ST1FLD(L)	ST1FLT(H)	ST1FLT(L)
ST1FRU(H)	ST1FRU(L)	ST1FRL(H)	ST1FRL(L)	ST1FIP	ST1CLE

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DATA: STANDBY IFBC STACK

ST1FST_HI	ST1FST_LOW	ST1FLT_HI	ST1FLT_LOW	ST1FLA_HI	ST1FLA_LOW
ST1FLD_HI	ST1FLD_LOW	ST1FST_HI	ST1FST_LOW	ST1FLT_HI	ST1FLT_LOW
ST1FLA_HI	ST1FLA_LOW	ST1FLD_HI	ST1FLD_LOW	ST1FST_HI	ST1FST_LOW
ST1FLT_HI	ST1FLT_LOW	ST1FLA_HI	ST1FLA_LOW	ST1FLD_HI	ST1FLD_LOW
ST1FST_HI	ST1FST_LOW	ST1FLT_HI	ST1FLT_LOW	ST1FLA_HI	ST1FLA_LOW
ST1FLD_HI	ST1FLD_LOW	ST1FST_HI	ST1FST_LOW	ST1FLT_HI	ST1FLT_LOW
ST1FLA_HI	ST1FLA_LOW	ST1FLD_HI	ST1FLD_LOW	ST1FST_HI	ST1FST_LOW
ST1FLT_HI	ST1FLT_LOW	ST1FLA_HI	ST1FLA_LOW	ST1FLD_HI	ST1FLD_LOW

Defined as:

ST1FST_HI Upper byte of standby IFBC status stack
 ST1FST_LOW Lower bytes of standby IFBC status stack
 ST1FLT_HI Upper byte of standby IFBC last transaction stack
 ST1FLT_LOW Lower bytes of standby IFBC last transaction stack
 ST1FLA_HI Upper byte of standby IFBC last transfer address stack
 ST1FLA_LOW Lower bytes of standby IFBC last transfer address stack
 ST1FLD_HI Upper byte of standby IFBC last transfer data stack
 ST1FLD_LOW Lower bytes of standby IFBC last transfer data stack

DATA: TMS CRITICAL REGISTERS (TMSCR)

TG4STAT	TG4STRD	TG4ESR+0	TG4ESR+1
TG4STAT	TG4STRD	TG4ESR+0	TG4ESR+1

NOTE: The first line supplies information for controller 0; the second line supplies information for controller 1.

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DATA: TSI CRITICAL REGISTERS (NON XTSI;TSI CR)

TI4STAT*	TI4STAT	TI4ESR+0	TI4ESR+1	TI4ESR+2	TI4ESR+3
TI4ESR+4	TI4ESR+5	TI4ESR+6	TI4ESR+7	TI4ESR+10	TI4ESR+11
TI4ESR+12	TI4ESR+13	TI4ESR+14	TI4ESR+15	TI4ESR+16	TI4ESR+17
TI4ESR+20	TI4ESR+21	TI4ESR+22	TI4ESR+23	TI4ESR+24	TI4ESR+25
TI4ESR+26	TI4ESR+27	TI4ESR+30	TI4ESR+31		

TI4STAT*	TI4STAT	TI4ESR+0	TI4ESR+1	TI4ESR+2	TI4ESR+3
TI4ESR+4	TI4ESR+5	TI4ESR+6	TI4ESR+7	TI4ESR+10	TI4ESR+11
TI4ESR+12	TI4ESR+13	TI4ESR+14	TI4ESR+15	TI4ESR+16	TI4ESR+17
TI4ESR+20	TI4ESR+21	TI4ESR+22	TI4ESR+23	TI4ESR+24	TI4ESR+25
TI4ESR+26	TI4ESR+27	TI4ESR+30	TI4ESR+31		

NOTE: The first five lines of the data block supply information for controller 0; the sixth through tenth lines supply information for controller 1.

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DATA: TSI CRITICAL REGISTERS (XTSI CR)

CSTATUS	STATR	MADATA	FSTATUS0	FSTATUS1	CESR
PEST	CNTL	EXCNTLSTATL	EXCNTLSTATH	XESR	GESR
GCNTL	GADDR0	GADDR1	EXINTR	CIAESCL	EXSANTIM
EXSTKBNDL	EXSTKBNDH	MBPTR	SHDWMBPTR	CIARADDRL	CIARADDRH
CIADATAL	CIADATAH	PSSNS	XTFERSUM	TSICTL	TSITSC
TSISTAT	TSITSEL	TSIEXR0	TSIEXR1	TSIESR0	TSIESR1
CSPETSC	FBICTL	PSCSUM	PSCPEST	PSCPSE	PSCPCMCO
PSCCBCO	ALFESR0	ALFESR1	TRPFER0	TRPFER1	ALNKER0
ALNKER1	CSPEsr0	CSPEsr1	CSPSTAT	CSPCTL0	CSPCTL1
CSPTCERR	PSCEQUIP	PSCINSRV	GRSVRCODE	GRSVCAUSE	GRSVMISC1
GRSVMISC2	GRSVSP	GRSVSTK	GRSVFP	GRSVPC	GRSVLOAD
GRSVCHKSUM	CTLEQIP	0.....0	0.....0	0.....0	0.....0
MEMN	XLATE	7.....7	7.....7	7.....7	7.....7

NOTE: UPPER HALF = CONTROLLER 0
LOWER HALF (not shown) = CONTROLLER 1

Defined as:

CSTATUS	Controller software status.
STATR	Controller hardware status
MADATA	MA data response
FSTATUS0	Frame software status WORD 0
FSTATUS1	Frame software status WORD 1
CESR	Controller primary Error Source Register (ESR)
PEST	Controller programmable error source inhibit register
CNTL	Controller control register
EXCNTLSTATL	EXEC Control/Status register Low 24 bits
EXCNTLSTATH	EXEC Control/Status register High 8 bits
XESR	EXEC ESR
GESR	Global Ram ESR
GCNTL	Global Ram Control Register
GADDR0	Global Ram Address Memory 0
GADDR1	Global Ram Address Memory 1
EXINTR	EXEC Interrupt Register
CIAESCL	CIA Error, Status, and Control Register
EXSANTIM	Sanity Timer Register
EXSTKBNDL	Stack Boundary Register Low 24 bits

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EXSTKBNH	Stack Boundary Register High 8 bits
MBPTR	Maintenance Buffer Pointer
SHDWMBPTR	Shadow Maintenance Buffer Pointer
CIARADDRL	CIA Read Address Register Low 24 bits
CIARADDRH	CIA Read Address Register High 8 bits
CIADATAL	CIA Control Bus Data Register Low 24 bits
CIADATAH	CIA Control Bus Data Register High 8 bits
PSSNS	Protection Switch Sense Register
XTFERSUM	XTF Fabric Error Summary Register
TSICTL	TSI Control Register
TSITSC	TSI Time-Slot Counter
TSISTAT	TSI Status Register
TSITSEL	TSI Time-Slot Error Latch
TSIEXR0	TSI Exercise Register 0
TSIEXR1	TSI Exercise Register 1
TSIESR0	TSI ESR 0
TSIESR1	TSI ESR 1
CSPETSC	Controller Signal Processor (CSP) Timeslot Counter Register
FBICTL	FBI Control Register
PSCSUM	PSC Error Summary Register
PSCPEST	PSC Error Source Inhibit Register
PSCPSE	PSC Read Protection Switch Enable Register
PSCPCMCO	PSC PCM Cutoff Register
PSCCBCO	PSC CB Cutoff Register
ALFESR0	ALF Error Register 0
ALFESR1	ALF Error Register 1
TRPFER0	ALF Primary TRPF Error Register 0
TRPFER1	ALF Primary TRPF Error Register 1
ALNKER0	ALF Primary A-Link Error Register 0
ALNKER1	ALF Primary A-Link Error Register 1
CSPESR0	CSP Error Source Register 0
CSPESR1	CSP Error Source Register 1
CSPSTAT	CSP Status Register

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CSPCTL0	CSP Control Register 0
CSPCTL1	CSP Control Register 1
CSPTCERR	CSP Trunk Counter Error Latch Register
PSCEQUIP	XTC PSC Equipage Array
PSCINSRV	XTC PSC In-service Array
GRSVRCODE	GRAM F-Level Error Code
GRSVCAUSE	GRAM Cause of F-Level Error
GRSVMISC1	GRAM Miscellaneous Firmware Buffer 1
GRSVMISC2	GRAM Miscellaneous Firmware Buffer 2
GRSVSP	GRAM Stack Pointer Register
GRSVSTK	GRAM Stack Contents Register
GRSVFP	GRAM Frame Pointer Register
GRSVPC	GRAM Program Counter Register
GRSVLOAD	GRAM EXEC Generic Load Identifier
GRSVCHKSUM	GRAM EXEC program checksum, low 16 bits
CTLEQUIP	Control Equipage
MEMN	Member number.
XLATE	

DATA: UNIQUE API DATA

AP1REINF_WD0	AP1REINF_WD1	AP1REINF_WD2	76543210	76543210	76543210
AP1RRCOV_WD0	AP1RRCOV_WD1	AP1RRCOV_WD2	76543210	76543210	76543210
AP1R_LSTATE_0	AP1R_LSTATE_1	AP1R_LSTATE_2	76543210	76543210	76543210
AP1R_CRSTATW	AP1R_CECODE	AP1R_CRSEQV	AP1R_CRTIMOT	AP1R_3BCMD	76543210
1APRPICSTAT	1APR_PICERR	1APRPICSTE	AP1RLKTSOUT	AP1R_TIMEWD	AP1RSWFLOUT
AP1RCFGFOUT	AP1R_RECOVR	AP1R_BL_ERR	AP1R_CNIBLM	AP1R_TBERSTAT	AP1R_CNIEWD
AP1R_CFIPS	AP1R_CFCST	AP1R_CFCER	AP1R_CFVIO	AP1R_CF3BER	AP1R_CFTOUT
AP1R_SFIPS	AP1R_SFCST	AP1R_SFCER	AP1R_SFVIO	AP1R_SF3BER	AP1R_SFTOUT
AP1RLTTAT	AP1RLTTAC0	AP1RLTTAC1			

NOTE: Octal data 76543210 means that the word was not used.

Defined as:

AP1REINF_WD0	Error information word for State 0. See TABLE K.
AP1REINF_WD1	Error information word for State 1. See TABLE K.
AP1REINF_WD2	Error information word for State 2. See TABLE K.

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AP1RRCOV_WD0	Recovery information word for State 0. See TABLE L.
AP1RRCOV_WD1	Recovery information word for State 1. See TABLE L.
AP1RRCOV_WD2	Recovery information word for State 2. See TABLE L.
AP1R_LSTATE_0	Link test results word for State 0. See TABLE M.
AP1R_LSTATE_1	Link test results word for State 1. See TABLE M.
AP1R_LSTATE_2	Link test results word for State 2. See TABLE M.
AP1R_CRSTATW	Command system response mode status word: (-----EEEEEEEEEDCBAAA) A Command system response state (AP1R_CRSTATE) 0 Idle state (1APR_IDLE) 1 Synchronous acknowledge sent (1APR_SACKS) 3 Command received (1APR_CMDR) B Command to API error (AP1R_CAPIER) C Command sequence violation (AP1R_CMDSEQV) D Command response timeout (AP1R_CRTIMOT) E Command response state code (AP1R_CRSTCODE), see TABLE N.
AP1R_CECODE	Command system response mode error word.
AP1R_CRSEQV	Command system response mode sequence violation word.
AP1R_CRTIMOT	Command system response mode timeout word.
AP1R_3BCMD	Command system response mode - 3B command and data.
1APRPICSTAT	PIC status word: (-----PONMLKJIHGFEDCBA) A PC emulation mode B Interrupt generated by 1B alert C Interrupt generated by 3B alert D Interrupt generated by 3B system interrupt E 1B alert function disabled F 3B alert function disabled G 1B error checking disabled H 3B error checking disabled I 1B side in loop around mode J 3B side in loop around mode K DMA suspended by 1B L DMA suspended by 3B

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M Interrupt generated by PIC error
N Interrupt generated by PC
O Interrupt generated by 1B system interrupt
P Interrupt generated by DGN

1APR_PICERR PIC error word: (-----PONMLKJIHGFEDCBA)

A BIC timeout
B Actual read in offset or size error
C 1B command register inhibited
D AU bus sequencer inhibited
E AU address range error
F Parity failure on AP bus
G Parity failure on PIC bus
H Pointer check failure
I Command check error
J Maintenance buffer address not loaded
K Illegal PIC RAM address specified
L PIC error
M BIC error
N DMA word count error
O Illegal circular buffer command
P Illegal instruction

1APRPICSTE PIC state word:

0 PIC has no status
1 PIC is active
2 PIC is standby
3 PIC is out of service

AP1RLKTSOUT Link test output (Latest results).

AP1R_TIMEWD Timing word: (DCBBBBBBBBBAAAAAAAAAAAAA)

A Counter for half hour timing (AP1R_TIMEEN)
B Counter for state sequence timing (AP1R_HALFEN)
C Half hour timing enable (AP1RTIMECNT)
D State sequence timing enable (AP1R_HALFTM)

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AP1RSWFLOUT	Switch fail output. If the API switch fails, this gives the reason for the failure using APFR error codes in TABLE N.
AP1RCFGFOUT	Configuration fail output. If the configuration of the API fails, this gives the reason for the failure using APFR error codes in TABLE N.
AP1R_RECOVR	Recovery Miscellaneous word: (GGGFEDCCCBBBBBAAA-----) - A The APS number (AP1R_APSNUM) - B Count of successful buffer initializations (AP1R_BICNT) - C State upon entry into fault recovery (AP1REENTRYST) - D APDRV initialization (AP1RINITAPD) - E 3B boot (AP1R_BOOT3B) - F Pre-duplex fail analysis in progress (AP1R_DFAL) - G Level of phase requested on 3B (AP1R_3BPHSE)
AP1R_BL_ERR	Base Level maintenance error word. To identify the source, refer to the text phrase printed in the BLM printout or refer to the BLM client items in the error information word (TABLE K, position A). Link Integrity Monitor (LIM) BLM Error Word: (NMLLLLLLLKJIIHGFEDDCBA) - A LIM command to API error (AP1RLIMCMER) - B LIM no access to command register (AP1RLIMNACC) - C LIM had a command time out (AP1RLIMCMTO) - D Type of API active, or standby (AP1RLIMTYPE) - E 3B configuration request detected (AP1R3BCNFRQ) - F 3B DMA is suspended (AP1R3BSUSP) - G The 3B is not responding (AP1RN3BRESP) - H Error when API status word was read (AP1RERRSTAT) - I Specific KCODE of this API (AP1RLIMKCO) - J Bad status no active API for this APS (AP1R_NACTIVE) - K Bad status APIs are active (AP1R_ACTACT) - L LIM time count (AP1RLIMTCNT) - M LIM time out (AP1RLIMTTO) - N LIM timing in progress (AP1RLIMTOP) APS message handler BLM Error Word in octal: 3 — No active API for this APS

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Disk system audit program BLM Error Word in octal:

- 2 — No disk request completions
- 5 — Circular buffer invalid
- 30 — Bad currency pointers
- 34 — No completions FMI non-1B file jobs
- 35 — No completions non-FMI jobs

Function Subs Message BLM Error Word:

- 36 — No message completions

AP1R_CNIBLM

CNI Base level error word: (-----EEEEEDCCBAAA)

A CNI Error Types (AP1R_BLTYPE):

- 0 Not used
- 1 Self pointer BLM (1APR_SPBLM)
- 2 Unload pointer BLM (1APR_UPBLM)
- 3 Buffer overflow BLM (1APR_OVFLBLM)
- 4 Load pointer BLM (1APR_LPBLM)
- 5 Client reported BLM (1APR_CLEBLM)
- 6 Message reported by APMH BLM (1APR_MSGBLM)

B Side that was in error (AP1R_BLSIDE):

- set — 1B side (1APR_1ABLM)
- reset — 3B side (1APR_3BBLM)

C Message direction at time of error (AP1R_BLDIR):

- 0 Direction not specified (1APR_DINBLM).
- 1 Direction was incoming to the 1B (1APR1AINBLM).
- 2 Direction was outgoing from the 1B (1APR1AOUTBLM).
- 3 Both directions (1APRBOTHBLM).

D CNI buffer initialization requested (AP1R_BLINITR)

E CNITBERSTAT field (AP1R_BLTBST)

AP1R_TBERSTAT

CNI traffic buffer error status word: (-----HHHHGGGGIJFEDCBA)

- A TB Self pointer fault (AP1R_TBSPFLT)
- B TB Unload pointer fault (AP1R_TBUPFLT)
- C TB Load pointer fault (AP1R_TBLPFLT)

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- D Side of fault (AP1R_TBFLTSIDE):
 - set — 1B side
 - reset — 3B side
- E Stream direction (AP1R_STRDRTN):
 - set — from 1B
 - reset — from APS
- F Current buffer in use pointer (AP1R_TBCBPTR):
 - set — TB
 - reset — CB
- J Invalid CNI buffer header pointer (AP1R_HDRINV)
- I Invalid pointer address (AP1R_ADDERR)
- G Buffer forced out of service (AAP1R_FRCOFF). (Diagnostics only)
- H TB scanning activated in octal (AP1RSRTB_STAT):
 - 1 Send TB for 1B active - Outgoing stream
 - 2 Receive TB for 1B active - Incoming stream
 - 4 Receive TB for APS active - Outgoing stream
 - 10 Send TB for APS active - Incoming stream

AP1R_CNIEWD

CNI Error Information Word: (-----EDCCBAAA)

- A CNI Error Types (AP1R_CNITYPE):
 - 0 Unused (1APR_UNUSED)
 - 1 Self pointer error (1APR_SPPTRF)
 - 2 Unload pointer error (1APR_UPPTRF)
 - 3 Buffer overflow error (1APR_TBOVFL)
 - 4 Load pointer error (1APR_LPPTRF)
 - 5 Client requested BLM error (1APR_TBCLE)
 - 6 Bad messages error detected by APMH (1APR_TBMSG)
- B Processor side that is in error (AP1R_SIDEERR):
 - set— 1B (1APRSODE_1A)
 - unset— 3B (1APRSODE_3B)
- C Message direction at time of error (AP1R_DIRERR):
 - 0 Direction not specified (1APRDIR_NULL).
 - 1 Direction was incoming to the 1B (1APRDIR_1AIN).

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	2 Direction was outgoing from the 1B (1APRDIR_1AOUT).
	3 Both directions (1APRDIR_BOTH).
D	CNI buffer initialization request (AP1R_CINITR).
	0 No init requested (1APR_NOINIT).
	1 Init requested (1APR_YESINIT).
E	Request that stream be stopped (AP1R_STOP):
	0 Do not stop CNI stream (1APR_NOSTOP)
	1 Stop CNI stream (1APR_YESSTOP)
AP1R_CFIPS	Command system initiate mode that contains command and data to be sent to the 3B Computer. See TABLE O. Configuration failure due to command system failure.
AP1R_CFCST	Command system initiate mode status word. See TABLE P. Configuration failure due to command system failure.
AP1R_CFCER	Command system initiate mode error word. See TABLE Q. Configuration failure due to command system failure.
AP1R_CFVIO	Command system initiate mode sequence violation word. See TABLE R. Configuration failure due to command system failure.
AP1R_CF3BER	Command system initiate mode 3B error word. See TABLE R. Configuration failure due to command system failure.
AP1R_CFTOUT	Command system initiate mode timeout word. See TABLE R. Configuration failure due to command system failure.
AP1R_SFIPS	Command system initiate mode that contains command and data to be sent to the 3B Computer. See TABLE O. Switch failure due to command system failures.
AP1R_SFCST	Command system initiate mode status word. See TABLE P. Switch failure due to command system failures.
AP1R_SFCER	Command system initiate mode error word. See TABLE Q. Switch failure due to command system failures.
AP1R_SFVIO	Command system initiate mode sequence violation word. See TABLE R. Switch failure due to command system failures.
AP1R_SF3BER	Command system initiate mode 3B error word. See TABLE R. Switch failure due to command system failures.
AP1R_SFTOUT	Command system initiate mode timeout word. See TABLE R. Switch failure due to command system failures.
AP1RLTTAT	API long term trouble analysis timer.
AP1RLTTAC0	API 0 long term trouble analysis counter.
AP1RLTTAC1	API 1 long term trouble analysis counter.

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TABLE K
ERROR INFORMATION WORD
(Where State 0, 1, 2 = PONMLKJIHGFEDDDCBAAAAAA)(AP1REINF_WD)

Position	Meaning
A	ERROR TYPE (AP1RPIC_TYP): P=0: PIC error type: 1 Circular buffer address and size do not agree with the PIC (1APRCIRBERR) 2 Pointer check failure (1APRPTCKFL) 3 Illegal circular buffer command (1APRILLCMD) 4 1B command register inhibited (1APRCMRINH) 5 AU bus sequencer inhibited (1APRSEQINH) 6 AU address range error Parity failure on AP bus (1APRADDRERR) 7 Parity failure on AP bus (1APRPFLAPB) 10 Parity failure on PIC bus (1APRPFLPIC) 11 Command check error (1APRCMDERR) 12 Maintenance buffer address not loaded (1APRMTCBUF) 13 Illegal PIC RAM address specified (1APRILLRAMA) 14 PIC error (1APRPICERR) 15 Illegal instruction (1APRILLINS) 20 TB load /end pointer fault (1APR_TBLPLT) 21 TB unload pointer fault (1APR_TBUPFLT) 22 TB self pointer fault (1APR_TBSPFLT) 23 TB address calculation error (1APR_ADDRERR) 24 TB invalid header pointer (1APR_HDRINVL) P=1: Base level client: 10 Link integrity monitor (LIM) 20 SAWS audit (SADK) 30 APS message handler (APMH) 40 Functional subroutines (FNCTSUBS) 50 Common network interface (APMHCNI)

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TABLE K
ERROR INFORMATION WORD (Continued)
(Where State 0, 1, 2 = PONMLKJIHGFEDDDCBBAAAAAA)

Position	Meaning
B	Hardware error type (AP1RHRD_TYP):
1	3B requested interrupt (function not implemented) (1APR3BINT)
2	API had a command parity fail on read (1APRCMDPFLR)
3	API mode error (1APRMODE)
C	Interrupt from API on board diagnostics (1APRDGNINT)
D	3B error type: (AP1R3B_TYP)
1	3B buffers have been initialized (1APR3BINITB)
2	3B has marked an API out-of-service (1APR3BAPIOS)
3	3B system has initialized (1APRSYSINIT)
4	API sent 3B a PIC interrupt (1APRPICINT)
7	Command system response mode failure (1APRCMDRFL)
E	3B interrupt (AP1R_3B_INT)
F	Dump ram from active API (AP1R_DRAM_A)
G	Interrupt from the active API (AP1R_ACTINT)
H	Interrupt from the standby API (AP1R_SBYINT)
I	Multiple PIC errors (AP1R_MULPIC)
J	PIC error detected (AP1RPIC_ERR)
K	No active API for this APS (AP1RNACTAPI)
L	Unknown command system sent from 3B (AP1RUKNCMD)
M	Error threshold exceeded (AP1RERRTHRS)
N	Buffer initialization required (AP1R_INITRQ)
O	No error found (AP1RNERRFND)
P	Base level recovery information (AP1R_BS_LEV)

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TABLE L
RECOVERY INFORMATION WORD
(Where State 0, 1, 2 = Q-----PONMLKJIHGFEDCBAAA)(AP1RRCV_INF)

Position	Meaning
A	Next recovery state (AP1R_STATE)
B	APS link tested OK (AP1R_LINKOK)
C	3B buffers were initialized (AP1R_3BINIT)
D	APS link tested no good (AP1R_LINKNG)
E	The standby API was removed (AP1R_SBYRMV)
F	Buffer initialization failed (AP1R_BIN_FL)
G	Buffer initialization OK threshold exceeded (AP1RBITHRES)
H	The configured API was no good (AP1R_CFGNG)
I	The switch was no good (AP1R_SW_NG)
J	No configuration was found (AP1RNCFGFND)
K	The configured API was OK (AP1R_CFG_OK)
L	The switch was OK (AP1R_SW_OK)
M	The buffer initialization was successful (AP1RBI_OK)
N	APDRV was initialized (AP1R_APDINIT)
O	3B has been booted (AP1R_3BBOOT)
P	CNI stream init successful (AP1R_CNIINOK)
Q	Pre-duplex fail analysis in progress (AP1R_DPFAF)

TABLE M
TEST LINK RESULTS
(Where State 0, 1, 2 = -----DCBA)(AP1R_LSTATE)

Position	Meaning
A	API cannot be reached (AP1R_LAPIFAL)
B	3B cannot be reached (AP1R_L3BFAL)
C	3B initialized com_buf (AP1R_L3BINIT)
D	1B to 3B link OK (AP1R_LNKOK)

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TABLE N
APFR ERROR CODES

100	Failed to get buffer information from message handler
101	API command failure
102	Failed to restore common hardware
103	Failed, forced by ROS key
104	Failed, unit active main
105	Failed, bus out of service
106	Failed, unit not in operational state
107	Unit type to KCODE conversion failed
110	Immediate fail return from message handler on sending message
111	MCC forced API out-of-service
112	Timeout, no message acknowledgement on comm buffer restore message to 3B
113	API command timeout
114	API command never started processing
115	Loop around message not in receiving buffer
116	Mate status fail, MEMN does not exist
117	Cannot access command register in the API
120	Incorrect final status detected
121	The test message has failed
122	The command system has failed - refer to fields h ¹ through m ¹ for reason of failure.
123	An attempt was made to restore active-active
124	Message handler failed to initialize com_buffer
125	No active API found for this APS
126	Active MEMN for this APS is not operational
127	Message handler failed to send message
130	Timeout waiting for message acknowledgement
131	Acknowledge message from 3B was no good
132	No active in-service API
133	Status shows active-active state
134	Message handler failed to initialize xcom_buf
135	Initial command system response failed
136	Command system not synchronized - sequence violation occurred

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TABLE N (Continued)
APFR ERROR CODES

137	SACK command system to interprocessor word failed
140	3B command system was not found
141	Command system response timeout in wait routine
142	CACK command system to interprocessor word failed
143	Received protocol command system expected command system command
156	3B command response time out (1APR_CMOTO)
201	APS member number out of range
202	Fail to restore out-of-service mate API before switching
203	Member number to base address conversion failed
204	Switch API failed due to the out-of-service mate API

TABLE O
COMMAND SYSTEM INITIATE MODE
(Command and data to be sent to the 3B, where AP1R_CFIPS,
AP1R_SFIPS = -----CCCCBBBBAAAAAAAAA)

Position	Meaning
A	Interprocessor commands:
0	Null command (1APR_NULL)
1	Unassigned
2	Synchronization command (1APR_SYNC)
3	Synchronous acknowledgement command (1APR_SACK)
4	IP_CMD command acknowledgment (1APR_CACK)
5	Reinitialize all COM_BUF resources including in-service APIs (1APINIT_COM)
6	Initialize in-service APIs to COM_BUF (1APRACT_COM)
7	Reinitialize all XCOM_BUF resources including in-service APIs (1APINITXCOM)
10	Configure API as specified (1APCONF_API)
11	APS error detected - 3B only (1APRERR_RPT)

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TABLE O
COMMAND SYSTEM INITIATE MODE (Continued)
(Command and data to be sent to the 3B, where AP1R_CFIPS,
AP1R_SFIPS = -----CCCCBBBBAAAAAAAAA)

Position	Meaning
12	PS 0 pump request (1APRPS0B_REQ). The specific quarter to be pumped is defined as follows and placed in the AP1R_IPDATA field of the interprocessor command: 1 = Pump the first quarter of PS 0 (1APR_FIRST) 2 = Pump the second quarter of PS 0 (1APR_SECOND) 3 = Pump the third quarter of PS 0 (1APR_THIRD) 4 = Pump the fourth quarter of PS 0 (1APR_FOURTH) 5 = Pump the fourth quarter of PS 0 (1APR_FIFTH)
13	Select logical 1B-file for normal request as specified (1APRUPD_REQ): 1 = Logical normal file (1APR_NORMAL) 2 = Logical update file (1APR_UPDATE)
14	Load PCRVPUMP into 3B main memory (1APRSR_REQ): 1 = PCRVPUMP copy at DADR 200 (1APR_COPY1)
15	Unassigned
16	Request initialization of APDRV (1APR_REQINIT)
17	Request to boot the 3B system (1APR_REQBOOT)
B	Member number to be configured if CONF_API command
C	Configuration state for member number if CONF_API command:
0	Unit not operational (1APR_NOOP)
1	API is active and in-service (1APR_ACT)
2	API is standby and in-service (1APR_SBY)
3	API is out-of-service (1APR_OOS)

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TABLE P
COMMAND SYSTEM STATUS - INITIATE MODE
(Where AP1R_CSSTATI = IHHHHHGGGFFF--EDCB---AAA)

Position	Meaning
A	Present command system state. Initiate Mode States (AP1R_PCSS):
0	Idle state (1APR_IDLE)
1	Synchronous command sent state (1APR_SYNCS)
2	Synchronous acknowledge received state (1APR_SACKR)
3	Command sent state (1APR_CMDS)
4	Command acknowledge received state (1APR_CACKR)
5	Null command sent state (1APR_NULLS)
B	Command to API error (AP1R_CAPIE)
C	Sequence violation - synchronized from 3B (AP1R_SEQV)
D	Timeout error (AP1R_TIMEO)
E	3B error while processing command (AP1R_3BERR)
F	Command to API error count (AP1R_CERRC)
G	Command to acknowledge timeout (AP1R_CATO)
H	Synchronize acknowledge timeout (AP1R_SATO)
I	Final timeout (AP1R_FTO)

TABLE Q
INITIATE MODE — COMMAND FAILURE LAYOUT
(Where AP1R_CFCER, AP1R_SFCER = CCCBBBBBBBBBBBBB---AAAAAA)

Position	Meaning
A	Failing command (AP1R_FACMD) - see TABLE S
B	Command error code (AP1R_CMD_EC) - see TABLE N
C	Command system state only if failure is in command system initiate mode (AP1R_CSTATE)

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TABLE R
COMMAND REGISTER LAYOUT
(CCCCCCCCCCCCCCCCBBAAAAAA)

Position	Meaning
A	Command operation code (AP1R_APIOP)- see TABLE S
B	Command disposition code(AP1R_APIDIS): 0 Command has been completed (1APR_COMP) 1 Command has failed (1APR_FAIL) 2 Command is in progress (1APR_IP) 3 Command has been loaded in the command register (1APR_LOAD)
C	Command data field (AP1R_APIDAT) 151515 Link integrity monitor OK code (1APR_LIMAOK) 152525 Link integrity monitor 3B configuration request (1APR_CNFRQ) 155555 Link integrity monitor 3B request 1B file duplex fail (1APR_DXF1AF)

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TABLE S
API COMMANDS

0	Invalid command (1APR_INVLD)
1	Mtc_sub size (both send and receive) (1APRMB_SZ)
2	Lower 16 bits of 1B send mtc_buf (1APRMB_LOSD)
3	Upper 6 bits of 1B send mtc_buf (1APRMB_UPSD)
4	Lower 16 bits of 1B receive mtc_buf (1APRMB_LORC)
5	Upper 6 bits of 1B send receive mtc_buf (1APRMB_UPRC)
6	Load RAM at 16-bit address from "my" send mtc_buf (1APRMB_LDRM)
7	Dump RAM at 16-bit address to "my" receive mtc_buf (1APRMB_DPRM)
10	Copy "my" sent mtc_buf to "other" receive mtc_buf (1APRMB_CPSD)
11	Copy "my" receive mtc_buf unload pointer to "other" send unload pointer (1APRMB_CPPT)
12	Send interrupt to other side (1APR_SD_INT)
13	Disable on board diagnostics (1APR_D_DGN)
14	Suspend DMA except for mtc_buf commands (1APR_SUSDMA)
15	Resume DMA from point of suspension (1APR_RESDMA)
16	Read 8-bit DMA job number (1APR_RDDMA)
17	Abort DMA job in progress, if any (1APR_ABTDMA)
20	Disable PIC loop around mode (1APR_D_LOOP)
21	Enable PIC loop around mode (1APR_E_LOOP)
22	Disable all error checks (1APR_D_ERCK)
23	Enable all error checks (1APR_E_ERCK)
24	Read 16-bit API status word (1APR_RDSTAT)
25	Clear through mask 16-bit API status word (1APR_MKSTAT)
26	Read 16 bit API error word (1APR_RDERR)
27	Clear through mask 16-bit error word (1APR_MKERR)
30	Read 16-bit API state word (1APR_RDSTE)
31	Write 16-bit API state word (1APR_WTSTE)
32	Initiate AU diagnostic helper (1APR_AUDGN)
33	Enable on board diagnostics (1APR_E_DGN)
34	Disable alert function (1APR_DALERT)
35	Enable alert function (1APR_EALERT)
36	Send 16-bit data to other processor (1APR_SDDATA)
37	Receive 16-bit data from other processor (1APR_RCDATA)
40	Disable PC emulation (1APR_D_PCEM)
41	Enable PC emulation (1APR_E_PCEM)
42	Send interprocessor data (IPD) to other side (1APR_IPD)
43	Read status/error word (TBERSTAT) (1APR_RDTBERST)
44	Update status/error word (TBERSTAT) (1APR_WTTBST)

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DATA: UNIQUE FS DATA (FSUNIQUE)

DRB0	DRB1	DRB2	DRB3	CAB0	CAB1
SAVJ	DDR	FS1ADDR	FS1IR0	FS1IR1	FS1ESR1
FS1ESR2	FS1ESR3	FS1ESR1M	FS1ESR2M	FS1RDRB0	FS1LDRB3
FS1RDRB1	FS1LDRB1	FS1RDRB2	FS1LDRB2	FS1RDRB3	FS1LDRB3
FS1RSTWDR	FS1LSTWDR	FS1RTRA	FS1LTRA	FS1CR01	FS1SPR0
FS1DIDC	FS1DS0	FS1DS1	FS1DS2	FS1DS3	FS1SMDRK
FS1SSJBS	FS1CR00	FS1EXCNT	FS1EUTCNTR	FS1FTRACTR0	FS1DC01
FS1DC1	FS1DC2	FS1DC3	FS1WDRBAR	FS1RSTAT0	FS1RSTAT1
FS1RSTAT2	FS1RSTAT3	FS1RSTAT0*	FS1RSTAT1*	FS1RSTAT2*	FS1RSTAT3*
FS1CR02					

Defined as:

DRB0 - DRB3	Disk request block for failing job.
CAB0	Client answer block 0.
CAB1	Client answer block 1.
SAVJ	SPPGM Address + 1 where error was detected.
DDR	DDR register.
FS1ADDR	Active DDR.
FS1IR0	Busy/idle REG 0.
FS1IR1	Busy/idle REG 1.
FS1ESR1	Error summary REG 1.
FS1ESR2	Error summary REG 2.
FS1ESR3	Error summary REG 3.
FS1ESR1M	Error summary REG 1 mate.
FS1ESR2M	Error summary REG 2 mate.
FS1RDRB* - FS1LDRB*	Right and left disk request registers for DRB word * (Where * = 0, 1, 2, or 3).
FS1RSTWDR - FS1LSTWDR	Right and left disk start word.
FS1RTRA - FS1LTRA	Right and left translated record address.
FS1CR01	Error control information.
FS1SPR0	Stop with interject register.
FS1DIDC	Disk indicators.

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FS1DS0 - FS1DS3	Disk shadow registers.
FS1SMDRR	Search and match register.
FS1SSJBS	Store sequencer jobs.
FS1CR00	Control read register 00.
FS1EXCNT	Exerciser error counter.
FS1EUTCNTR	Exerciser UTRA counter.
FS1ETRACR	Exerciser TRA counter.
FS1DC0 - FS1DC3	Disk counters 0 - 3.
FS1WDRBAR	Writable disk request block register.
FS1RSTAT0 - FS1RSTAT3	FS status for 4 FSs at interject or D-level entry.
FS1CR02	Control read register 2.

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DATA: UNIQUE MUP DATA.

MC1RCID0	MC1RMID0	MC1RSTA0U	MC1RSTA0	-----	MC1RCTL0
MC1RESR0U	MC1RESR0	MC1RDAT0U	MC1RDAT0	MC1RINST0U	MC1RINST0
MC1RRPLY0U	MC1RRPLY0	-----	-----	MC1RSTAT0	MC1RSTAT0A
-----	-----	MC1RSDAT0UB	MC1RSDAT0B	MC1RSINST0UB	MC1RSINST0B
MC1RCID1	MC1RMID1	MC1RSTA1U	MC1RSTA1	-----	MC1RCTL1
MC1RESR1U	MC1RESR1	MC1RDAT1U	MC1RDAT1	MC1RINST1U	MC1RINST1
MC1RRPLY1U	MC1RRPLY1	-----	-----	MC1RSTAT1	MC1RSTAT1A
-----	-----	MC1RSDAT1UB	MC1RSDAT1B	MC1RSINST1UB	MC1RSINST1B
MC1RFIB	MC1RFIB+1	MC1RFIB+2	MC1RSRTB	MC1RCTSWTB	MC1RLRTB
MC1RSIB	MC1RSIB+1	MC1RSIB+2	MC1RSRCB	-----	MC1RLRCB
MC1RSFIB	MC1RSFIB+1	MC1RSFIB+2	MC1RDTBLAB	MC1RBLMRAB	MC1RBLMFIB
MC1RST0FAB	MC1RST1FAB	MC1RCTSWFAB	MC1RST0FIB	MC1RST1FIB	-----
MC1RPGMAD	MC1RTSTAD	MC1RTSTOP	MC1RILFSAV	MC1RILGSAV	MC1RILJSAB
MC1RILKSAV	MC1RILLSAV	MC1RILXSAV	MC1RILYSAB	MC1RILZSAV	-----

OR

DATA: UNIQUE MUP DATA.

FREG	GREG	TREG	XREG	ZREG
------	------	------	------	------

Definedas:

MC1RCID0	MUP 0 client ID register. Bit Meaning 0-9 Circuit pack name
MC1RMID0	MUP 0 micro code ID register. Bit Meaning 0-9 Microcode name

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MC1RSTA0U	MUP 0 status register.
	Bit Meaning
	24 Command register is busy
	27 MUP has been reset
MC1RSTA0	MUP 0 status register.
	Bit Meaning
	0 Received data parity bit 0
	1 Received data parity bit 1
	2 Received data parity bit 2
	3 Received data parity bit 3
	4 Last cycle was read
	5 Last cycle was write
	6 Last cycle was block DMA
	7 Last cycle was word DMA
	8 Last cycle was client to client
	9 Operational interject active
	10 Maintenance interject active
	11 Maintenance interrupt active
	12 Block DMA request
	13 Word DMA request
	14 Client to client request
	16 MMIO request
	17 MUP trouble
	18 MUP not forced
	19 MUP not active
	20 Reply complete
	21 Reply in-progress
	22 Reply failure
	23 User option reply

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MC1RCTL0	MUP 0 control register. Bit Meaning 0 Client IFB enable 3 Operational interject enable 4 Maintenance interject enable 5 Maintenance interrupt enable 6 Operational interject clear 7 Maintenance interject clear 8 Maintenance interrupt clear 9 Indicates MUP is in-service 10 Indicates MUP is being updated 11 Reset client 12 MUP activity control 13 MUP trouble control 14 Clear reset indicator in MUP status register
MC1RESR0U	MUP 0 error summary register. Bit Meaning 24 User defined operational interject
MC1RESR0	MUP 0 error summary register. Bit Meaning 2 Detected no all seems well 3 Detected all seems well failure 4 Master detected data parity error 5 MUP detected data parity error 6 MUP detected control error 7 MUP detected unused address error 8 MUP detected address parity error 9 Sent all seems well failure 10 Client error - maintenance interject 11 IFB error - maintenance interrupt 16 Sanity timeout 17 68010 bus error

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	18	DRAM error
	19	Memory access error
	20	Both MUPs active
	21	Software detected error
	22	MUP forced in hardware
	23	User defined operational interject
MC1RDATA0U	MUP 0 data register.	
	Bit	Meaning
	24-31	Upper byte of data
MC1RDATA0	MUP 0 data register.	
	Bit	Meaning
	0-23	Lower 3 bytes of data
MC1RINST0U	MUP 0 instruction register.	
	Bit	Meaning
	24-31	Upper byte of instruction
MC1RINST0	MUP 0 instruction register.	
	Bit	Meaning
	0-23	Lower 3 bytes of instruction
MC1RRPLY0U	MUP 0 reply register.	
	Bit	Meaning
	24-31	Upper byte of reply register
MC1RRPLY0	MUP 0 reply register.	
	Bit	Meaning
	0-23	Lower 3 bytes of reply register
MC1RSTAT0	MUP 0 software status before fault processing.	
	Bit	Meaning
	0	MUP is troubled
	1	MUP is stopped
	3	MUP is active

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	4 MUP is standby
	5 MUP is forced in hardware
	9 Do not restore MUP
MC1RSTAT0A	MUP 0 software status after fault processing. Same as MC1RSTAT0
MC1RSDAT0UB	MUP 0 DATA register before the last stop/start instruction. Same as MC1RDAT0U
MC1RSDAT0B	MUP 0 DATA register before the last stop/start instruction. Same as MC1RDAT0
MC1RSINST0UB	MUP 0 instruction register before the last stop/start instruction. Same as MC1RINST0U
MC1RSINST0B	MUP 0 instruction register before the last stop/start instruction. Same as MC1RINST0
MC1RCID1	MUP 1 client ID register. Same as MC1RCID0
MC1RMID1	MUP 1 micro code ID register. Same as MC1RMID0
MC1RSTA1U	MUP 1 status register. Same as MC1RSTA0U
MC1RSTA1	MUP 1 status register. Same as MC1RSTA0
MC1RCTL1	MUP 1 control register. Same as MC1RCTL0
MC1RESR1U	MUP 1 error summary register. Same as MC1RESR0U
MC1RESR1	MUP 1 error summary register. Same as MC1RESR0
MC1RDAT1U	MUP 1 data register. Same as MC1RDAT0U
MC1RDAT1	MUP 1 data register. Same as MC1RDAT0
MC1RINST1U	MUP 1 instruction register. Same as MC1RINST0U
MC1RINST1	MUP 1 instruction register. Same as MC1RINST0
MC1RRPLY1U	MUP 1 reply register. Same as MC1RRPLY0U
MC1RRPLY1	MUP 1 reply register. Same as MC1RRPLY0
MC1RSTAT1	MUP 1 software status before fault processing. Same as MC1RSTAT0
MC1RSTAT1A	MUP 1 software status after fault processing. Same as MC1RSTAT0
MC1RSDAT1UB	MUP 1 data register before the last stop/start instruction. Same as MC1RDAT0U
MC1RSDAT1B	MUP 1 data register before the last stop/start instruction. Same as MC1RDAT0
MC1RSINST1UB	MUP 1 instruction register before the last stop/start instruction. Same as MC1RINST0U
MC1RSINST1B	MUP 1 instruction register before the last stop/start instruction. Same as MC1RINST0

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MC1RFIB	MUP fault information. Bit Meaning 0 MUP member number 3-4 MUPs software status on the IFB 1 Active 2 Standby 3 OOS 6-7 Method of entry into fault recovery 1 Interrupt 2 Interject 3 BLM 9-12 Fault type 1 No fault found - INJ 2 Both MUPs active - INJ 3 Memory access error - INJ 4 DRAM error - INJ 5 68000 bus error - INJ 6 Sanity time-out - INJ 7 Software generated error - INJ 8 Forced active - INJ 9 Time-out - BLM 10 DMA failed - BLM 11 Hardware-software mismatch - BLM 15 Multiply fault indicator 18-19 Starting state 21-22 Ending state
MC1RFIB+1	Fault information from fault previous to MC1RFIB.
MC1RFIB+2	Fault information from fault previous to MC1RFIB+1.

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MC1RSRTB	MUP short range timer.
	Bit Meaning
	0-17 Short range timer
MC1RCTSWTB	21 Short range timer enable
	MUP context switch timer.
	Bit Meaning
MC1RLRTB	0-9 Context switch timer
	21 Context switch timer enable
	22 Indicates a restore command has been sent
	23 Context switch abort indicator
MC1RSIB	MUP long range timer.
	Bit Meaning
	0-17 Long range timer
MC1RSIB	21 Long range timer enable
	Steps taken during fault processing
	Bit Meaning
	0 Determine INT/INJ type
	1 Both MUPs have same hardware activity state
	3 Both MUPs are active in software status
	4 Hardware - software match
	5 Other MUP was reset
	8 Recover both MUPs
	9 Remove standby MUP
	10 MUI failing address from MUP
	13 MUP / MUI access test
	14 Restart MUP
	15 Get MUP information
	19 Reset MUP
	20 Switch MUPs
	22 Switch context
	23 DTBL called

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MC1RSIB+1	Steps taken during fault processing for fault previous to MC1RSIB.
MC1RSIB+2	Steps taken during fault processing for fault previous to MC1RSIB+1.
MC1RSRCB	MUP short range counter. Bit Meaning 0-4 Number of force related entries.
MC1RLRCB	MUP long range counter. Bit Meaning 0-8 MUP 0 long range counter 12-20 MUP 1 long range counter
MC1RSFIB	Indicates which steps failed during fault processing. Same as MC1RSIB
MC1RSFIB+1	Indicates which steps failed during fault processing for fault previous to MC1RSFIB.
MC1RSFIB+2	Indicates which steps failed during fault processing for fault previous to MC1RSFIB+1.
MC1RDTBLAB	DTBL determination address.
MC1RBLMRAB	Return address of the caller of a BLM.
MC1RBLMFIB	Fault information from caller of a BLM.
MC1RST0FAB	State 0 failing address.
MC1RST1FAB	State 1 failing address.
MC1RCTSWFAB	Context switch failing address.
MC1RST0FIB	State 0 failing information: Bit Meaning 0 - 17 = Lower bits of MUP reply register 18 - 23 = Instruction status of restart instruction
MC1RST1FIB	State 1 failing information: Bit Meaning 0 - 23 = Lower bits of MUP reply register.
MC1RPGMAD	Program address at failure.
MC1RTSTAD	Test address at failure.
MC1RTSTOP	Test options: Bit Meaning 0 = Active CC failed 1 = Standby CC failed 2 = Store failed 3 = IFB failed

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- 4 = IFB client failed
- 5 = False response test failed
- 6 - 12 = Client unique failure information
 - 6 = MUP audit(s) failed
 - 7 = MUP audit(s) failed no dma data
 - 8 = Active CC failed
 - 9 = Standby CC failed
- 13 = Client delay segment break request flag
- 14 = Test standby configuration
- 15 = On standby configuration
- 16 = Run test on base level
- 17 = No PS test
- 18 = No CS test
- 19 = No CC test
- 20 = Test IFB controller
- 21 = Test IFB client
- 22 = Test store access
- 23 = False response test

MC1RILFSAV	F register at time of MUP access test failure.
MC1RILGSAV	G register at time of MUP access test failure.
MC1RILJSAV	J register at time of MUP access test failure.
MC1RILKSAV	K register at time of MUP access test failure.
MC1RILLSAV	L register at time of MUP access test failure.
MC1RILXSAV	X register at time of MUP access test failure.
MC1RILYSAV	Y register at time of MUP access test failure.
MC1RILZSAV	Z register at time of MUP access test failure.

FREG	Fault encountered by calling program.
GREG	Originator of BLM request.
TREG	Return address of caller.
XREG	Invalid MUP base address.
ZREG	Fault information passed by the calling program.

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DATA: UNIQUE SSD DATA

SS1RCID	SS1RMID	SS1RSTA	SS1RESR	SS1RDAT	SS1RLRTW
SS1RLRCW	SS10ROW40	SS10ROW41	SS10ROW42	SS10ROW43	SS10ROW44
SS10ROW45	SS10ROW46	SS10ROW50	SS10ROW51	SS10ROW52	SS10ROW53
SS10ROW54	SS10ROW55	SS10ROW56			

Defined as:

SS1RCID	SSD 0/1 CID register
SS1RMID	SSD 0/1 MID register
SS1RSTA	SSD 0/1 STA register
SS1RESR	SSD 0/1 ESR register
SS1RDAT	SSD 0/1 DAT register
SS1RLRTW	SSD long range timer word
SS1RLRCW	SSD long range counter word
SS10ROW40 - SS10ROW56	SSD 0/1 matrix

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DATA: VIF CRITICAL REGISTERS (VIFCR)

VC4STAT VC4VIUSTAT1

VC4R0_1 VC4R2_3 VC4R4_5 VC4R6_7 VC4R8_9 VC4R10_11
VC4R12_13 VC4R14_15

VC4R0_1 VC4R2_3 VC4R4_5 VC4R6_7 VC4R8_9 VC4R10_11
VC4R12_13 VC4R14_15

NOTE: The first line supplies information for controllers 0 and 1; the second and third lines supplies information for controller 0; the fourth and fifth lines supplies information for controller 1.

DATA: XA WINDOW INFORMATION

AC1SDA(H)	AC1SDA(L)	AC1XACTL	AC1XAWT	AC1XAWP0	AC1XAWP1
AC1XAWP2	AC1XAWP3	AC1XAWP4	AC1XAWP5	AC1XAWP6	AC1XAWP7
ST1SDA(H)	ST1SDA(L)	ST1XACTL	ST1XAWT	ST1XAWP0	ST1XAWP1
ST1XAWP2	ST1XAWP3	ST1XAWP4	ST1XAWP5	ST1XAWP6	ST1XAWP7

Defined as:

SDA(H) Saved Data Address. (High order bits)

Bit Meaning

0-6 The high order bits (24-29) of the 30-bit Saved Data Address (SDA). The complete data address is determined by concatenating SDA(H) with SDA(L).

SDA(L) Saved Data Address. (Low order bits)

Bit Meaning

0-23 The low order bits (0-23) of the 30-bit SDA. The complete data address is determined by concatenating SDA(H) with SDA(L).

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XACTL Extended access control register. There are 8 window enable bits corresponding to a specific window, 0-7. When an enable bit is set, access is enabled for that window. If the enable is "0", access to that window address will not be translated and will not result in an XS or XM access. Instead, the address goes directly to the CS Bus for ordinary CS access. The upper bits 8-31 are zero.

Bit Meaning

- 0 XAWEN0, extended access window 0 enable.
- 1 XAWEN1, extended access window 1 enable.
- 2 XAWEN2, extended access window 2 enable.
- 3 XAWEN3, extended access window 3 enable.
- 4 XAWEN4, extended access window 4 enable.
- 5 XAWEN5, extended access window 5 enable.
- 6 XAWEN6, extended access window 6 enable.
- 7 XAWEN7, extended access window 7 enable.

XAWT Extended access window type register. XAWTn - Window type bit for window n. A window type of "0" indicates that window n is an XS window. Window type "1" indicates window n is an XM window. The upper bits 8-31 are zero.

Bit Meaning

- 0 XAWT0, extended access window 0 type.
- 1 XAWT1, extended access window 1 type.
- 2 XAWT2, extended access window 2 type.
- 3 XAWT3, extended access window 3 type.
- 4 XAWT4, extended access window 4 type.
- 5 XAWT5, extended access window 5 type.
- 6 XAWT6, extended access window 6 type.
- 7 XAWT7, extended access window 7 type.

XAWPn Extended access window pointer n. (n represents window pointers 0-7.) This 15 bit field is the window pointer associated with accesses through window n. It will become bits 27 through 13 of the target address for translations using window n. The upper bits 15-31 are zero.

Bit Meaning

- 0-14 Extended access window pointer

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DATA: XPWR INTERNAL DATA

XSTAT_X	XSTAT_X+1	IMAGE_X	IMAGE_X+1	IMAGE_X+2	IMAGE_X+3
STABINX_X	STABINX_X+1	BSTAT_X			
XSTAT	XSTAT+1	IMAGE	IMAGE+1	IMAGE+2	IMAGE+3
STABINX	STABINX+1	BSTAT	LRTW	LRCW	

NOTE: Prefix all words with XP1R.

Defined as:

XSTAT_X XPWR 0 unit software status word before XPWR base level mtce.

Bit Meaning

- 0 = 5v converter for CS bus 0 found faulty.
- 1 = 5v converter for CS bus 1 found faulty.
- 2 = 5v converter for PS bus 0 found faulty.
- 3 = 5v converter for PS bus 1 found faulty.
- 4 = 5v converter for IF bus 0 found faulty.
- 5 = 5v converter for IF bus 1 found faulty.
- 6 = Terminating voltage of CS bus 0 found out-of-range.
- 7 = Terminating voltage of CS bus 1 found out-of-range.
- 8 = Terminating voltage of PS bus 0 found out-of-range.
- 9 = Terminating voltage of PS bus 1 found out-of-range.
- 10 = Terminating voltage of IF bus 0 found out-of-range.
- 11 = Terminating voltage of IF bus 1 found out-of-range.
- 12 = 24v converter found faulty.
- 13-14 = Current XPWR state.
 - State = DGR(degraded) state.
 - State = OOS(out of service) state.
 - State = ACT(active) state.
 - State = Unassigned.
- 15 = Unused.
- 16 = SSD 0 unit is just restored.
- 17-18 = Current SD value of XPWR 0.

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- 19 = XPWR 0 unit is just restored.
- 20 = Need to verify XPWR scan image.
- 21 = OOS state forced by XPWR software.
- 22 = XPWR 0 can be restored only by TTY message.
- 23 = Stop XPWR 0 scanning.

XSTAT_X+1 XPWR 1 unit software status word before XPWR base level mtce.

Bit Meaning

- 0 = 5v converter for CS bus 0 found faulty.
- 1 = 5v converter for CS bus 1 found faulty.
- 2 = 5v converter for PS bus 0 found faulty.
- 3 = 5v converter for PS bus 1 found faulty.
- 4 = 5v converter for IF bus 0 found faulty.
- 5 = 5v converter for IF bus 1 found faulty.
- 6 = Terminating voltage of CS bus 0 found out-of-range.
- 7 = Terminating voltage of CS bus 1 found out-of-range.
- 8 = Terminating voltage of PS bus 0 found out-of-range.
- 9 = Terminating voltage of PS bus 1 found out-of-range.
- 10 = Terminating voltage of IF bus 0 found out-of-range.
- 11 = Terminating voltage of IF bus 1 found out-of-range.
- 12 = 24v converter found faulty.

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- 13-14 = Current XPWR state.
State = DGR(degraded) state.
State = OOS(out of service) state.
State = ACT(active) state.
State = Unassigned.
15 = Unused.
16 = SSD 1 unit is just restored.
17-18 = Current SD value of XPWR 0.
19 = XPWR 1 unit is just restored.
20 = Need to verify XPWR scan image.
21 = OOS state forced by XPWR software.
22 = XPWR 1 will be restored only by TTY message.
23 = Stop XPWR 1 scanning.

IMAGE_X XPWR 0 scan image word 0 before XPWR base level mtce.

- | Bit | Meaning |
|-------|--|
| 0 | = 24v converter status. |
| 1-5 | = Unused. |
| 6 | = Major alarm indicator. |
| 7 | = CS bus 0 terminating voltage status. |
| 8 | = CS bus 1 terminating voltage status. |
| 9 | = Status of 5v converter for CS bus 0. |
| 10 | = Unused. |
| 11 | = Status of 5v converter for CS bus 1. |
| 12-13 | = Unused. |
| 14 | = PS bus 0 terminating voltage status. |
| 15 | = PS bus 1 terminating voltage status. |
| 16 | = Status of 5v converter for PS bus 0. |
| 17 | = Unused. |
| 18 | = Status of 5v converter for PS bus 1. |
| 19-23 | = Unused. |

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IMAGE_X+1 XPWR 0 scan image word 1 before XPWR base level mtce.

Bit Meaning

- 0 = IF bus 0 terminating voltage status.
- 1 = IF bus 1 terminating voltage status.
- 2 = Status of 5v converter for IF bus 0.
- 3 = Unused.
- 4 = Status of 5v converter for IF bus 1.
- 5-6 = Unused.
- 7-13 = Buffer used for verifying scan image.
- 14-23 = Unused.

IMAGE_X+2 XPWR 1 scan image word 0 before XPWR base level mtce.

Bit Meaning

- 0 = 0 = 24v converter status.
- 1-5 = Unused.
- 6 = Major alarm indicator.
- 7 = CS bus 0 terminating voltage status.
- 8 = CS bus 1 terminating voltage status.
- 9 = Status of 5v converter for CS bus 1.
- 10 = Unused.
- 11 = Status of 5v converter for CS bus 0.
- 12-13 = Unused.
- 14 = PS bus 0 terminating voltage status.
- 15 = PS bus 1 terminating voltage status.
- 16 = Status of 5v converter for PS bus 1.
- 17 = Unused.
- 18 = Status of 5v converter for PS bus 0.
- 19-23 = Unused.

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IMAGE_X+3 XPWR 1 scan image word 1 before XPWR base level mtce.

Bit Meaning

0 = IF bus 0 terminating voltage status.

1 = IF bus 1 terminating voltage status.

2 = Status of 5v converter for IF bus 1.

3 = Unused.

4 = Status of 5v converter for IF bus 0.

5-6 = Unused.

7-13 = Buffer used for verifying scan image.

14-23 = Unused.

STABINX_X XPWR 0 status table index word before XPWR base level mtce.

Bit Meaning

0-23 = Index value.

Value = No fault on XPWR 0.

Value = SSD 0 is OOS.

Value = XPWR 0 is powered down.

Value = Fault on converter for ACT bus or 24v converter.

Value = Fault on converter for OOS bus.

STABINX_X+1 XPWR 1 status table index word before XPWR base level mtce.

Bit Meaning

0-23 = Index value.

Value = No fault on XPWR 1.

Value = SSD 1 is OOS.

Value = XPWR 1 is powered down.

Value = Fault on converter for ACT bus or 24v converter.

Value = Fault on converter for OOS bus.

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BSTAT_X Bus(CS, PS, IF bus) status word before XPWR base level mtce.

Bit Meaning

0 = CS bus 0 is OOS if set.

1 = CS bus 1 is OOS if set.

2 = PS bus 0 is OOS if set.

3 = PS bus 1 is OOS if set.

4 = PS bus 0 is OOS if set.

5 = PS bus 1 is OOS if set.

6-23 = Unused.

XSTAT XPWR 0 unit software status word after XPWR base level mtce.
See XSTAT_X.

XSTAT+1 XPWR 1 unit software status word after XPWR base level mtce.
See XSTAT_X+1.

IMAGE XPWR 0 scan image word 0 after XPWR base level mtce.
See IMAGE_X.

IMAGE+1 XPWR 0 scan image word 1 after XPWR base level mtce.
See IMAGE_X+1.

IMAGE+2 XPWR 1 scan image word 0 after XPWR base level mtce.
See IMAGE_X+2.

IMAGE+3 XPWR 1 scan image word 1 after XPWR base level mtce.
See IMAGE_X+3.

STABINX XPWR 0 status table index word after XPWR base level mtce.
See STABINX_X.

STABINX+1 XPWR 1 status table index word after XPWR base level mtce.
See STABINX_X+1.

SEE PROPRIETARY NOTICE ON COVER PAGE

BSTAT Bus(CS, PS, IF bus) status word after XPWR base level mtce.
 See BSTAT_X.

LRTW XPWR long range timer word.

Bit Meaning

0-17 = XPWR long range timer.

18-19 = Unused.

20 = Long range timer enable bit.

21-23 = Unused.

LRCW XPWR long range counter word.

Bit Meaning

0-11 = Long range counter for XPWR 0.

12-23 = Long range counter for XPWR 1.

SEE PROPRIETARY NOTICE ON COVER PAGE

DATA: XTSI AUXILIARY DATA (for base level maintenance)

BSIZE	LPBK_ERR/KIND	HEADER	DATA0	DATA1	DATA2
DATA3	DATA4	DATA5	DATA6	DATA7	DATA8
DATA9	DATA10	DATA11	DATA12	DATA13	DATA14
DATA15	MBPTRS*	SDMPTR*	MBSTAT*	PSC_OS*	PSC_PEST
0...0					

NOTE: Only present for illegitimate reports, otherwise all zeros.

BSIZE	Block size.
LPBK_ERR/KIND	Loopback error flag / Kind of report
HEADER	Frame report header word (from the maintenance buffer).
DATA0-DATA15	Frame report data words 00-15 (from the maintenance buffer).
MBPTRS*	Maintenance buffer pointers.
SDMPTR*	Shadow maintenance buffer pointer.
MBSTAT*	Maintenance processor buffer status.
PSC_OS	Protection switch client out of service.
PSC_PEST	Protection switch client PEST bit array.

DATA: XTSI NON PSC AUXILIARY DATA DUMP

DUMP SZ	CLIENT_ID	PUFR_INT2	PUFR_INT3	PUFR_INT4	PUFR_INT5
---------	-----------	-----------	-----------	-----------	-----------

DUMP SZ => octal 00005014

Defined as:

DUMP SZ	Report Type and Block Size
CLIENT_ID	Suspect client identification number
PUFR_INT2	Reserved
PUFR_INT3	Reserved
PUFR_INT4	Reserved
PUFR_INT5	Reserved

SEE PROPRIETARY NOTICE ON COVER PAGE

DATA: XTSI PCM BUS AUXILIARY

DUMP SZ	0....0	0....0	0....0	0....0	0....0
PSCX0	PSCX0 USTAT	PSCX0 STAT	PSCX0 CESR	PSCX0 CTL	PSCX0 EXR
PSCX1	PSCX1 USTAT	PSCX1 STAT	PSCX1 CESR	PSCX1 CTL	PSCX1 EXR
PSCX2	PSCX2 USTAT	PSCX2 STAT	PSCX2 CESR	PSCX2 CTL	PSCX2 EXR
PSCX3	PSCX3 USTAT	PSCX3 STAT	PSCX3 CESR	PSCX3 CTL	PSCX3 EXR
PSCX4	PSCX4 USTAT	PSCX4 STAT	PSCX4 CESR	PSCX4 CTL	PSCX4 EXR
PSCX5	PSCX5 USTAT	PSCX5 STAT	PSCX5 CESR	PSCX5 CTL	PSCX5 EXR

NOTE: The printout for SPS will be all zero for XTSI REL 1.

Defined as:

DUMP SZ	Report Type and Block Size.
PSCX	D3U/SPS/IBU Subunit type indicator.
PSCX STAT	D3U/SPS/IBU Software Status.
PSCX USTAT	D3U/SPS/IBU Hardware Status.
PSCX CESR	D3U/SPS/IBU Error Register.
PSCX CTL	D3U/SPS/IBU Control Register.
PSCX EXR	D3U/SPS/IBU Exercise Register.

Following is the data layout of clients that reside on a sub-branch. The data is layout based on the EVEN or ODD member of the XTSI frame and the sub-branch within the member. The Client_id is returned.

To access the data:

XTSI_PCM_SUBBR_DATA[EVEN / ODD mem][SUB-BRANCH][Client mem]

PCM SUB-BRANCH LAYOUT

FRAME MEM	SUB-BRANCH	CLIENT 1	CLIENT 2	CLIENT 3	CLIENT 4	CLIENT 5	CLIENT 6
4TIXMEMN_E	PCM_SUB_BRANCH_0	4TIXSPS0	4TIXSPS1	4TIXSPS2	4TIXSPS3	4TIXSPS4	4TIXSPS10
	PCM_SUB_BRANCH_1	4TIXALF	4TIXALF	4TIXALF	4TIXALF	4TIXALF	
	PCM_SUB_BRANCH_2	4TIXD3U0	4TIXD3U1	4TIXD3U2	4TIXD3U6	SPARE0	SPARE2
4TIXMEMN_O	PCM_SUB_BRANCH_0	4TIXSPS5	4TIXSPS6	4TIXSPS7	4TIXSPS8	4TIXSPS9	4TIXSPS11
	PCM_SUB_BRANCH_1	4TIXALF	4TIXALF	4TIXALF	4TIXALF	4TIXALF	
	PCM_SUB_BRANCH_2	4TIXD3U3	4TIXD3U4	4TIXD3U5	4TIXD3U7	SPARE1	4TIXIBU0

SEE PROPRIETARY NOTICE ON COVER PAGE

DATA: XTSI PCM BUS MISMATCH AUXILIARY

DUMP SZ	TIME-SLOT	TRANS WORD C0	TRANS WORD C1	TRANS QUERY C0	TRANS QUERY C1
PCMIL C0	PCMIL C1	PCMIH C0	PCMIH C1	PCMOL C0	PCMOL C1
PCMOH C0	PCMOH C1	TSM C0	TSM C1	SYNDR C0	SYNDR C1
SYNDR CALC	SUTMN	SUB-BRANCH 0....0		0....0	0....0
PSCX0	PSCX0 USTAT	PSCX0 STAT	PSCX0 CESR	PSCX0 CTL	PSCX0 EXR
PSCX1	PSCX1 USTAT	PSCX1 STAT	PSCX1 CESR	PSCX1 CTL	PSCX1 EXR
PSCX2	PSCX2 USTAT	PSCX2 STAT	PSCX2 CESR	PSCX2 CTL	PSCX2 EXR
PSCX3	PSCX3 USTAT	PSCX3 STAT	PSCX3 CESR	PSCX3 CTL	PSCX3 EXR
PSCX4	PSCX4 USTAT	PSCX4 STAT	PSCX4 CESR	PSCX4 CTL	PSCX4 EXR
PSCX5	PSCX5 USTAT	PSCX5 STAT	PSCX5 CESR	PSCX5 CTL	PSCX5 EXR

Defined as:

DUMP SZ	Report Type and Block Size.				
TIMESLOT	Time Slot				
TRANS WORD C0	Translation Ram Controller 0				
TRANS WORD C1	Translation Ram Controller 1				
TRANS QUERY C0	Translation Query Controller 0				
TRANS QUERY C1	Translation Query Controller 1				
TTSI PCMIL C0	TTSI Input PCM Low Controller 0				
TTSI PCMIL C1	TTSI Input PCM Low Controller 1				
TTSI PCMIL C0	TTSI Input PCM High Controller 0				
TTSI PCMIL C1	TTSI Input PCM High Controller 1				
TTSI PCMOL C0	TTSI Output PCM Low Controller 0				
TTSI PCMOL C1	TTSI Output PCM Low Controller 1				
TTSI PCMOL C0	TTSI Output PCM High Controller 0				
TTSI PCMOL C1	TTSI Output PCM High Controller 1				

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TSM C0	TSM Controller 0
TSM C1	TSM Controller 1
SYNDR C0	Syndrome Register Controller 0
SYNDR C1	Syndrome Register Controller 1
SUB-BRANCH	PCM Bus Subbranch
PSCX(0-5)	PSC Client Number
PSCX(0-5) STAT	PSC Client HW Status
PSCX(0-5) USTAT	PSC Client SW Status
PSCX(0-5) CESR	PSC Client CESR
PSCX(0-5) CTL	PSC Client Control Register
PSCX(0-5) EXR	PSC Client Exercise Register

Following is the data layout of clients that reside on a sub-branch. The data is layout based on the EVEN or ODD member of the XTSI frame and the sub-branch within the member. The Client_id is returned.

To access the data:

XTSI_PCM_SUBBR_DATA[EVEN / ODD mem][SUB-BRANCH][Client mem]

PCM SUB-BRANCH LAYOUT

FRAME MEM	SUB-BRANCH	CLIENT 1	CLIENT 2	CLIENT 3	CLIENT 4	CLIENT 5	CLIENT 6
4TIXMEMN_E							
	PCM_SUB_BRANCH_0	4TIXSPS0	4TIXSPS1	4TIXSPS2	4TIXSPS3	4TIXSPS4	4TIXSPS10
	PCM_SUB_BRANCH_1	4TIXALF					
	PCM_SUB_BRANCH_2	4TIXD3U0	4TIXD3U1	4TIXD3U2	4TIXD3U6		
4TIXMEMN_O							
	PCM_SUB_BRANCH_0	4TIXSPS5	4TIXSPS6	4TIXSPS7	4TIXSPS8	4TIXSPS9	4TIXSPS11
	PCM_SUB_BRANCH_1	4TIXALF					
	PCM_SUB_BRANCH_2	4TIXD3U3	4TIXD3U4	4TIXD3U5	4TIXD3U7	RESERVED	4TIXIBU0

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4. ACTION TO BE TAKEN

This output message is informational. Any action taken must be based on the specific information printed and the technical impact of that data.

5. REFERENCES

PIDENTs

APFR	DTFR	MARP	PSFR	TNFR
AUFR	DUFR	MCAI	SPFR	VCFR
CCFR	ERAP	NCFR	PUFR	WPAD
CCIS	ERAT	PBFR	SCFR	XTSI
CSFR	FSFR	PCRVR	SCSF	
DIFR	IOCP	PFLR	SIRE	

Practice 234-180-110, *Call Processing Programs*

Practice 234-180-300, *Interrupt Software Control Structure Description*

Practice 234-180-310, *Peripheral Units Fault Recovery Program Description*

Practice 234-180-320, *Error Analysis Program Description*

Practice 234-280-330, *System Recovery, Initialization and Reinitialization Description*

Practice 254-280-111, *Input/Output Programs Software Description*

Practice 254-280-310, *Fault Recovery Program*

Practice 254-280-320, *Error Analysis Program*

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4ESS
OM-4B000-01

REPT:

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REPT:0-212

Issue 1.8.1
July 2002

ID REPT:A-LEV:0
WORK CENTER.. MOC
GENERIC 4E27R2 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

A-LEV[a]
MFNUM=b

2. REASON FOR OUTPUT

To report that a A-level interrupt has occurred. This is an abbreviated form of the REPT:0 message, which will follow.

3. VARIABLE FIELD DEFINITIONS

- a Action line. Refer to TABLE A.
b Maintenance file number (MFNUM) in octal.

4. ACTION TO BE TAKEN

This output message is informational. Any action taken must be based on the specific information printed and the technical impact of that data.

5. REFERENCES

PIDENTs
AUFR CCFR CCIS CSFR DIFR
DTFR DUFR ERAP ERAT FSFR
IOCP MARP MCAI NCFR PBFR
PCRVR PFLR PSFR PUFR SCFR
SCSF SIRE SPFR TNFR VCFR
WPAD XTSI

NOTE: The PIDENT listing contains PIDENTs for all abbreviated messages.
The A-LEV message is not associated with all listed PIDENTs.

Practice 234-180-110, *Call Processing Programs*
Practice 234-180-300, *Interrupt Software Control Structure Description*
Practice 234-180-310, *Peripheral Units Fault Recovery Program Description*
Practice 234-180-320, *Error Analysis Program Description*
Practice 234-180-330, *System Recovery, Initialization and Reinitialization Description*
Practice 254-280-111, *Input/Output Programs Software Description*
Practice 254-280-310, *Fault Recovery Program*
Practice 254-280-320, *Error Analysis Program*

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TABLE A

Action Lines and Their Meanings		
Phase	Symbol	Meaning
COPIED HARD TO SOFT	40MTN_FRDCHS	Requested Copy Hardware to Software
COPIED SOFT TO HARD	40MTN_FRDCSH	Requested Copy Software to Hardware
DUPLEX FAILED	40MTN_ERDUF	Duplex Failed
DUPLEX FAILED	40MTN_FRDUFL	Requested Duplex Fail
FORCE REMOVED	40MTN_FRDFRV	Requested Force Removal
PESTED	40MTN_FRRPS	Requested Pesting
REMOVED	40MTN_FRDNRV	Requested Normal Removal
REMOVED LOM	40MTN_FRDLOM	Requested Removal LOM
REQ NO ACTION	40MTN_FRRQNA	Requested No Action
RESTORED	40MTN_FRRSUB	Requested Restore
RMV MATE LOM & RST	40MTN_FRLOMR	Requested Restore Subject Remove Mate LOM
RMVD & DGN	10MTN_MIRAD	Removed and Requested Diagnostics
RMVD BOTH MATE &	40MTN_FRRMRS	Requested Remove Subject Remove Mate
RST MATE & RMVD	10MTN_MIRMR	Restored Mate and Removed
RST MATE & RMVD & DGN	10MTN_MIRRD	Restored Mate and RMVD and Diagnosed
RST MATE NO UPD & RMVD	40MTN_FRRNRS	Requested Remove Subject Restore Mate Not Updated
RST MATE UPD & RMVD	40MTN_FRRURS	Requested Remove Subject Restore Mate Updated
RST NO UPDATE	40MTN_FRDTNP	Requested Restore No Update
RST WITH UPDATE	40MTN_FRDTUP	Requested Restore With Update
SCHED AUDIT NUMBER	40MTN_FRDAUD	Requested Audit Number
SCHED CLEANUP OF	40MTN_FRDCLP	Requested Cleanup
SCHED DGN	40MTN_FRDDGN	Requested Diagnostics
SCHED DGN & OPT PHASES	40MTN_FRDOP	Requested DGN With Optional Phases
SCHED PERIPH UNIT	40MTN_FRDPUC	Requested Peripheral Unit
SCHED PEST UPDATE	40MTN_FRUPDD	Requested Pest Update
STATUS AUDIT		Status Audit
SWITCHED	40MTN_FRDSWT	Requested Switch
ZSTART MATE & RMVD	40MTN_ERRZS	Removed Suspect and Requested Zero Start Mate
ZSTART MATE & RMVD	40MTN_FRZAPS	Requested ZAP and Zero Start Mate

NOTE: TABLE A contains a complete listing of abbreviated phases for all abbreviated messages. Some of the abbreviated phases may not be used as the a (action line) variable for the A-LEV message.

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:B-LEV:0
WORK CENTER.. MOC
GENERIC 4E27R2 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

B-LEV[a]
MFNUM=b

2. REASON FOR OUTPUT

To report that a B-level interrupt has occurred. This is an abbreviated form of the REPT:0 message, which will follow.

3. VARIABLE FIELD DEFINITIONS

- a Action line. Refer to TABLE A.
b Maintenance file number (MFNUM) in octal.

4. ACTION TO BE TAKEN

This output message is informational. Any action taken must be based on the specific information printed and the technical impact of that data.

5. REFERENCES

PIDENTs

AUFR	CCFR	CCIS	CSFR	DIFR
DTFR	DUFR	ERAP	ERAT	FSFR
IOCP	MARP	MCAI	NCFR	PBFR
PCRv	PFLR	PSFR	PUFR	SCFR
SCSF	SIRE	SPFR	TNFR	VCFR
WPAD	XTSI			

NOTE: The PIDENT listing contains PIDENTs for all abbreviated messages.
The B-LEV message is not associated with all listed PIDENTs.

Practice 234-180-110, *Call Processing Programs*
Practice 234-180-300, *Interrupt Software Control Structure Description*
Practice 234-180-310, *Peripheral Units Fault Recovery Program Description*
Practice 234-180-320, *Error Analysis Program Description*
Practice 234-180-330, *System Recovery, Initialization and Reinitialization Description*
Practice 254-280-111, *Input/Output Programs Software Description*
Practice 254-280-310, *Fault Recovery Program*
Practice 254-280-320, *Error Analysis Program*

SEE PROPRIETARY NOTICE ON COVER PAGE

TABLE A

Action Lines and Their Meanings		
Phase	Symbol	Meaning
COPIED HARD TO SOFT	40MTN_FRDCHS	Requested Copy Hardware to Software
COPIED SOFT TO HARD	40MTN_FRDCSH	Requested Copy Software to Hardware
DUPLEX FAILED	40MTN_ERDUF	Duplex Failed
DUPLEX FAILED	40MTN_FRDUFL	Requested Duplex Fail
FORCE REMOVED	40MTN_FRDFRV	Requested Force Removal
PESTED	40MTN_FRRPS	Requested Pesting
REMOVED	40MTN_FRDNRV	Requested Normal Removal
REMOVED LOM	40MTN_FRDLOM	Requested Removal LOM
REQ NO ACTION	40MTN_FRRQNA	Requested No Action
RESTORED	40MTN_FRRSUB	Requested Restore
RMV MATE LOM & RST	40MTN_FRLOMR	Requested Restore Subject Remove Mate LOM
RMVD & DGN	10MTN_MIRAD	Removed and Requested Diagnostics
RMVD BOTH MATE &	40MTN_FRRMRS	Requested Remove Subject Remove Mate
RST MATE & RMVD	10MTN_MIRMR	Restored Mate and Removed
RST MATE & RMVD & DGN	10MTN_MIRRD	Restored Mate and RMVD and Diagnosed
RST MATE NO UPD & RMVD	40MTN_FRRNRS	Requested Remove Subject Restore Mate Not Updated
RST MATE UPD & RMVD	40MTN_FRRURS	Requested Remove Subject Restore Mate Updated
RST NO UPDATE	40MTN_FRDTNP	Requested Restore No Update
RST WITH UPDATE	40MTN_FRDTUP	Requested Restore With Update
SCHED AUDIT NUMBER	40MTN_FRDAUD	Requested Audit Number
SCHED CLEANUP OF	40MTN_FRDCLP	Requested Cleanup
SCHED DGN	40MTN_FRDDGN	Requested Diagnostics
SCHED DGN & OPT PHASES	40MTN_FRDOP	Requested DGN With Optional Phases
SCHED PERIPH UNIT	40MTN_FRDPUC	Requested Peripheral Unit
SCHED PEST UPDATE	40MTN_FRUPDD	Requested Pest Update
STATUS AUDIT		Status Audit
SWITCHED	40MTN_FRDSWT	Requested Switch
ZSTART MATE & RMVD	40MTN_ERRZS	Removed Suspect and Requested Zero Start Mate
ZSTART MATE & RMVD	40MTN_FRZAPS	Requested ZAP and Zero Start Mate

NOTE: TABLE A contains a complete listing of abbreviated phases for all abbreviated messages. Some of the abbreviated phases may not be used as the a (action line) variable for the B-LEV message.

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:BLM:0
WORK CENTER.. MOC
GENERIC 4E27R2 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

BLM[a]
MFNUM=b

2. REASON FOR OUTPUT

To report that a base level maintenance (BLM) interrupt has occurred. This is an abbreviated form of the REPT:0 message, which will follow.

3. VARIABLE FIELD DEFINITIONS

- a Action line. Refer to TABLE A.
b Maintenance file number (MFNUM) in octal.

4. ACTION TO BE TAKEN

This output message is informational. Any action taken must be based on the specific information printed and the technical impact of that data.

5. REFERENCES

PIDENTs

AUFR	CCFR	CCIS	CSFR	DIFR
DTFR	DUFR	ERAP	ERAT	FSFR
IOCP	MARP	MCAI	NCFR	PBFR
PCRv	PFLR	PSFR	PUFR	SCFR
SCSF	SIRE	SPFR	TNFR	VCFR
WPAD	XTSI			

NOTE: The PIDENT listing contains PIDENTs for all abbreviated messages.
The BLM message is not associated with all listed PIDENTs.

Practice 234-180-110, *Call Processing Programs*
Practice 234-180-300, *Interrupt Software Control Structure Description*
Practice 234-180-310, *Peripheral Units Fault Recovery Program Description*
Practice 234-180-320, *Error Analysis Program Description*
Practice 234-180-330, *System Recovery, Initialization and Reinitialization Description*
Practice 254-280-111, *Input/Output Programs Software Description*
Practice 254-280-310, *Fault Recovery Program*
Practice 254-280-320, *Error Analysis Program*

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TABLE A

Action Lines and Their Meanings		
Phase	Symbol	Meaning
COPIED HARD TO SOFT	40MTN_FRDCHS	Requested Copy Hardware to Software
COPIED SOFT TO HARD	40MTN_FRDCSH	Requested Copy Software to Hardware
DUPLEX FAILED	40MTN_ERDUF	Duplex Failed
DUPLEX FAILED	40MTN_FRDUFL	Requested Duplex Fail
FORCE REMOVED	40MTN_FRDFRV	Requested Force Removal
PESTED	40MTN_FRRPS	Requested Pesting
REMOVED	40MTN_FRDNRV	Requested Normal Removal
REMOVED LOM	40MTN_FRDLOM	Requested Removal LOM
REQ NO ACTION	40MTN_FRRQNA	Requested No Action
RESTORED	40MTN_FRRSUB	Requested Restore
RMV MATE LOM & RST	40MTN_FRLOMR	Requested Restore Subject Remove Mate LOM
RMVD & DGN	10MTN_MIRAD	Removed and Requested Diagnostics
RMVD BOTH MATE &	40MTN_FRRMRS	Requested Remove Subject Remove Mate
RST MATE & RMVD	10MTN_MIRMR	Restored Mate and Removed
RST MATE & RMVD & DGN	10MTN_MIRRD	Restored Mate and RMVD and Diagnosed
RST MATE NO UPD & RMVD	40MTN_FRRNRS	Requested Remove Subject Restore Mate Not Updated
RST MATE UPD & RMVD	40MTN_FRRURS	Requested Remove Subject Restore Mate Updated
RST NO UPDATE	40MTN_FRDTNP	Requested Restore No Update
RST WITH UPDATE	40MTN_FRDTUP	Requested Restore With Update
SCHED AUDIT NUMBER	40MTN_FRDAUD	Requested Audit Number
SCHED CLEANUP OF	40MTN_FRDCLP	Requested Cleanup
SCHED DGN	40MTN_FRDDGN	Requested Diagnostics
SCHED DGN & OPT PHASES	40MTN_FRDOP	Requested DGN With Optional Phases
SCHED PERIPH UNIT	40MTN_FRDPUC	Requested Peripheral Unit
SCHED PEST UPDATE	40MTN_FRUPDD	Requested Pest Update
STATUS AUDIT		Status Audit
SWITCHED	40MTN_FRDSWT	Requested Switch
ZSTART MATE & RMVD	40MTN_ERRZS	Removed Suspect and Requested Zero Start Mate
ZSTART MATE & RMVD	40MTN_FRZAPS	Requested ZAP and Zero Start Mate

NOTE: TABLE A contains a complete listing of abbreviated phases for all abbreviated messages. Some of the abbreviated phases may not be used as the a (action line) variable for the BLM message.

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:C-LEV:0
WORK CENTER.. MOC
GENERIC 4E27R2 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

C-LEV[a]
MFNUM=b

2. REASON FOR OUTPUT

To report that a C-level interrupt has occurred. This is an abbreviated form of the REPT:0 message, which will follow.

3. VARIABLE FIELD DEFINITIONS

- a Action line. Refer to TABLE A.
b Maintenance file number (MFNUM) in octal.

4. ACTION TO BE TAKEN

This output message is informational. Any action taken must be based on the specific information printed and the technical impact of that data.

5. REFERENCES

PIDENTs

AUFR	CCFR	CCIS	CSFR	DIFR
DTFR	DUFR	ERAP	ERAT	FSFR
IOCP	MARP	MCAI	NCFR	PBFR
PCRv	PFLR	PSFR	PUFR	SCFR
SCSF	SIRE	SPFR	TNFR	VCFR
WPAD	XTSI			

NOTE: The PIDENT listing contains PIDENTs for all abbreviated messages.
The C-LEV message is not associated with all listed PIDENTs.

Practice 234-180-110, *Call Processing Programs*
Practice 234-180-300, *Interrupt Software Control Structure Description*
Practice 234-180-310, *Peripheral Units Fault Recovery Program Description*
Practice 234-180-320, *Error Analysis Program Description*
Practice 234-180-330, *System Recovery, Initialization and Reinitialization Description*
Practice 254-280-111, *Input/Output Programs Software Description*
Practice 254-280-310, *Fault Recovery Program*
Practice 254-280-320, *Error Analysis Program*

SEE PROPRIETARY NOTICE ON COVER PAGE

TABLE A

Action Lines and Their Meanings		
Phase	Symbol	Meaning
COPIED HARD TO SOFT	40MTN_FRDCHS	Requested Copy Hardware to Software
COPIED SOFT TO HARD	40MTN_FRDCSH	Requested Copy Software to Hardware
DUPLEX FAILED	40MTN_ERDUF	Duplex Failed
DUPLEX FAILED	40MTN_FRDUFL	Requested Duplex Fail
FORCE REMOVED	40MTN_FRDFRV	Requested Force Removal
PESTED	40MTN_FRRPS	Requested Pesting
REMOVED	40MTN_FRDNRV	Requested Normal Removal
REMOVED LOM	40MTN_FRDLOM	Requested Removal LOM
REQ NO ACTION	40MTN_FRRQNA	Requested No Action
RESTORED	40MTN_FRRSUB	Requested Restore
RMV MATE LOM & RST	40MTN_FRLOMR	Requested Restore Subject Remove Mate LOM
RMVD & DGN	10MTN_MIRAD	Removed and Requested Diagnostics
RMVD BOTH MATE &	40MTN_FRRMRS	Requested Remove Subject Remove Mate
RST MATE & RMVD	10MTN_MIRMR	Restored Mate and Removed
RST MATE & RMVD & DGN	10MTN_MIRRD	Restored Mate and RMVD and Diagnosed
RST MATE NO UPD & RMVD	40MTN_FRRNRS	Requested Remove Subject Restore Mate Not Updated
RST MATE UPD & RMVD	40MTN_FRRURS	Requested Remove Subject Restore Mate Updated
RST NO UPDATE	40MTN_FRDTNP	Requested Restore No Update
RST WITH UPDATE	40MTN_FRDTUP	Requested Restore With Update
SCHED AUDIT NUMBER	40MTN_FRDAUD	Requested Audit Number
SCHED CLEANUP OF	40MTN_FRDCLP	Requested Cleanup
SCHED DGN	40MTN_FRDDGN	Requested Diagnostics
SCHED DGN & OPT PHASES	40MTN_FRDOP	Requested DGN With Optional Phases
SCHED PERIPH UNIT	40MTN_FRDPUC	Requested Peripheral Unit
SCHED PEST UPDATE	40MTN_FRUPDD	Requested Pest Update
STATUS AUDIT		Status Audit
SWITCHED	40MTN_FRDSWT	Requested Switch
ZSTART MATE & RMVD	40MTN_ERRZS	Removed Suspect and Requested Zero Start Mate
ZSTART MATE & RMVD	40MTN_FRZAPS	Requested ZAP and Zero Start Mate

NOTE: TABLE A contains a complete listing of abbreviated phases for all abbreviated messages. Some of the abbreviated phases may not be used as the a (action line) variable for the C-LEV message.

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:D-LEV:0
WORK CENTER.. MOC
GENERIC 4E27R2 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

D-LEV[a]
MFNUM=b

2. REASON FOR OUTPUT

To report that a D-level interrupt has occurred. This is an abbreviated form of the REPT:0 message, which will follow.

3. VARIABLE FIELD DEFINITIONS

- a Action line. Refer to TABLE A.
b Maintenance file number (MFNUM) in octal.

4. ACTION TO BE TAKEN

This output message is informational. Any action taken must be based on the specific information printed and the technical impact of that data.

5. REFERENCES

PIDENTs

AUFR	CCFR	CCIS	CSFR	DIFR
DTFR	DUFR	ERAP	ERAT	FSFR
IOCP	MARP	MCAI	NCFR	PBFR
PCRv	PFLR	PSFR	PUFR	SCFR
SCSF	SIRE	SPFR	TNFR	VCFR
WPAD	XTSI			

NOTE: The PIDENT listing contains PIDENTs for all abbreviated messages.
The D-LEV message is not associated with all listed PIDENTs.

Practice 234-180-110, *Call Processing Programs*
Practice 234-180-300, *Interrupt Software Control Structure Description*
Practice 234-180-310, *Peripheral Units Fault Recovery Program Description*
Practice 234-180-320, *Error Analysis Program Description*
Practice 234-180-330, *System Recovery, Initialization and Reinitialization Description*
Practice 254-280-111, *Input/Output Programs Software Description*
Practice 254-280-310, *Fault Recovery Program*
Practice 254-280-320, *Error Analysis Program*

SEE PROPRIETARY NOTICE ON COVER PAGE

TABLE A

Action Lines and Their Meanings		
Phase	Symbol	Meaning
COPIED HARD TO SOFT	40MTN_FRDCHS	Requested Copy Hardware to Software
COPIED SOFT TO HARD	40MTN_FRDCSH	Requested Copy Software to Hardware
DUPLEX FAILED	40MTN_ERDUF	Duplex Failed
DUPLEX FAILED	40MTN_FRDUFL	Requested Duplex Fail
FORCE REMOVED	40MTN_FRDFRV	Requested Force Removal
PESTED	40MTN_FRRPS	Requested Pesting
REMOVED	40MTN_FRDNRV	Requested Normal Removal
REMOVED LOM	40MTN_FRDLOM	Requested Removal LOM
REQ NO ACTION	40MTN_FRRQNA	Requested No Action
RESTORED	40MTN_FRRSUB	Requested Restore
RMV MATE LOM & RST	40MTN_FRLOMR	Requested Restore Subject Remove Mate LOM
RMVD & DGN	10MTN_MIRAD	Removed and Requested Diagnostics
RMVD BOTH MATE &	40MTN_FRRMRS	Requested Remove Subject Remove Mate
RST MATE & RMVD	10MTN_MIRMR	Restored Mate and Removed
RST MATE & RMVD & DGN	10MTN_MIRRD	Restored Mate and RMVD and Diagnosed
RST MATE NO UPD & RMVD	40MTN_FRRNRS	Requested Remove Subject Restore Mate Not Updated
RST MATE UPD & RMVD	40MTN_FRRURS	Requested Remove Subject Restore Mate Updated
RST NO UPDATE	40MTN_FRDTNP	Requested Restore No Update
RST WITH UPDATE	40MTN_FRDTUP	Requested Restore With Update
SCHED AUDIT NUMBER	40MTN_FRDAUD	Requested Audit Number
SCHED CLEANUP OF	40MTN_FRDCLP	Requested Cleanup
SCHED DGN	40MTN_FRDDGN	Requested Diagnostics
SCHED DGN & OPT PHASES	40MTN_FRDOP	Requested DGN With Optional Phases
SCHED PERIPH UNIT	40MTN_FRDPUC	Requested Peripheral Unit
SCHED PEST UPDATE	40MTN_FRUPDD	Requested Pest Update
STATUS AUDIT		Status Audit
SWITCHED	40MTN_FRDSWT	Requested Switch
ZSTART MATE & RMVD	40MTN_ERRZS	Removed Suspect and Requested Zero Start Mate
ZSTART MATE & RMVD	40MTN_FRZAPS	Requested ZAP and Zero Start Mate

NOTE: TABLE A contains a complete listing of abbreviated phases for all abbreviated messages. Some of the abbreviated phases may not be used as the a (action line) variable for the D-LEV message.

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:E-LEV:0
WORK CENTER.. MOC
GENERIC 4E27R2 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

E-LEV[a]
MFNUM=b

2. REASON FOR OUTPUT

To report that a E-level interrupt has occurred. This is an abbreviated form of the REPT:0 message, which will follow.

3. VARIABLE FIELD DEFINITIONS

- a Action line. Refer to TABLE A.
b Maintenance file number (MFNUM) in octal.

4. ACTION TO BE TAKEN

This output message is informational. Any action taken must be based on the specific information printed and the technical impact of that data.

5. REFERENCES

PIDENTs

AUFR	CCFR	CCIS	CSFR	DIFR
DTFR	DUFR	ERAP	ERAT	FSFR
IOCP	MARP	MCAI	NCFR	PBFR
PCRv	PFLR	PSFR	PUFR	SCFR
SCSF	SIRE	SPFR	TNFR	VCFR
WPAD	XTSI			

NOTE: The PIDENT listing contains PIDENTs for all abbreviated messages.
The E-LEV message is not associated with all listed PIDENTs.

Practice 234-180-110, *Call Processing Programs*
Practice 234-180-300, *Interrupt Software Control Structure Description*
Practice 234-180-310, *Peripheral Units Fault Recovery Program Description*
Practice 234-180-320, *Error Analysis Program Description*
Practice 234-180-330, *System Recovery, Initialization and Reinitialization Description*
Practice 254-280-111, *Input/Output Programs Software Description*
Practice 254-280-310, *Fault Recovery Program*
Practice 254-280-320, *Error Analysis Program*

SEE PROPRIETARY NOTICE ON COVER PAGE

TABLE A

Action Lines and Their Meanings		
Phase	Symbol	Meaning
COPIED HARD TO SOFT	40MTN_FRDCHS	Requested Copy Hardware to Software
COPIED SOFT TO HARD	40MTN_FRDCSH	Requested Copy Software to Hardware
DUPLEX FAILED	40MTN_ERDUF	Duplex Failed
DUPLEX FAILED	40MTN_FRDUFL	Requested Duplex Fail
FORCE REMOVED	40MTN_FRDFRV	Requested Force Removal
PESTED	40MTN_FRRPS	Requested Pesting
REMOVED	40MTN_FRDNRV	Requested Normal Removal
REMOVED LOM	40MTN_FRDLOM	Requested Removal LOM
REQ NO ACTION	40MTN_FRRQNA	Requested No Action
RESTORED	40MTN_FRRSUB	Requested Restore
RMV MATE LOM & RST	40MTN_FRLOMR	Requested Restore Subject Remove Mate LOM
RMVD & DGN	10MTN_MIRAD	Removed and Requested Diagnostics
RMVD BOTH MATE &	40MTN_FRRMRS	Requested Remove Subject Remove Mate
RST MATE & RMVD	10MTN_MIRMR	Restored Mate and Removed
RST MATE & RMVD & DGN	10MTN_MIRRD	Restored Mate and RMVD and Diagnosed
RST MATE NO UPD & RMVD	40MTN_FRRNRS	Requested Remove Subject Restore Mate Not Updated
RST MATE UPD & RMVD	40MTN_FRRURS	Requested Remove Subject Restore Mate Updated
RST NO UPDATE	40MTN_FRDTNP	Requested Restore No Update
RST WITH UPDATE	40MTN_FRDTUP	Requested Restore With Update
SCHED AUDIT NUMBER	40MTN_FRDAUD	Requested Audit Number
SCHED CLEANUP OF	40MTN_FRDCLP	Requested Cleanup
SCHED DGN	40MTN_FRDDGN	Requested Diagnostics
SCHED DGN & OPT PHASES	40MTN_FRDOP	Requested DGN With Optional Phases
SCHED PERIPH UNIT	40MTN_FRDPUC	Requested Peripheral Unit
SCHED PEST UPDATE	40MTN_FRUPDD	Requested Pest Update
STATUS AUDIT		Status Audit
SWITCHED	40MTN_FRDSWT	Requested Switch
ZSTART MATE & RMVD	40MTN_ERRZS	Removed Suspect and Requested Zero Start Mate
ZSTART MATE & RMVD	40MTN_FRZAPS	Requested ZAP and Zero Start Mate

NOTE: TABLE A contains a complete listing of abbreviated phases for all abbreviated messages. Some of the abbreviated phases may not be used as the a (action line) variable for the E - LEV message.

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:ERSTP:0
WORK CENTER.. MOC
GENERIC 4E27R2 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

ERSTP[a]
MFNUM=b

2. REASON FOR OUTPUT

To report that an error stop (ERSTP) interrupt has occurred. This is an abbreviated form of the REPT:0 message, which will follow.

3. VARIABLE FIELD DEFINITIONS

- a Action line. Refer to TABLE A.
b Maintenance file number (MFNUM) in octal.

4. ACTION TO BE TAKEN

This output message is informational. Any action taken must be based on the specific information printed and the technical impact of that data.

5. REFERENCES

PIDENTs

AUFR	CCFR	CCIS	CSFR	DIFR
DTFR	DUFR	ERAP	ERAT	FSFR
IOCP	MARP	MCAI	NCFR	PBFR
PCRVR	PFLR	PSFR	PUFR	SCFR
SCSF	SIRE	SPFR	TNFR	VCFR
WPAD	XTSI			

NOTE: The PIDENT listing contains PIDENTs for all abbreviated messages.
The ERSTP message is not associated with all listed PIDENTs.

Practice 234-180-110, *Call Processing Programs*
Practice 234-180-300, *Interrupt Software Control Structure Description*
Practice 234-180-310, *Peripheral Units Fault Recovery Program Description*
Practice 234-180-320, *Error Analysis Program Description*
Practice 234-180-330, *System Recovery, Initialization and Reinitialization Description*
Practice 254-280-111, *Input/Output Programs Software Description*
Practice 254-280-310, *Fault Recovery Program*
Practice 254-280-320, *Error Analysis Program*

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TABLE A

Action Lines and Their Meanings		
Phase	Symbol	Meaning
COPIED HARD TO SOFT	40MTN_FRDCHS	Requested Copy Hardware to Software
COPIED SOFT TO HARD	40MTN_FRDCSH	Requested Copy Software to Hardware
DUPLEX FAILED	40MTN_ERDUF	Duplex Failed
DUPLEX FAILED	40MTN_FRDUFL	Requested Duplex Fail
FORCE REMOVED	40MTN_FRDFRV	Requested Force Removal
PESTED	40MTN_FRRPS	Requested Pesting
REMOVED	40MTN_FRDNRV	Requested Normal Removal
REMOVED LOM	40MTN_FRDL0M	Requested Removal LOM
REQ NO ACTION	40MTN_FRRQNA	Requested No Action
RESTORED	40MTN_FRRSUB	Requested Restore
RMV MATE LOM & RST	40MTN_FRLOMR	Requested Restore Subject Remove Mate LOM
RMVD & DGN	10MTN_MIRAD	Removed and Requested Diagnostics
RMVD BOTH MATE &	40MTN_FRRMRS	Requested Remove Subject Remove Mate
RST MATE & RMVD	10MTN_MIRMR	Restored Mate and Removed
RST MATE & RMVD & DGN	10MTN_MIRRD	Restored Mate and RMVD and Diagnosed
RST MATE NO UPD & RMVD	40MTN_FRRNRS	Requested Remove Subject Restore Mate Not Updated
RST MATE UPD & RMVD	40MTN_FRRURS	Requested Remove Subject Restore Mate Updated
RST NO UPDATE	40MTN_FRDTNP	Requested Restore No Update
RST WITH UPDATE	40MTN_FRDTUP	Requested Restore With Update
SCHED AUDIT NUMBER	40MTN_FRDAUD	Requested Audit Number
SCHED CLEANUP OF	40MTN_FRDCLP	Requested Cleanup
SCHED DGN	40MTN_FRDDGN	Requested Diagnostics
SCHED DGN & OPT PHASES	40MTN_FRDOP	Requested DGN With Optional Phases
SCHED PERIPH UNIT	40MTN_FRDPUC	Requested Peripheral Unit
SCHED PEST UPDATE	40MTN_FRUPDD	Requested Pest Update
STATUS AUDIT		Status Audit
SWITCHED	40MTN_FRDSWT	Requested Switch
ZSTART MATE & RMVD	40MTN_ERRZS	Removed Suspect and Requested Zero Start Mate
ZSTART MATE & RMVD	40MTN_FRZAPS	Requested ZAP and Zero Start Mate

NOTE: TABLE A contains a complete listing of abbreviated phases for all abbreviated messages. Some of the abbreviated phases may not be used as the a (action line) variable for the ERSTP message.

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:F-LEV:0
WORK CENTER.. MOC
GENERIC 4E27R2 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

F-LEV[a]
MFNUM=b

2. REASON FOR OUTPUT

To report that a F-level interrupt has occurred. This is an abbreviated form of the REPT:0 message, which will follow.

3. VARIABLE FIELD DEFINITIONS

- a Action line. Refer to TABLE A.
b Maintenance file number (MFNUM) in octal.

4. ACTION TO BE TAKEN

This output message is informational. Any action taken must be based on the specific information printed and the technical impact of that data.

5. REFERENCES

PIDENTs

AUFR	CCFR	CCIS	CSFR	DIFR
DTFR	DUFR	ERAP	ERAT	FSFR
IOCP	MARP	MCAI	NCFR	PBFR
PCRv	PFLR	PSFR	PUFR	SCFR
SCSF	SIRE	SPFR	TNFR	VCFR
WPAD	XTSI			

NOTE: The PIDENT listing contains PIDENTs for all abbreviated messages.
The F-LEV message is not associated with all listed PIDENTs.

Practice 234-180-110, *Call Processing Programs*
Practice 234-180-300, *Interrupt Software Control Structure Description*
Practice 234-180-310, *Peripheral Units Fault Recovery Program Description*
Practice 234-180-320, *Error Analysis Program Description*
Practice 234-180-330, *System Recovery, Initialization and Reinitialization Description*
Practice 254-280-111, *Input/Output Programs Software Description*
Practice 254-280-310, *Fault Recovery Program*
Practice 254-280-320, *Error Analysis Program*

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TABLE A

Action Lines and Their Meanings		
Phase	Symbol	Meaning
COPIED HARD TO SOFT	40MTN_FRDCHS	Requested Copy Hardware to Software
COPIED SOFT TO HARD	40MTN_FRDCSH	Requested Copy Software to Hardware
DUPLEX FAILED	40MTN_ERDUF	Duplex Failed
DUPLEX FAILED	40MTN_FRDUFL	Requested Duplex Fail
FORCE REMOVED	40MTN_FRDFRV	Requested Force Removal
PESTED	40MTN_FRRPS	Requested Pesting
REMOVED	40MTN_FRDNRV	Requested Normal Removal
REMOVED LOM	40MTN_FRDLOM	Requested Removal LOM
REQ NO ACTION	40MTN_FRRQNA	Requested No Action
RESTORED	40MTN_FRRSUB	Requested Restore
RMV MATE LOM & RST	40MTN_FRLOMR	Requested Restore Subject Remove Mate LOM
RMVD & DGN	10MTN_MIRAD	Removed and Requested Diagnostics
RMVD BOTH MATE &	40MTN_FRRMRS	Requested Remove Subject Remove Mate
RST MATE & RMVD	10MTN_MIRMR	Restored Mate and Removed
RST MATE & RMVD & DGN	10MTN_MIRRD	Restored Mate and RMVD and Diagnosed
RST MATE NO UPD & RMVD	40MTN_FRRNRS	Requested Remove Subject Restore Mate Not Updated
RST MATE UPD & RMVD	40MTN_FRRURS	Requested Remove Subject Restore Mate Updated
RST NO UPDATE	40MTN_FRDTNP	Requested Restore No Update
RST WITH UPDATE	40MTN_FRDTUP	Requested Restore With Update
SCHED AUDIT NUMBER	40MTN_FRDAUD	Requested Audit Number
SCHED CLEANUP OF	40MTN_FRDCLP	Requested Cleanup
SCHED DGN	40MTN_FRDDGN	Requested Diagnostics
SCHED DGN & OPT PHASES	40MTN_FRDOP	Requested DGN With Optional Phases
SCHED PERIPH UNIT	40MTN_FRDPUC	Requested Peripheral Unit
SCHED PEST UPDATE	40MTN_FRUPDD	Requested Pest Update
STATUS AUDIT		Status Audit
SWITCHED	40MTN_FRDSWT	Requested Switch
ZSTART MATE & RMVD	40MTN_ERRZS	Removed Suspect and Requested Zero Start Mate
ZSTART MATE & RMVD	40MTN_FRZAPS	Requested ZAP and Zero Start Mate

NOTE: TABLE A contains a complete listing of abbreviated phases for all abbreviated messages. Some of the abbreviated phases may not be used as the a (action line) variable for the F-LEV message.

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:INT:0
WORK CENTER.. MOC
GENERIC 4E27R2 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

INT[a]
MFNUM=b

2. REASON FOR OUTPUT

To report that a interrupt has occurred. This is an abbreviated form of the REPT:0 message, which will follow.

3. VARIABLE FIELD DEFINITIONS

- a Action line. Refer to TABLE A.
b Maintenance file number (MFNUM) in octal.

4. ACTION TO BE TAKEN

This output message is informational. Any action taken must be based on the specific information printed and the technical impact of that data.

5. REFERENCES

PIDENTs

AUFR	CCFR	CCIS	CSFR	DIFR
DTFR	DUFR	ERAP	ERAT	FSFR
IOCP	MARP	MCAI	NCFR	PBFR
PCRv	PFLR	PSFR	PUFR	SCFR
SCSF	SIRE	SPFR	TNFR	VCFR
WPAD	XTSI			

NOTE: The PIDENT listing contains PIDENTs for all abbreviated messages.
The INT message is not associated with all listed PIDENTs.

Practice 234-180-110, *Call Processing Programs*
Practice 234-180-300, *Interrupt Software Control Structure Description*
Practice 234-180-310, *Peripheral Units Fault Recovery Program Description*
Practice 234-180-320, *Error Analysis Program Description*
Practice 234-180-330, *System Recovery, Initialization and Reinitialization Description*
Practice 254-280-111, *Input/Output Programs Software Description*
Practice 254-280-310, *Fault Recovery Program*
Practice 254-280-320, *Error Analysis Program*

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TABLE A

Action Lines and Their Meanings		
Phase	Symbol	Meaning
COPIED HARD TO SOFT	40MTN_FRDCHS	Requested Copy Hardware to Software
COPIED SOFT TO HARD	40MTN_FRDCSH	Requested Copy Software to Hardware
DUPLEX FAILED	40MTN_ERDUF	Duplex Failed
DUPLEX FAILED	40MTN_FRDUFL	Requested Duplex Fail
FORCE REMOVED	40MTN_FRDFRV	Requested Force Removal
PESTED	40MTN_FRRPS	Requested Pesting
REMOVED	40MTN_FRDNRV	Requested Normal Removal
REMOVED LOM	40MTN_FRDLOM	Requested Removal LOM
REQ NO ACTION	40MTN_FRRQNA	Requested No Action
RESTORED	40MTN_FRRSUB	Requested Restore
RMV MATE LOM & RST	40MTN_FRLOMR	Requested Restore Subject Remove Mate LOM
RMVD & DGN	10MTN_MIRAD	Removed and Requested Diagnostics
RMVD BOTH MATE &	40MTN_FRRMRS	Requested Remove Subject Remove Mate
RST MATE & RMVD	10MTN_MIRMR	Restored Mate and Removed
RST MATE & RMVD & DGN	10MTN_MIRRD	Restored Mate and RMVD and Diagnosed
RST MATE NO UPD & RMVD	40MTN_FRRNRS	Requested Remove Subject Restore Mate Not Updated
RST MATE UPD & RMVD	40MTN_FRRURS	Requested Remove Subject Restore Mate Updated
RST NO UPDATE	40MTN_FRDTNP	Requested Restore No Update
RST WITH UPDATE	40MTN_FRDTUP	Requested Restore With Update
SCHED AUDIT NUMBER	40MTN_FRDAUD	Requested Audit Number
SCHED CLEANUP OF	40MTN_FRDCLP	Requested Cleanup
SCHED DGN	40MTN_FRDDGN	Requested Diagnostics
SCHED DGN & OPT PHASES	40MTN_FRDOP	Requested DGN With Optional Phases
SCHED PERIPH UNIT	40MTN_FRDPUC	Requested Peripheral Unit
SCHED PEST UPDATE	40MTN_FRUPDD	Requested Pest Update
STATUS AUDIT		Status Audit
SWITCHED	40MTN_FRDSWT	Requested Switch
ZSTART MATE & RMVD	40MTN_ERRZS	Removed Suspect and Requested Zero Start Mate
ZSTART MATE & RMVD	40MTN_FRZAPS	Requested ZAP and Zero Start Mate

NOTE: TABLE A contains a complete listing of abbreviated phases for all abbreviated messages. Some of the abbreviated phases may not be used as the a (action line) variable for the INT message.

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:INTJ:0
WORK CENTER.. MOC
GENERIC 4E27R2 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

INTJ[a]
MFNUM=b

2. REASON FOR OUTPUT

To report that a interject has occurred. This is an abbreviated form of the REPT:0 message, which will follow.

3. VARIABLE FIELD DEFINITIONS

- a Action line. Refer to TABLE A.
b Maintenance file number (MFNUM) in octal.

4. ACTION TO BE TAKEN

This output message is informational. Any action taken must be based on the specific information printed and the technical impact of that data.

5. REFERENCES

PIDENTs

AUFR	CCFR	CCIS	CSFR	DIFR
DTFR	DUFR	ERAP	ERAT	FSFR
IOCP	MARP	MCAI	NCFR	PBFR
PCRv	PFLR	PSFR	PUFR	SCFR
SCSF	SIRE	SPFR	TNFR	VCFR
WPAD	XTSI			

NOTE: The PIDENT listing contains PIDENTs for all abbreviated messages.
The INTJ message is not associated with all listed PIDENTs.

Practice 234-180-110, *Call Processing Programs*
Practice 234-180-300, *Interrupt Software Control Structure Description*
Practice 234-180-310, *Peripheral Units Fault Recovery Program Description*
Practice 234-180-320, *Error Analysis Program Description*
Practice 234-180-330, *System Recovery, Initialization and Reinitialization Description*
Practice 254-280-111, *Input/Output Programs Software Description*
Practice 254-280-310, *Fault Recovery Program*
Practice 254-280-320, *Error Analysis Program*

SEE PROPRIETARY NOTICE ON COVER PAGE

TABLE A

Action Lines and Their Meanings		
Phase	Symbol	Meaning
COPIED HARD TO SOFT	40MTN_FRDCHS	Requested Copy Hardware to Software
COPIED SOFT TO HARD	40MTN_FRDCSH	Requested Copy Software to Hardware
DUPLEX FAILED	40MTN_ERDUF	Duplex Failed
DUPLEX FAILED	40MTN_FRDUFL	Requested Duplex Fail
FORCE REMOVED	40MTN_FRDFRV	Requested Force Removal
PESTED	40MTN_FRRPS	Requested Pesting
REMOVED	40MTN_FRDNRV	Requested Normal Removal
REMOVED LOM	40MTN_FRDL0M	Requested Removal LOM
REQ NO ACTION	40MTN_FRRQNA	Requested No Action
RESTORED	40MTN_FRRSUB	Requested Restore
RMV MATE LOM & RST	40MTN_FRLOMR	Requested Restore Subject Remove Mate LOM
RMVD & DGN	10MTN_MIRAD	Removed and Requested Diagnostics
RMVD BOTH MATE &	40MTN_FRRMRS	Requested Remove Subject Remove Mate
RST MATE & RMVD	10MTN_MIRMIR	Restored Mate and Removed
RST MATE & RMVD & DGN	10MTN_MIRRD	Restored Mate and RMVD and Diagnosed
RST MATE NO UPD & RMVD	40MTN_FRRNRS	Requested Remove Subject Restore Mate Not Updated
RST MATE UPD & RMVD	40MTN_FRRURS	Requested Remove Subject Restore Mate Updated
RST NO UPDATE	40MTN_FRDTNP	Requested Restore No Update
RST WITH UPDATE	40MTN_FRDTUP	Requested Restore With Update
SCHED AUDIT NUMBER	40MTN_FRDAUD	Requested Audit Number
SCHED CLEANUP OF	40MTN_FRDCLP	Requested Cleanup
SCHED DGN	40MTN_FRDDGN	Requested Diagnostics
SCHED DGN & OPT PHASES	40MTN_FRDOP	Requested DGN With Optional Phases
SCHED PERIPH UNIT	40MTN_FRDPUC	Requested Peripheral Unit
SCHED PEST UPDATE	40MTN_FRUPDD	Requested Pest Update
STATUS AUDIT		Status Audit
SWITCHED	40MTN_FRDSWT	Requested Switch
ZSTART MATE & RMVD	40MTN_ERRZS	Removed Suspect and Requested Zero Start Mate
ZSTART MATE & RMVD	40MTN_FRZAPS	Requested ZAP and Zero Start Mate

NOTE: TABLE A contains a complete listing of abbreviated phases for all abbreviated messages. Some of the abbreviated phases may not be used as the a (action line) variable for the INTJ message.

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:K-LEV:0
WORK CENTER.. MOC
GENERIC 4E27R2 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

K-LEV[a]
MFNUM=b

2. REASON FOR OUTPUT

To report that a K-level interrupt has occurred. This is an abbreviated form of the REPT:0 message, which will follow.

3. VARIABLE FIELD DEFINITIONS

- a Action line. Refer to TABLE A.
b Maintenance file number (MFNUM) in octal.

4. ACTION TO BE TAKEN

This output message is informational. Any action taken must be based on the specific information printed and the technical impact of that data.

5. REFERENCES

PIDENTs

AUFR	CCFR	CCIS	CSFR	DIFR
DTFR	DUFR	ERAP	ERAT	FSFR
IOCP	MARP	MCAI	NCFR	PBFR
PCRv	PFLR	PSFR	PUFR	SCFR
SCSF	SIRE	SPFR	TNFR	VCFR
WPAD	XTSI			

NOTE: The PIDENT listing contains PIDENTs for all abbreviated messages.
The K-LEV message is not associated with all listed PIDENTs.

Practice 234-180-110, *Call Processing Programs*
Practice 234-180-300, *Interrupt Software Control Structure Description*
Practice 234-180-310, *Peripheral Units Fault Recovery Program Description*
Practice 234-180-320, *Error Analysis Program Description*
Practice 234-180-330, *System Recovery, Initialization and Reinitialization Description*
Practice 254-280-111, *Input/Output Programs Software Description*
Practice 254-280-310, *Fault Recovery Program*
Practice 254-280-320, *Error Analysis Program*

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TABLE A

Action Lines and Their Meanings		
Phase	Symbol	Meaning
COPIED HARD TO SOFT	40MTN_FRDCHS	Requested Copy Hardware to Software
COPIED SOFT TO HARD	40MTN_FRDCSH	Requested Copy Software to Hardware
DUPLEX FAILED	40MTN_ERDUF	Duplex Failed
DUPLEX FAILED	40MTN_FRDUFL	Requested Duplex Fail
FORCE REMOVED	40MTN_FRDFRV	Requested Force Removal
PESTED	40MTN_FRRPS	Requested Pesting
REMOVED	40MTN_FRDNRV	Requested Normal Removal
REMOVED LOM	40MTN_FRDLOM	Requested Removal LOM
REQ NO ACTION	40MTN_FRRQNA	Requested No Action
RESTORED	40MTN_FRRSUB	Requested Restore
RMV MATE LOM & RST	40MTN_FRLOMR	Requested Restore Subject Remove Mate LOM
RMVD & DGN	10MTN_MIRAD	Removed and Requested Diagnostics
RMVD BOTH MATE &	40MTN_FRRMRS	Requested Remove Subject Remove Mate
RST MATE & RMVD	10MTN_MIRMR	Restored Mate and Removed
RST MATE & RMVD & DGN	10MTN_MIRRD	Restored Mate and RMVD and Diagnosed
RST MATE NO UPD & RMVD	40MTN_FRRNRS	Requested Remove Subject Restore Mate Not Updated
RST MATE UPD & RMVD	40MTN_FRRURS	Requested Remove Subject Restore Mate Updated
RST NO UPDATE	40MTN_FRDTNP	Requested Restore No Update
RST WITH UPDATE	40MTN_FRDTUP	Requested Restore With Update
SCHED AUDIT NUMBER	40MTN_FRDAUD	Requested Audit Number
SCHED CLEANUP OF	40MTN_FRDCLP	Requested Cleanup
SCHED DGN	40MTN_FRDDGN	Requested Diagnostics
SCHED DGN & OPT PHASES	40MTN_FRDOP	Requested DGN With Optional Phases
SCHED PERIPH UNIT	40MTN_FRDPUC	Requested Peripheral Unit
SCHED PEST UPDATE	40MTN_FRUPDD	Requested Pest Update
STATUS AUDIT		Status Audit
SWITCHED	40MTN_FRDSWT	Requested Switch
ZSTART MATE & RMVD	40MTN_ERRZS	Removed Suspect and Requested Zero Start Mate
ZSTART MATE & RMVD	40MTN_FRZAPS	Requested ZAP and Zero Start Mate

NOTE: TABLE A contains a complete listing of abbreviated phases for all abbreviated messages. Some of the abbreviated phases may not be used as the a (action line) variable for the K-LEV message.

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:1A-FILE
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT: 1A FILE ACCESS a
[b]

2. REASON FOR OUTPUT

To indicate the status of access to the 1A file on the 3B computer.

3. VARIABLE FIELD DEFINITIONS

a Status:

DUPLEX FAILED — Access for software to the 1A file is denied.

RESTORED — Access to the 1A file has been restored. A matching
audit of disk to core completed with no errors.

For a = DUPLEX FAILED:

b Reason access is denied:

1A FILE ACCESS RECOVERY IN PROGRESS

1A FILE ACCESS RECOVERY STOPPED

1A FILE ACCESS RECOVERY TIMED OUT

4. ACTION TO BE TAKEN

If status is DUPLEX FAILED and the reason is:

1A FILE ACCESS RECOVERY IN PROGRESS, then the system audit of writable stores
(SAWS) matching audit is in progress. Wait for a completion message and
status.

1A FILE ACCESS RECOVERY STOPPED, then the SAWS matching audit did not
complete or had an error. (See rest of printout.) Restoration of access to
the 1A file must be done by manual action. Consult Task Oriented
Practices (TOP) for recovery from duplex attached processor interface
(API) failure.

1A FILE ACCESS RECOVERY TIMED OUT, then the SAWS matching audit has not
completed in the allotted time. Restoration of access to the 1A file must be
done by manual action. Consult TOPs for recovery from duplex API
failure.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
APFRBASE
APFRILEV

Practice 234-151-002, *Peripheral Equipment Maintenance - Maintenance Operations Center (MOC) Recover from Duplex Failure of APIs and 1A File Access*

Practice 254-280-114, *Attached Processor Interface Programs*

Practice 254-280-210, *Maintenance Control Program*

Input Messages
ALW:APS
CLR:APS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:ABLE
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT:ABLE TO RECORD AMA DATA

2. REASON FOR OUTPUT

To report that automatic message accounting (AMA) data is now being recorded.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
AMDX
IOCPOMC1

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:AC-PWR-RM
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:AC PWR RMV a b [c] [d] e

2. REASON FOR OUTPUT

To report the occurrence of a loss of alternating current (AC) power.

3. VARIABLE FIELD DEFINITIONS

a	Unit type.
b	Member number.
c	Subunit type and submember number.
d	Frame type and number.
e	Frame location number.

4. ACTION TO BE TAKEN

Check cause for power alarm.

5. REFERENCES

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:AC-PWR-RS
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:AC PWR RST a b [c] [d] e

2. REASON FOR OUTPUT

To report the restoral of alternating current (AC) power.

3. VARIABLE FIELD DEFINITIONS

a	Unit type.
b	Member number.
c	Subunit type.
d	Submember number.
e	Frame type and number.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:ACK
WORK CENTER.. MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT:ACK TIMEOUT a b c d e REQ IN PROGRESS

2. REASON FOR OUTPUT

To report that a removal or restoral request made from a frame power control switch has timed out. The acknowledge lamp has been turned off, and possible diagnostic information normally given at the frame has been canceled. However, the request is still active and can be expected to proceed to completion.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | Unit type of the frame involved. |
| b | Member number of unit. |
| c | Subunit type, if present. |
| d | Subunit number if a subunit type is present. |
| e | Frame type and number. |

4. ACTION TO BE TAKEN

None. Request is still in progress and has not been lost.

5. REFERENCES

PIDENT
MCCMEPS1

Practice 254-280-212, *Master Control Complex Common Control and Monitor Program*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:ACT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT: ACT CC FAIL NO SW

2. REASON FOR OUTPUT

To report that the active central control (CC) has failed some noncritical CC test. The message is printed on interrupt level by the CC fault recognition program. The CCs were not switched because the standby CC was marked in trouble.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
CCFRMAIN

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:ACV
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT: ACV VOLUME EXCEEDED

2. REASON FOR OUTPUT

During the trunk sub-group headcell audit, if the number of trunks with Access Charge Verification (ACV) allowed is exceeded, then the throttling rate will get set to 50% and this message will be output. The message will also be output when throttling of ACV processing can be resumed at its original volume.

3. VARIABLE FIELD DEFINITIONS

See Reason For Output.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
BILLCNTL

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:ALARM
WORK CENTER.. MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT: a ALARM b GROWTH GRID c FLN dddd.dd
MSN eeeeeee ACTIVATED

2. REASON FOR OUTPUT

To print whenever a hardware alarm (equipment frame) is activated in an alarm grid designated as being in the growth or special growth state. An alarm grid designated as unequipped will not report any alarms.

3. VARIABLE FIELD DEFINITIONS

- a The alarm level which occurred (listed according to urgency):
- ABS — Alarm battery supply.
 - CR — Critical.
 - MJ — Major.
 - MN — Minor (continuous).
 - PMJ — Power major.
 - PMN — Power minor.
- b The maintenance center responsible for the alarm grid:
- MOC — Master operations center.
 - TEC1 — Terminal equipment center 1.
 - TEC2 — Terminal equipment center 2.
 - TEC3 — Terminal equipment center 3.
 - TEC4 — Terminal equipment center 4.
 - TEC5 — Terminal equipment center 5.
 - TOC — Trunk operations center.
- c The member number (1-15) of the alarm grid involved. Member number 0 is unused.
- d The floor location number (FLN) of the miscellaneous frame containing the alarm grid equipment. For example, 1701.13 where 17=building floor number, 01=equipment lineup number, and 13=equipment frame number.

SEE PROPRIETARY NOTICE ON COVER PAGE

e The miscellaneous scan point number (MSN) of the alarm grid scan point which was activated (state change 0 to 1).

4. ACTION TO BE TAKEN

Note that during the growth of an alarm grid, both planned and unplanned alarm reports can occur. Confirm that this report has occurred as a result of a planned growth procedure; otherwise, locate and correct the hardware fault.

5. REFERENCES

PIDENT
ALRM01

Practice 234-100-040, *Office Alarm System Description and Theory*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:ALM
WORK CENTER.. MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT: a ALM b GRID c FLN dddd.dd

2. REASON FOR OUTPUT

To report that a hardware alarm (equipment frame) has been activated in an alarm grid designated as being in the operational state. If the alarm grid is in the growth state, the message REPT:ALARM output message is printed in place of this message. This message only indicates which alarm grid received the alarm. For specific equipment frame identification, consult the REPT:PA output message which accompanies this message.

3. VARIABLE FIELD DEFINITIONS

- a The alarm level that occurred (listed according to degree of urgency):
- ABS — Alarm battery supply.
 - CR — Critical.
 - FOR — Foreign alarm (transferred or grouped with this grid).
 - MJ — Major.
 - MN — Minor (continuous).
 - PMJ — Power major.
 - PMN — Power minor.
- b The maintenance center responsible for the alarm grid:
- MOC — Master operations center.
 - TEC1 — Terminal equipment center 1.
 - TEC2 — Terminal equipment center 2.
 - TEC3 — Terminal equipment center 3.
 - TEC4 — Terminal equipment center 4.
 - TEC5 — Terminal equipment center 5.
 - TOC — Trunk operations center.
- c The member number of the alarm grid involved (1-15); member number 0 is unused.

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- d The floor location number (FLN) of the miscellaneous frame containing the alarm grid equipment. FLN will only appear when a=ABS, since this is the alarm for the alarm circuit itself mounted in the miscellaneous frame. For example, 1701.13 where 17 is the building floor number, 01 is the equipment lineup number, and 13 is the equipment frame number.

4. ACTION TO BE TAKEN

Repair the hardware failure according to the urgency of the alarm level. A hardware alarm cannot be retired with the alarm retire key; it must be retired at the source of the trouble (frame fuse, etc.). A separate REPT:PA output message indicates exactly which equipment frame activated the alarm. Visual and audible signals are also provided as an aid in locating the trouble area.

5. REFERENCES

PIDENT
ALRM01

Practice 234-100-040, *Office Alarm System Description and Theory*

Output Messages
REPT:ALARM
REPT:PA

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:ALW
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:ALW:TDAS MSG a
b CODE: cc

2. REASON FOR OUTPUT

To print in response to the ALW:TDAS input message. If the message failed, a reject code or output code is printed. If the message was successful, the traffic (TRF) tape is linked into the 4ESSTM software.

3. VARIABLE FIELD DEFINITIONS

- a COMPLETE — No reject or output code printed.
FAILED — Look at the reject or output code.
- b OUTPUT — Look at output code.
REJECT — Look at reject code.
- c Output codes are as follows:
2 — TRF restarted on a new tape.
3 — TRF restarted - failed during write on old tape.
4 — TRF is not active.
- Reject codes are as follows:
1 — TRF should not be read only.
2 — Macro already in progress.
3 — TRF file should not be open.
4 — TRF file should not be closed.
5 — File state should not be changing.
6 — TRF not active.
7 — Tape passed end of tape.
8 — Signaling link (SL) function requesting NSL macro.
9 — NSL function requesting SL macro.
10 — Function is out of range (invalid).
11 — Cannot release active unit.

SEE PROPRIETARY NOTICE ON COVER PAGE

- 13 — Unit to be released not linked to function.
- 14 — Standby unit not available.
- 15 — No macro in progress.
- 16 — Unit is the active unit.
- 17 — Unit is not assigned.

4. ACTION TO BE TAKEN

Ensure that the TRF tape is mounted and the tape drive is in service.

5. REFERENCES

PIDENT
DUPTXST

Input Message
ALW: TDAS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:AMA-ICDR-1A
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:AMA and ICDR 1A TRANSFER BUFFER OVERFLOW
AMA and ICDR INFORMATION RECORDING HALTED

2. REASON FOR OUTPUT

To report that the flow of automatic message accounting (AMA) (and international call detail recording [ICDR] if the office is so equipped) data between the 1A AMA send buffer and the attached processor system (APS) receiving buffer AM_rcvbuf has been interrupted. Data is no longer being transferred to the APS so the 1A buffer overflows. A critical alarm occurs because billing information is lost. Also, the "BILLING RECORDING STOPPED" lamp on the master control complex (MCC) is lit.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

See if there have been alarms on the APS due to buffers backing up. If so, this message indicates the last place for holding data is full. Fixing the problems on the APS will allow normal transfer to resume.

If this is not the case, check for problems with the APS (a phase 2, 3 or 4, or system suspension), the attached processor interfaces (APIs), and/or auxiliary unit (AU) buses. If all of these are performing normally, the problem is probably due to an inactive or insane process on the APS. If the cause is not evident, check the operations, administration, & maintenance (OA & M) plan for the AMASE feature.

Indication that the system is back to normal is given by the output message: REPT AMA and ICDR RECORDING RESTARTED and by the "Billing Recording Stopped" lamp on the MCC going out.

5. REFERENCES

PIDENTs
BILLCNTL
IOCPPOM4

Output Message
REPT:AMA-ICDR-REC

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:AMA-ICDR-REC
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:AMA and ICDR RECORDING RESTARTED

2. REASON FOR OUTPUT

To report that automatic message accounting (AMA) data is now being recorded. If the office is also handling international call detailed recording (ICDR), its data recording has also been restarted.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
BILLCNTL
IOCPOM4

Output Message
REPT:AMA-ICDR-1A

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:AMA-ICDR-TR
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:AMA and ICDR TRANSFER TO 3B HALTED
DATA MAY SOON BE LOST!

2. REASON FOR OUTPUT

To report that the 1A buffer used to hold automatic message accounting (AMA) data is half-full. The data is not being transferred to the 3B for formatting. AMA recording is in jeopardy as the buffer will soon overflow. The craft must find the cause of the blockage before this happens.

The amount of time available before the buffer overflows is completely dependent on the amount of billable calls handled by the office.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

Handle this output message just the same as if the buffer had already overflowed: see the REPT:AMA-ICDR-1A output message (REPT AMA 1A TRANSFER BUFFER OVERFLOW) to find the actions to be taken.

When the problem is resolved, The REPT:ABLE message is printed. If the problem is not fixed in time, the REPT AMA 1A TRANSFER BUFFER OVERFLOW message is printed, and AMA data will be lost.

5. REFERENCES

PIDENTs
BILLCNTL
IOCPPOM4

Output Messages
REPT:ABLE
REPT:AMA-ICDR-1A

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:ANSWERED
WORK CENTER.. MAC, MOC, NMOC, TEC,
TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:ANSWERED CALLS LESS THAN 20% OF INCOMING SEIZURES

ADDR OF FAILURE aaaaaaaaa

ANSWERED CALLS bbbbbbbb
INCOMING SEIZURES cccccccc

2. REASON FOR OUTPUT

To inform the craft that a threshold percentage of 4ESS™ calls are not being completed. This percentage will be displayed above the test call seizure lamp on the master control complex (MCC) bar graph.

This message will only be printed every 5 minutes and if the measurement sample (i.e., traffic flow) was significant enough to warrant an alertable condition.

When this message is seen, the test call failure light on the MCC should be lit.

3. VARIABLE FIELD DEFINITIONS

- a Location in the SIMRMCCD PIDENT where the message was initiated.
- b Number of outpulsed calls that were answered for one minute.
- c Total incoming seizure count for one minute.

4. ACTION TO BE TAKEN

None. This output is informational. Any action taken should be based on supporting information.

5. REFERENCES

PIDENT
SIMRMCCD

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:AOOC
WORK CENTER.. NMOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT: AOOC TURNOFF MESSAGE a:
CODE = bbb-ccc TSG = dddd dd dd ddd ddd

2. REASON FOR OUTPUT

To report when a turnoff message is received or sent in response to a call which has been routed out-of-chain.

3. VARIABLE FIELD DEFINITIONS

a	RECEIVED SENT
b	Numbering plan area (NPA) number.
c	Exchange number (NXX).
d	Circuit identification number (CIN) identifying the trunk subgroup (TSG).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
NMGTANAL
NMGTOCTO

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:AOOC-ROUT
WORK CENTER.. NMOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:AOOC ROUTING TURNOFF MESSAGES

a ON THESE TSGS

bbbb bb bb bbb bbb

-
-
-

2. REASON FOR OUTPUT

To print when a turnoff message is transmitted or received on a trunk subgroup (TSG).

3. VARIABLE FIELD DEFINITIONS

a Specifies the action taken:

RECEIVED

TRANSMITTED

b Circuit identification number (CIN) identifying the trunk subgroup(s) affected.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
NMGTANAL

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:APMSG
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT:APMSG [a]
[MFNUM= b]

2. REASON FOR OUTPUT

To report the receipt of a 3B attached processor system (APS) output message. The message is printed at the priority assigned by the APS.

3. VARIABLE FIELD DEFINITIONS

- a Text of message generated by the APS.
- b Error analysis program (ERAP) maintenance file number, in octal, used to save message (if printed at an alarmed priority).

4. ACTION TO BE TAKEN

Perform action listed for 3B APS output message in APS Input/Output (I/O) Document.

5. REFERENCES

PIDENT
IOCPUSR1

4ESSTM/APS I/O Messages Document, IM/OM-4A001

Input Messages
ALW:APMSG
APMSG:0
INH:APMSG

Output Message
REPT:IOCP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:APS
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT:APS a AUTO RECOVERY b
c

2. REASON FOR OUTPUT

To indicate the status of the attached processor communication link.

3. VARIABLE FIELD DEFINITIONS

a Attached processor system (APS) number (0-7).
b Status:
FAILURE — Automatic recovery failed to recover the link in the allotted time period.
INHIBITED — Automatic recovery has automatically been stopped.
SUCCESS — Automatic recovery successfully established communication with the 3B computer.

For b = FAILURE:

c AUTO RECOVERY INHIBITED.
For b = INHIBITED:

c EXCESSIVE AU BOOTSTRAPS.
EXCESSIVE ERROR RATE.

For b = SUCCESS:

c 1A FILE ACCESS DUPLEX FAILED
1A FILE ACCESS RECOVERY IN PROGRESS
1A FILE ACCESS RECOVERY STOPPED

4. ACTION TO BE TAKEN

If status is:

FAILURE Investigate and correct attached processor interface (API) hardware or the 3B computer. When the problem is cleared restore the link to the 3B computer. (See input message ALW:APS.)
INHIBITED and c = EXCESSIVE AU BOOTSTRAPS — Auxiliary unit (AU) problem led to excessive bootstraps. Request assistance to analyze system problems.

SEE PROPRIETARY NOTICE ON COVER PAGE

INHIBITED	and c = EXCESSIVE ERROR RATE — Auto link recovery was attempted too often. Request assistance to analyze system problem.
SUCCESS	and c = 1A FILE ACCESS RECOVERY IN PROGRESS — Wait for system audit of writable stores (SAWS) audit of 1A file to complete.
SUCCESS	and c = 1A FILE ACCESS RECOVERY STOPPED — If matching audit is inhibited, allow SAWS and check the 1A file for validity. Consult Task Oriented Practices (TOP) for duplex API failure recovery.

5. REFERENCES

PIDENT
APFRILEV

Input Messages
ALW:APS
CLR:APS
INH:APS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:ATP-NODE
WORK CENTER.. MOC, TEC, TOC
GENERIC 4E20 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:ATP NODE TROUBLE

2. REASON FOR OUTPUT

To report the AT&T trigger platform (ATP) node is not responding to 1B processor messages. Messages to the ATP node will be throttled until the ATP node responds.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
Q931ATP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:AUD-CUTOF
WORK CENTER.. MAC, MOC, NMOC, TEC,
TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:AUD ALM CUTOFF a b

2. REASON FOR OUTPUT

To report that the audible alarm has been cut off from the frame control switch. In the case of the signaling processor (SP), this report refers to the state of the matrix maintenance limit (MML) switch.

3. VARIABLE FIELD DEFINITIONS

a Unit type:

 MFA — Miscellaneous frame A.
 MFB — Miscellaneous frame B.
 SP — Signaling processor.

b Member number of unit.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
MCFNPEMO

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:AUD-RSTD
WORK CENTER.. MAC, MOC, NMOC, TEC,
TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:AUD ALM RSTD a b

2. REASON FOR OUTPUT

To indicate that the audible alarm has been restored at the frame control switch. In the case of the signaling processor (SP), this report refers to the state of the matrix maintenance limit (MML) switch.

3. VARIABLE FIELD DEFINITIONS

a Unit type:

 MFA — Miscellaneous frame A.
 MFB — Miscellaneous frame B.
 SP — Signal processor.

b Member number of unit.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
MCFWIOCP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:AUDIT
WORK CENTER.. MAC, MOC, NMOC, TEC,
TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:AUDIT MESSAGE a FROM bbbbbbbb IN EMERGENCY MODE
cccccccc dddddddd eeeeeeee ffffffff gggggggg hhhhhhhh iiiiiiiii jjjjjjjj
cccccccc dddddddd eeeeeeee ffffffff gggggggg hhhhhhhh iiiiiiiii jjjjjjjj

2. REASON FOR OUTPUT

To print when an attempt has been made to request or add to an audit message while in emergency mode.

3. VARIABLE FIELD DEFINITIONS

- a Indicates whether a new request or an addition to audit message was attempted:
ADDITION
REQUEST
- b Address where request was made (T register).
- c - j Dump of registers and shadow registers, where:
First Line — Central control (CC) registers F,G,J,K,L,X,Y,Z
Second Line — CC shadow registers F,G,J,K,L,X,Y,Z

4. ACTION TO BE TAKEN

Determine the cause of audit message request. Do this immediately if many audits are being requested or if the manual requests being made are not completing properly. Eliminate cause of request, if possible.

5. REFERENCES

PIDENT
EPECEXEC

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:AUTO
WORK CENTER.. NMOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:AUTO	HTRCODES, a		
CODE	IMA COUNT	INA COUNT	OUTPULSED ATTEMPTS
bbb-ccc	dddd	eeee	ffff

2. REASON FOR OUTPUT

Printed when the internal hard-to-reach (HTR) analysis determines that some codes completion statistics indicate those codes are HTR.

3. VARIABLE FIELD DEFINITIONS

- a DOMESTIC — Domestic.
 INTL — International.
- b Numbering plan area (NPA) of code:
 000 — Exchange number (NXX) is in home NPA.
- c NXX of code:
 000 — NPA only.
- d 5-minute count of calls bound for this code that failed within the machine.
- e 5-minute count of calls that failed in the network.
- f 5-minute count of calls successfully outpulsed.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
NMGTANAL

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:BANDSTAT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:BANDSTAT UNACKNOWLEDGED TFA SIGLK aabb BAND c

2. REASON FOR OUTPUT

To indicate that a far-end common channel signaling system number 6 (CCITT6) office has not responded to repeated sending of traffic allowed (TFA) signals within one minute.

3. VARIABLE FIELD DEFINITIONS

- a Terminal grouping (TGR) number of link affected.
- b Subunit number within TGR.
- c Number of band on which TFA was not acknowledged.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
ISCLSTP6

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:BP-SCS
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

- [1] REPT:BP SCS a MRAM b {FAST|NORMAL|CUSTOM}
[2] REPT:BP SCS a SCU c MRAM d {FAST|NORMAL|CUSTOM}

2. REASON FOR OUTPUT

This autonomous message prints whenever a breakpoint fires in a Service Circuit System (SCS) frame.

Format [1] is used for a breakpoint report from the controller.

Format [2] is used for a breakpoint report from a Service Circuit Unit (SCU).

3. VARIABLE FIELD DEFINITIONS

- a SCS member number in decimal (0-7).
b SCS controller Micro-store instruction Random Access Memory (MRAM) address in hexadecimal where the breakpoint has fired. The valid range is 0 thru FFFF.
c SCU number in decimal (0-15).
d SCU MRAM address in hexadecimal where the breakpoint has fired. The valid range is 4000 - BFFF.

4. ACTION TO BE TAKEN

Read the breakpoint data stored from the controller or from the SCU using the DUMP:MEMORY-SCS command as directed by the Technical Assistance Center. Remove any unneeded breakpoints using the CLR:BP-SCS input command.

5. REFERENCES

PIDENT
SCSBPMEM

Input Messages
CLR:BP-SCS
DUMP:MEMORY-SCS
OP:BP-SCS

Output Messages
DUMP:MEMORY-SCS
OP:BP-SCS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:CALL
WORK CENTER.. NMOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT: CALL FAILED TO REROUTE ON TSG aaaa aa aa aaa aaa bbb

2. REASON FOR OUTPUT

To report when a call fails because the trunk subgroup (TSG) to which it was rerouted (by network management [NM] manual control) was either NC or had some NM control on it. It will be issued, at most, once per rerouted TSG per 5 minutes.

3. VARIABLE FIELD DEFINITIONS

a Circuit identification number (CIN) identifying the trunk subgroup.
b Base traffic number (BFTN).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
NMGTANAL
NMGTCALL

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:CALL-9
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT: CALL USING TRK abbbb bb bb bbb bbb HAS BEEN
UP OVER c OR MORE MIDNIGHTS.

2. REASON FOR OUTPUT

To report that either the centralized automatic message accounting (CAMA) midnight passed function or other (e.g., direct services dialing capability [DSDC]) billing midnight passed routine has determined that a call has been up for at least 9 midnights for offices with old format billing records, or 15 midnights for offices with new format billing records. When such a call is detected, it will be reported by this message.

3. VARIABLE FIELD DEFINITIONS

- a Traffic number of the incoming trunk.
- b Circuit identification number (CIN) of the incoming trunk.
- c Number (15) of midnights the call has been up.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
CAMA0000
DSDCBILL

Practice 234-180-110, *Call Processing Programs*

Output Message
REPT:OVER

SEE PROPRIETARY NOTICE ON COVER PAGE

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ID REPT:CALL-C
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:CALL USING TRK ab HAS BEEN UP OVER c MIDNIGHTS

2. REASON FOR OUTPUT

To report that either the centralized automatic message accounting (CAMA) midnight passed function or other (e.g., direct services dialing capability [DSDC]) billing midnight passed function has determined that an answered call has been in progress for more than one midnight.

3. VARIABLE FIELD DEFINITIONS

- a Traffic number of the incoming trunk.
- b Circuit identification number (CIN) of the incoming trunk.
- c Number (2 through 8) of midnights the call has been up.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
CAMA0000
DSDCBILL

Practice 234-180-110, *Call Processing Programs*

Output Message
REPT:OVER

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:CALL-FAILED
WORK CENTER.. NMOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:CALL FAILED BECAUSE ALL AOOO ROUTES ARE TURNED OFF:
AOOO RDBI = a
{DOMESTIC CODE b-c|INTL CC d}

2. REASON FOR OUTPUT

To report when a call fails because it has overflowed the in-chain routing data block (RDB), and all routes in the out-of-chain RDB have been turned off, either manually or automatically. It will be issued once per automatic out-of-chain routing data block index (AOOO RDBI) per five minutes.

3. VARIABLE FIELD DEFINITIONS

a	Automatic out-of-chain routing data block index.
b	Numbering plan area (NPA) called.
c	Exchange number (NXX) called.
d	Country code called.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
NMGTANAL
NMGTCALL

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:CAMA
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:CAMA TRK abbbb bb bb bbb bbb HAS BEEN UP OVER 9 OR
MORE MIDNIGHTS

2. REASON FOR OUTPUT

To report the centralized automatic message accounting (CAMA) midnight past program, executed every day at midnight, to increment the midnight's past counter for all active CAMA calls. This counter is limited to one decimal digit. Thus, once a call has been active over nine midnights, this count can no longer be incremented. When such a call is detected, it will be reported by this message.

3. VARIABLE FIELD DEFINITIONS

- a Traffic number of the incoming trunk.
- b Circuit identification number (CIN) of the incoming trunk.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
CAMA0000

Practice 234-180-110, *Call Processing Programs*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:CAMA-TRK
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:CAMA TRK abbbb bb bb bbb bbb HAS BEEN UP OVER c MIDNIGHTS

2. REASON FOR OUTPUT

To report the centralized automatic message accounting (CAMA) midnight past program, executed every day at midnight, which increments the midnight's past digit for all active CAMA calls. Any CAMA call that has been active for two or more midnights is reported via this teletypewriter (TTY) message.

3. VARIABLE FIELD DEFINITIONS

- a Traffic number of the incoming trunk.
- b Circuit identification number (CIN) of the incoming trunk.
- c Number of midnights over which the call has been active (2-8).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
CAMA0000

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:CANCEL
WORK CENTER.. MAC, MOC, NMOC, TEC,
TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:CANCEL OVERLOAD CONTROLS a

2. REASON FOR OUTPUT

To respond to a request by the operation of the cancel overload key on the master control complex (MCC) to cancel all overload controls or to remove the cancel of overload controls.

3. VARIABLE FIELD DEFINITIONS

a Disposition of the request:

COMPLETED — All overload controls have been removed.

REMOVED — The cancel has been removed and the overload controls are returned to their state previous to the cancel request.

STARTED — The cancel request has been accepted and overload controls have started to be removed.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
OVLDPGRM

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:CARRIER
WORK CENTER.. NMOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT: CARRIER GROUP ALARM a THE FOLLOWING TSGs ARE AFFECTED:
TSG TSG SIZE NO. OF TRUNKS AFFECTED TRAFFIC NUMBER
bbbb bb bb bbb bbb c d e

2. REASON FOR OUTPUT

To report that a carrier group alarm (CGA) is activated or deactivated. A list of the trunk subgroups (TSGs) affected is given.

3. VARIABLE FIELD DEFINITIONS

- a Status of the alarm:
ACTIVATED
DEACTIVATED
- b Circuit identification number (CIN) of the trunk subgroup affected.
- c Total number of trunks in the TSG.
- d Number of trunks in the TSG that are affected.
- e Traffic number of first affected trunk.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
NMGTANAL

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:CAT01
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

```
REPT:CAT01 a b c d e
ffff....    ....fff
ffff....    ....fff
.
.
.
ffff....fff
```

2. REASON FOR OUTPUT

To send diagnostic failure data to the switching control center system (SCCS) computer for centralized automatic trouble locating and analysis system 2 (CATLAS-2) trouble locating analysis.

3. VARIABLE FIELD DEFINITIONS

a	Unit type.
b	Member number.
c	Subunit type.
d	Submember number.
e	ABORT — Abort of the CAT01 sequence. CONTINUED — Continuation of the CAT01 sequence. END — End of the CAT01 sequence. HEADER — Start of the CAT01 sequence.
f	Hex characters representing data used by CATLAS-2.

4. ACTION TO BE TAKEN

Submit the CAT01 diagnostic failure data to CATLAS-2 for analysis.

5. REFERENCES

PIDENT
DRPPCAT

Input Messages
ALW:CATLAS
INH:CATLAS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:CAT03
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT:CAT03 a b c d PIN
eeefffff ggggg hhhiiii jjjjj

2. REASON FOR OUTPUT

To report the result of the failing diagnostic in the form of a parameter index number used in centralized automatic trouble locating and analysis system 2 (CATLAS-2) repair operations.

3. VARIABLE FIELD DEFINITIONS

a	Unit type.
b	Member number.
c	Subunit type.
d	Submember number.
e	The decimal number of the first failing phase of the diagnostic.
f	The decimal number of the first failing test of the diagnostic plus one.
g	The decimal value of the total number of failing tests plus the total number of bits set in the mismatch word in the first failing test of each failing phase of the diagnostic.
h	The decimal number of the last failing phase of the diagnostic.
i	The decimal number of the last failing test of the diagnostic plus one.
j	The decimal value of a hash sum computed over the entire diagnostic pattern.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
DRPPCAT

Input Messages
ALW:CATLAS
INH:CATLAS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:CC
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

[1] REPT:CC a INT FAIL DATA

AC1FR(H)	AC1FR(L)	AC1GR(H)	AC1GR(L)	AC1JR(H)	AC1JR(L)
AC1KR(H)	AC1KR(L)	AC1LR(H)	AC1LR(L)	AC1XR(H)	AC1XR(L)
AC1YR(H)	AC1YR(L)	AC1ZR(H)	AC1ZR(L)	AC1BR(H)	AC1BR(L)
AC1ER	AC1CSC	AC1CCS(H)	AC1CCS(L)	AC1ILA	CC1TESTFAIL
CC1ACW	CC1BCW	CC1STATUS			

[2] REPT:CC a INT FAIL DATA

ST1FR(H)	ST1FR(L)	ST1GR(H)	ST1GR(L)	ST1JR(H)	ST1JR(L)
ST1KR(H)	ST1KR(L)	ST1LR(H)	ST1LR(L)	ST1XR(H)	ST1XR(L)
ST1YR(H)	ST1YR(L)	ST1ZR(H)	ST1ZR(L)	ST1MMR	CC1TESTFAIL
AC1MSR	ST1MSR	ST1BR(H)	ST1BR(L)	AC1ME0(H)	AC1ME0(L)
ST1CAR(H)	ST1CAR(L)	ST1DAR(H)	ST1DAR(L)	ST1MI0(H)	ST1MI0(L)
AC1MI0(H)	AC1MI0(L)	AC1ME1(H)	AC1ME1(L)	AC1MI1(H)	AC1MI1(L)
ST1ME0(H)	ST1ME0(L)	ST1MI1(H)	ST1MI1(L)	ST1ME1(H)	ST1ME1(L)

2. REASON FOR OUTPUT

To report that either the active or standby central control (CC) failed one of the CC fault recognition tests during interrupt recovery. Also generates a printout describing the failure that occurred.

Format [1] prints if a is the active CC.

Format [2] prints if a is the standby CC.

3. VARIABLE FIELD DEFINITIONS

a The member number of the CC that failed.

Description of selected variable names:

ACW	—	CCFR control word.
BCW	—	Backup control word.
STATUS	—	CC status word.
TESTFAIL	—	Indication of which test failed.

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4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
CCFRMAIN
CCFRTEST

BIT	CONTROL WORD TEST SELECTION (CC1ACW & CC1BCW)
0	Buffer register tests
1	Register and homogeneity tests
2	Index adder tests
3	Add-one logic tests
4	Parity tests
5	Protected area tests
6	Stack tests
7	Boot ROM tests
8	Matcher tests
9	Decoder tests
10	Buffer bus access tests
11	Interrupt sequencer tests
12	Fetch / execution sequencer tests
13	Peripheral bus tests
14	Interface bus tests
15	Pulse source failure retry
16	Internal B-Level error recovery
17	Subsystem access tests
18	Peripheral controller (PC) B-Level all tests passed (ATP) termination routine
19	Switch CC ATP routine
20	C-Level ATP routine
21	External entry ATP routine
22	Deferred CCFR ATP termination routine
23	Interrupt termination routine

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BIT CC SOFTWARE STATUS WORD LAYOUT (CC1STATUS)

- 0 Run deferred CCFR tests on active CC only
- 1 Print results when deferred tests ATP
- 2 Switch CCs & retest if deferred tests ATP
- 3 Restore standby CC to service
- 4 Loop on deferred CCFR
- 5 Deferred CCFR in progress
- 6 Active CC indicator(which CC is active, 0 or 1)
- 7 CCs are running in-step
- 8 CCs were running in-step
- 9 Standby CC under test
- 10 Routine exercise in progress
- 11 Standby CC diagnosed because of high error rate
- 12 Active CC diagnosed because of high error rate
- 13 High error rate when CCs run in-step
- 14 External fault recovery requested CCFR tests
- 15 Request CC diagnostics
- 16 CCFR error analysis diagnosis flag
- 17 Deferred tests run as part of diagnostics
- 18 Results of deferred tests during diagnosis
- 19 The standby CC was removed via teletypewriter (TTY)
- 20 Update CC out-of-service lamps
- 21 B-Level occurred on standby CC
- 22 CC halted by access test
- 23 (unused)

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BIT FAILING TEST LAYOUT (CC1TESTFAIL)

- 0 Buffer register tests
- 1 Register and homogeneity tests
- 2 Index adder tests
- 3 Add-one logic tests
- 4 Parity generator and checker tests
- 5 Protected area tests
- 6 Stack tests
- 7 Boot ROM tests
- 8 Matcher tests
- 9 Decoder tests
- 10 Buffer bus access tests
- 11 Interrupt sequencer tests
- 12 Fetch / execution sequencer tests
- 13 Peripheral bus tests
- 14 Interface bus tests
- 15 (unused)
- 16 (unused)
- 17 (unused)
- 18 Subsystem access tests
- 19 Logic tests
- 20 Active matcher tests
- 21 (unused)
- 22 (unused)
- 23 (unused)

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ID REPT:CC-CLOCK
WORK CENTER.. MOC
GENERIC 4E19 only
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT:CC a (b) CLOCK ERRORS DETECTED - cccccccc

2. REASON FOR OUTPUT

To report the status of either/both the active and/or standby central control (CC) clock error sources as registered in the clock error (CLE) register(s).

3. VARIABLE FIELD DEFINITIONS

- a Member number of the CC having clock errors.
- b CC status:
- ACTIVE CC
- STDBY CC
- c Contents of the CC's CLE register. Bits 1-6 within the CLE indicate which pack originated the problem.
- | Bit | CLE Register Bit Interpretation |
|-----|---|
| 0 | UNLATCH CLOCK ES FOR THE CLOCK GENERATOR — Not applicable (N/A) (summary bit) |
| 1 | ACTIVE GENERATOR CLOCK ERROR BIT — KLW24 in active CC. |
| 2 | CC DISTRIBUTION CLOCK ERROR — KLW24 in CC listed. |
| 3 | INTERFACE BUS 0T4 DIST. CLOCK ERROR — KLW20 in CC listed. |
| 4 | INTERFACE BUS 2T6 DIST. CLOCK ERROR — KLW13 in CC listed. |
| 5 | STANDBY CC TRC OR CABLE FAIL ERROR LATCHED — KLW24 (The actual standby CC.) |
| 6 | STANDBY CC TRC OR CABLE FAIL ERROR SET — Not applicable. |

4. ACTION TO BE TAKEN

Consult with the next higher level of technical support to confirm repair action of unit based on the information in the register table.

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5. REFERENCES

PIDENT
CCFRMAIN
CCFRTEST

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ID REPT:CC-EER
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT: CC EER a

2. REASON FOR OUTPUT

To report on interrupt level by the central control (CC) fault recognition (CCFR) program that CC errors continue to occur, but both CCs pass all CCFR tests. The action performed depends on the number of errors that have occurred. CCFR will initiate automatic diagnosing and/or switching of the CCs in an effort to isolate the source of the errors. If interrupts still continue to occur and recovery has been attempted with both CCs, the standby CC will be removed from service.

3. VARIABLE FIELD DEFINITIONS

a Action taken by CCFR as follows:

DGN REQ	— Diagnose the standby CC.
STBY RMV	— Remove the standby CC from service to avoid further interrupts.
SW AND DGN REQ	— Switch CCs and diagnose the new standby CC.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
CCFRMAIN

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ID REPT:CC-PREFETCH
WORK CENTER.. MOC
GENERIC 4E26 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT:CC a PREFETCH 3 CYCLE TIMING ERROR

2. REASON FOR OUTPUT

Reports PREFETCH hardware not operating at 3 cycles in the Central Control (CC) indicated.

3. VARIABLE FIELD DEFINITIONS

a The member number of the CC.

4. ACTION TO BE TAKEN

Perform CC diagnostics on the CC indicated.

5. REFERENCES

PIDENTs
CCFRMAIN
CCFRTEST

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ID REPT:CCIS
WORK CENTER.. NMOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT: CCIS DOC TIME-OUT
a bbbb bb bb bbb bbb

2. REASON FOR OUTPUT

To report that the system has deactivated a dynamic overload control (DOC) on a common channel interoffice signaling (CCIS) trunk subgroup (TSG) because it had not been refreshed by the controlling office after a two-minute time period.

3. VARIABLE FIELD DEFINITIONS

a DOC level deactivated:

1 — MC1.

2 — MC2.

3 — MC3.

b Circuit identification number (CIN) identifying the trunk subgroup.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
NMGTRMFD

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ID REPT:CCISTRAP
WORK CENTER.. MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:CCISTRAP	a	MISRTE	DS	
SU:	b	b	b	b
	b	b		

2. REASON FOR OUTPUT

To respond to a MON:CCISTRAP input message. This message reports all misrouted direct signaling signals received by the office which do not contain the proper office address.

3. VARIABLE FIELD DEFINITIONS

a	RECEIVE
	SEND
b	The two-digit octal value of the misrouted signal.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
CCISIOPR

Input Message
MON:CCISTRAP

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ID REPT:CGA
WORK CENTER.. MOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:CGA TSN aaaaaaaaa, [b]

2. REASON FOR OUTPUT

To report the changes of state of the carrier group alarm (CGA) miscellaneous scanner number (MSN) points that have been placed in the CGA test state. A CGA is put in the test state by the IN:CGALIST;ADD input message.

3. VARIABLE FIELD DEFINITIONS

- a SP-ROW-POINT trunk scanner number (TSN) for the carrier group.
- | | |
|-------|--|
| SP | — A 2-digit decimal number indicating the signaling processor (SP) member number, range 00-31. |
| ROW | — A 3-digit decimal number indicating the row in the SP, range 000-255. |
| POINT | — A 2-digit decimal number indicating the point in the row, range 00-15. |
- b Indication of state:
- | | |
|----------|-------------------|
| (blank) | — Alarm state. |
| RESTORED | — Restoral state. |

4. ACTION TO BE TAKEN

Depends on the reason that CGA was put in the test state.

5. REFERENCES

PIDENT
CGAP00

Input Message
IN:CGALIST

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ID REPT:CIN
WORK CENTER.. MOC, TEC, TOC
GENERIC 4E22 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] REPT:CIN a;b c; STAT d: [b...b]
- [2] REPT:CIN a;e f; STAT d:
- [3] REPT:CIN a;g; STAT d: [h] [i] [CID {j|k}]
- [4] REPT:CIN a;OPR llmm; STAT d: [n] [o] [h]
- [5] REPT:CIN a;HAW p; STAT d
- [6] REPT:CIN a;q r;STAT d: OTAN2 s [,q...q]

2. REASON FOR OUTPUT

To report trunk state and group status changes.

Format 1 prints for digroup reasons.

Format 2 prints for group reasons.

Format 3 prints for individual reasons.

Format 4 prints for individual reasons with the OPR keyword. A routine or automatic (as the result of a call failure) operational trunk test has failed. Depending on the type of failure, the 4ESSTM switch will attempt to remove the trunk from service or just report the failure and not attempt to remove the trunk from service.

Format 5 prints for international trunks only. The last clearing sequence that was run by the high and wet PIDENT.

Format 6 prints Expanded Time Slot Interchange (XTSI) Digital Signal Level 3 (DS3) alarm and alarm abatement messages.

The REPT:CIN message is output every time a trunk has its basic maintenance state changed, or has its maintenance state qualifier changed. Thus, this message is generated when a trunk makes the transition from Active (ACT), Maintenance (MTC), Circuit Administration Disabled (CAD), or Blocked (BLK) to any different state of ACT, MTC, CAD, or BLK.

REPT:CIN is also used to report cases where the 4ESSTM switch attempts to change the state of a trunk, but was prevented from doing so by some control. In these cases, the state the trunk was left in and the type of control is output. The message is output to the

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Teletypewriter (TTY) channel defined as the trouble reporting channel in the unit type data of the 51A test position to which the trunk subgroup is assigned. For message trunks, this message is normally sent to TOPAS/CONNECT-VU in TOPAS/CONNECT-VU, not manual, format (see the REPT:OTAN output message).

This message is also used to report changes in group status for carrier groups, Voiceband Interface Units (VIUs), Digroup Terminal Units (DTUs), Digital Interface Units (DIUs), Expanded Time Slot Interchanges (XTSIs), Multi-Frequency (MF) signaling frame and Common Channel Interoffice Signaling (CCIS) Transceiver (XCVR) power alarm groups, MF signaling frame tone supply groups, and the CCIS bands. The group messages are sent when the group changes state, independent of the maintenance status of the individual trunks in the group.

3. VARIABLE FIELD DEFINITIONS

- a Circuit Identification Number (CIN).
- b c Major event and number. Additional values are listings of previous events:
 - ACP 24 — Digroup has been taken out of ignore state.
 - AID 24 — Alarm Indication Signals Daily (AID) seconds - path. A measure of the number of one second intervals where Alarm Indication Signals occur within a 24 hour period.
 - AIS 24 — Alarm Indication Signals (AIS) seconds - path. A measure of the number of one second intervals where Alarm Indication Signals occur within a 15 minute period.
 - ASA 24 — Blue alarm on an XTSI digroup.
 - ASC 24 — Blue alarm on an XTSI digroup has cleared.
 - BVH 24 — Digroup bipolar violation high (or out-of-service) threshold has been reached. Trunks are not removed from service for this reason. (Digroup Terminal [DT] only.)
 - BVL 24 — Digroup bipolar violation low (or maintenance) threshold has been reached. Trunks are not removed from service for this reason. (DT only.)
 - CSD 24 — Controlled Slip Seconds Daily (CSD) - path. A measure of the number of one second intervals where one or more controlled slips occurred within a 24 hour period.
 - CSS 24 — Controlled Slip Seconds (CSS) - path. A measure of the number of one second intervals where one or more controlled slips occurred within a 15 minute period.
 - CVD 24 — Coding Violations Daily (CVD) from Digital Signal Level 1 (DS1) superframe format frame synchronization bit errors or extended superframe format Cyclic Redundancy Check Level 6 (CRC-6) errors within a 24 hour period.

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- CVP 24 — Coding violations from Digital Signal Level 1 (DS1) superframe format frame synchronization bit errors or extended superframe format Cyclic Redundancy Check Level 6 (CRC-6) errors within a 15 minute period.
- DGC 24 — Digroup has been restored to service from a hardware failure (DIF only).
- DGO 24 — Digroup has been taken out of service for a hardware failure (DIF only).
- DSI 8 — Digital service circuits on an MF type DIU have been restored to service after a PSW.
- DSO 8 — Digital service circuits on an MF type DIU have been removed from service due to a Protection Switch (PSW).
- ESD 24 — Errored Seconds Daily (ESD) - path. A measure of the number of one second intervals where events such as frame synchronization errors, CRC-6 errors, SEF defects, AIS or controlled slips occurred within a 24 hour period.
- ESP 24 — Errored Seconds - path. A measure of the number of one second intervals where events such as frame synchronization errors, CRC-6 errors, SEF defects, AIS or controlled slips occurred within a 15 minute period.
- FBH 24 — Digroup framing bit high (or out-of-service) threshold has been reached. Trunks are not removed from service for this reason (DIF and XTSL).
- FBL 24 — Digroup framing bit low (or maintenance) threshold has been reached. Trunks are not removed from service for this reason (DIF only).
- FCH 24 — Digroup framing bit high (or out-of-service) threshold.
- FCL 24 — Digroup framing bit low (or maintenance) threshold has been cleared (DIF only).
- IGN 24 — Digroup on a DT or Digital Interface Frame (DIF) or XTSL has been put into the ignore state via a manual request.
- LAC 24 — Local alarm on a digroup on a DT, DIF or XTSL has cleared.
- LAC 30 — Local alarm on an digital interface frame E1 master digroup has cleared.
- LCA 24 — Local alarm on a digroup on a DT, DIF or XTSL.
- LCA 30 — Local alarm on an digital interface frame E1 master digroup has occurred.
- OFH 24 — Digroup out of frame high (or out-of-service) threshold has been reached. Trunks are not removed from service for this reason.

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- OFL 24 — Digroup out-of-frame low (or maintenance) threshold has been reached. Trunks are not removed from service for this reason.
- RAC 24 — Remote alarm on a digroup on a DT, DIF or XTSI has cleared.
- RAC 30 — Remote alarm on an digital interface frame E1 master digroup has cleared.
- RMA 24 — Remote alarm on a digroup on a DT, DIF or XTSI.
- RMA 30 — Remote alarm on an digital interface frame E1 master digroup has occurred.
- SAD 24 — SEF/AIS Seconds Daily (SAD) - path. A measure of the number of one second intervals where Severely Errored Frame or Alarm Indication Signal defects occur within a 24 hour period.
- SAS 24 — SEF/AIS Seconds - path. A measure of the number of one second intervals where Severely Errored Frame or Alarm Indication Signal defects occur within a 15 minute period.
- SED 24 — Severely Errored Seconds Daily (SED) - path. A measure of the number of one second intervals where any of the following occur within a 24 hour period:
1. DS1 superframe format with F(t) bit errors being measured, four or more frame synchronization bit errors occurred.
 2. DS1 superframe format with F(t) and F(s) bit errors being measured, eight or more frame synchronization bit errors occurred.
 3. DS1 superframe format with 320 or more CRC-6 errors.
 4. One or more Severely Errored Frame defects.
 5. One or more Alarm Indication Signals.
- SES 24 — Severely Errored Seconds (SES) - path. A measure of the number of one second intervals where any of the following occur within a 15 minute period:
1. DS1 superframe format with F(t) bit errors being measured, four or more frame synchronization bit errors occurred.
 2. DS1 superframe format with F(t) and F(s) bit errors being measured, eight or more frame synchronization bit errors occurred.
 3. DS1 superframe format with 320 or more CRC-6 errors.

SEE PROPRIETARY NOTICE ON COVER PAGE

4. One or more Severely Errored Frame defects.
5. One or more Alarm Indication Signals.

SLH 24 — Digroup slip high (or out-of-service) threshold has been reached. Trunks are not removed from service for this reason.

SLL 24 — Digroup slip low (or maintenance) threshold has been reached. Trunks are not removed from service for this reason. has been cleared (DIF and XTSL).

UAD 24 — Unavailable Seconds Daily (UAD) - path. A measure of the number of one second intervals in which the DS1 path is unavailable within a 24 hour period, i.e. at the onset of 10 contiguous SESs. The 10 contiguous SESs are included in the unavailable time.

UAS 24 — Unavailable Seconds (UAS) - path. A measure of the number of one second intervals in which the DS1 path is unavailable within a 15 minute period, i.e. at the onset of 10 contiguous SESs. The 10 contiguous SESs are included in the unavailable time.

d Maintenance status:

ACT — Active. Indicates the trunk(s) is still in service.

BLK — Blocked.

CAD — Circuit Administration Disabled.

MTC — Maintenance. Indicates an automatic removal from service.

e f Major event and number:

CAC 12 — Analog carrier group alarm cleared.

CAC 24 — Digital carrier group alarm cleared.

CAR 12 — Analog carrier group alarm.

CAR 24 — Digital carrier group alarm.

CFA 1 — Continuity failure analysis removed a Common Channel Signaling System (CCITT) number 7 trunk.

CFA 12 — Software carrier group alarm (CCIS continuity failure analysis) removed up to 12 CCIS trunks.

CFR 1 — Continuity failure analysis restored a CCITT No. 7 trunk.

CFR 12 — Software carrier group alarm restored up to 12 CCIS trunks.

CTS — MF signaling frame common tone supply duplex failure.

DCI 1 — D - Channel has been restored to service.

DCO 1 — D - Channel has gone out of service.

SEE PROPRIETARY NOTICE ON COVER PAGE

GRB 1 — Group blocking received on a band of CCIS trunks report to TOPAS/CONNECT-VU.

GRB 16 — Group blocking received on a band of CCIS trunks report to TCA channels.

GRU 1 — Group unblocking, 16 if a TCA channels, 1 if to TOPAS/CONNECT-VU.

GRU 16 — Group unblocking, 16 if a TCA channels, 1 if to TOPAS/CONNECT-VU.

PWA — Loss of power to a group of circuits.

RPF 12 — Software carrier group alarm (receive path failure), number of Ear & Mouth (E&M) trunks removed.

RPR 12 — Software carrier group alarm. number of E&M trunks restored.

RSB — CCIS reset band received on a band with some blocked trunks, number of blocked trunks which were unblocked.

TFA 16 — Transfer allowed received from Signaling Transfer Point (STP) on a band of trunks. Trunks restored to service.

TFP 16 — Dual transfer prohibit received from STP on a band of trunks. When a CCIS total signaling failure occurs, Transfer Prohibited (TFP) is not printed per band removed. Instead the link failure message which is printed at the maintenance channel is broadcast to all TCA channels.

TPF 12 — Software carrier group alarm (transmit path failure), number of E&M trunks removed.

TPR 12 — Software carrier group alarm, number of E&M trunks restored.

g

Major event:

BAT — 1-minute time-out waiting for a blocking acknowledgment signal on a CCITT No. 6 trunk has occurred.

BLK — A blocking signal has been received and not removed within 2 minutes on a CCIS trunk or 5 minutes on a CCITT No. 6 trunk.

BMT — Received maintenance service message on Q931 trunk; trunk marked blocked.

BOS — Received out-of-service message on Q931 trunk; trunk marked blocked.

BSC — A Remote Office Test Line (ROTL) or 105 responder has been removed from service because of a bad self check.

SEE PROPRIETARY NOTICE ON COVER PAGE

- CCF — Individual CCIS trunk encountered continuity check failure and failed retest. Attempted to make trunk MTC.LKD subject to Automatic Test Control (ATC) or Magic Number Control (MGC).
- CTO — Call time-out. A stable call involving a CCITT No. 5, CCITT No. 6, or CCIS trunk has been in progress for more than one hour after a phase 3. Suspect call is really not there any more and monitor from 51A test position.
- ERA — Trunk error analysis has detected a trunk or service circuit which is failing at a rate high enough to warrant removing the trunk from service or just reporting the trunk and not removing it from service.

For a report only case, ie, the error rate is not high enough to automatically remove the trunk from service, maintenance status will be ACT and variable h will be null.

Variable h will be null if the trunk was actually removed from service, or maintenance status will be ACT and variable h will indicate either a Magic Number Control (MGC) or trunk subgroup Error Analysis Control (EAC) prevented the trunk from being removed from service.

- FAL — A circuit has been removed from service because of a fuse alarm.
- HAW — The trunk went high and wet.
- HWC — A high and wet trunk came clear, ie, it went idle.
- MAN — A TTY SET:TRKSTAT input message, 51A test position state control button, or manual ROTL request caused the trunk to change state.
- MSP — Multiple scan points off-hook on a CCITT No. 5 trunk.
- PSR — Protection switch removal has allowed a circuit removed by PSW to be restored to service.
- PSW — Protection switching of a VIU has caused the removal of a trunk maintenance test circuit that does not have a protection switch relay.
- QTF — Prior to TPF carrier restoral, the last failing trunk is retested. If a failure is encountered, an attempt is made to mark the trunk MTC.LKO, subject to Automatic Test Control (ATC) or Magic Number Control (MGC).
- RTL — The trunk was requested to be removed or restored by ROTL via Centralized Automatic Reporting On Trunks (CAROT). Maintenance status variable indicates the state; if a removal request, variable h will indicate ATC or MGC if automatic test control or magic number control prevented the removal.

SEE PROPRIETARY NOTICE ON COVER PAGE

RTR — A restart message has been returned on a Q931 trunk. Trunk has been placed in the out-of-service, Disabled (DSA) automatic state.

SVC — An automatic service circuit test has failed. The 4ESSTM switch will always try to remove the trunk from service.

If successfully removed, maintenance status will be MTC and h will be null.

If the trunk could not be removed, maintenance status will be ACT and variable h will indicate that an Automatic Test Control (ATC) or Magic Number Control (MGC) was in effect.

Variable i will always be null. The failing results data must be obtained via the TEST:TRK message.

TAL — Tone alarm on tone trunks.

TQB — Trunk query has blocked a CCIS trunk.

TQU — Trunk query has unblocked a CCIS trunk.

TUE — Trunk query has removed a trunk from service because the far end is unequipped.

UAT — Time-out waiting for an unblocking acknowledgment signal on a CCITT No. 6 or CCITT No. 7 trunk has occurred.

UBL — A CCIS/CCITT No. 6 trunk previously reported as BLK has been unblocked due to receipt of unblocking.

ULB — Unequipped label has received on a CCIS trunk. The trunk is put in MTC.DSA<AUT> state.

VFC — A CCIS Voice Frequency Link (VFL) has been automatically restored to service because of a successful test message sent by the STP.

VFL — A CCIS voice frequency link has been automatically removed from service due to loss of synchronization or a failing test result message sent by the STP.

h ATC — Automatic Test Control (ATC)

EAC — Error Analysis Control (EAC)

MGC — Magic Number Control (MGC)

i Contains data about the type and number of failures observed. See Practice 234-100-050 for complete description.

j Call back identity of the source of the request, up to 9 characters in length.

k Call back identity of CAROT requesting the state change, up to 9 characters in length.

SEE PROPRIETARY NOTICE ON COVER PAGE

l lmm	Trouble number indicating how the test failed.
l	The phase number where the test failed: 4 Failure occurred during outpulsing. > 4 Failure occurred after successful outpulsing. In this case, see TEST:TRK output message, Heading 3.1, for how to interpret the trouble number for the type of test indicated. If the type of failure does not warrant automatic removal from service, maintenance status will be ACT and h will be null. If the type of failure indicates that the trunk should be removed from service, maintenance status will be MTC and variable h will be null if the trunk was successfully removed from service. If the trunk could not be removed from service, maintenance status will be ACT and variable h will indicate that a trunk subgroup Automatic Test Control (ATC) or Magic Number Control (MGC) was in effect.
m	The failure type.
n	Final handling code data.
o	Type of operational test that was run.
p	Clearing sequence number: 1 CCITT No. 5 with permanent signal on idle Outgoing Trunk (OGT) or 2-way trunk. 2 CCITT No. 5 with permanent signal on idle Incoming Trunk (ICT). 3 CCITT No. 5 quiet trunk used as OGT. 4 CCITT No. 5 quiet trunk used as ICT. 5 CCITT No. 5 with permanent signal used as OGT. 6 CCITT No. 5 with permanent signal used as ICT. 7 CCITT No. 5 2-Way trunk memory mutilation sequence. 8 CCITT No. 6 used as OGT (send Clear Forward [CLF]). 9 CCITT No. 6 used as ICT (send Call Failure [CFL]). 10 CCITT No. 6 2-Way trunk memory mutilation sequence (send CFL, CLF). 11 CCITT No. 6 used as ICT (wait for response).

SEE PROPRIETARY NOTICE ON COVER PAGE

- q Major DS3 event:
- A3A — XTSI DS3 Blue/ AIS alarm.
 - A3C — XTSI DS3 Blue/ AIS alarm abatement.
 - L3A — XTSI DS3 Local/ Red alarm.
 - L3C — XTSI DS3 Local/ Red alarm abatement.
 - R3A — XTSI DS3 Remote/ Yellow alarm.
 - R3C — XTSI DS3 Remote/ Yellow alarm abatement.
- r Trunk number for DS3 event:
- 336 — Assigned trunks on one XTSI/ DS3 half.
 - 672 — Assigned trunks on both XTSI/ DS3 halves.
- s Identity of first assigned trunk on XTSI DS3 second half.

4. ACTION TO BE TAKEN

Take action to fix problem and restore trunks. Trunks which were not taken out of service because of a control should be investigated and manually removed, if necessary, to prevent repeated automatic reports.

5. REFERENCES

PIDENTs
CGAP00
SVCTCNTL
TERA00
TMAD0001
TMAIHCW5
TMAIHCW6
TMAIHWET
TOPT0000

Practice 234-103-016, *Trunk Error Analysis (TERA)*
Practice 234-180-240, *Trunk Maintenance Administration Program Description*
Practice 234-180-241, *Trunk Error Analysis Program Description*
Practice 234-180-242, *Service Circuit Test Program (SVCT) - Description*
Practice 234-180-245, *Carrier Group Alarm Program Description*
Practice 234-180-246, *Trunk Testing Programs - Description*

Input Messages
SET : TRKSTAT
TEST : TRK

Output Messages
REPT : OTAN
TEST : TRK

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:CMAP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] REPT:CMAP.ISC FOR TAPE COMPLETE
- [2] REPT:CMAP.ISC FOR TELEPROCESSING COMPLETE
- [3] REPT:CMAP.ISC FOR TAPE ABORTED
- [4] REPT:CMAP.ISC FOR TELEPROCESSING ABORTED

2. REASON FOR OUTPUT

To inform the user that the CINMAP was either successfully completed or aborted.

Format [1] indicates that the CINMAP function for tape was successfully completed.

Format [2] indicates that the CINMAP function for teleprocessing was successfully completed.

Format [3] indicates that the CINMAP function for tape was aborted.

Format [4] indicates that the CINMAP function for teleprocessing was aborted.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
CMAPCINI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:CMS-CIN
WORK CENTER.. MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:CMS;CIN a;b; STAT d:e f

2. REASON FOR OUTPUT

The REPT:CMS-CIN output message is identical to the REPT:CIN output message with the exception that this message is initiated from circuit maintenance system (CMS). For a further explanation of this message, see the description of the REPT:CIN output message.

3. VARIABLE FIELD DEFINITIONS

- a Decimal format CMS. Circuit identification number (CIN).
- b Reason for, or source of, the state change. For group state changes, the size of the group is also indicated.
- d,e For a report only case, i.e., the error rate is not high enough to automatically remove the trunk from service, then variable d will be ACT, and variable e will be null.

For removal from service cases, d will be MTC and e null if the trunk was actually removed from service, or d will be ACT and e will indicate either a magic number control (MNC), or trunk subgroup error analysis control (EAC) prevented the trunk from being removed from service.

- f Always contains data about the type and number of failures observed.

NOTE: For further information on individual trunk or group trunk reasons, see the REPT:CIN output message.

4. ACTION TO BE TAKEN

Take action to fix problem and restore trunks. Trunks that were not taken out of service because of a control should be investigated and manually removed if necessary to prevent repeated automatic reports.

5. REFERENCES

PIDENTs
CGAP00
SVCTCNTL
TERA00
TMAD0001
TMADTOCA
TOPT0000

SEE PROPRIETARY NOTICE ON COVER PAGE

4ESS
OM-4B000-01

REPT:CMS;CIN

Output Message
REPT:CIN

SEE PROPRIETARY NOTICE ON COVER PAGE

REPT:CMS-CIN-2

Issue 1.8
September 2001

ID REPT:CMS-FAILU
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:CMS FAILURE: CMS SYNTAX FAILURE DUMP;aaaaaaaa bbbbbbbb
bbbbbbbb bbbbbbbb
cccccccc cccccccc cccccccc cccccccc cccccccc cccccccc cccccccc cccccccc
dddddddd dddddddd dddddddd dddddddd dddddddd dddddddd dddddddd dddddddd
eeeeeeee eeeeeeee eeeeeeee eeeeeeee eeeeeeee eeeeeeee eeeeeeee eeeeeeee
ffffffff ffffffff ffffffff ffffffff ffffffff ffffffff ffffffff ffffffff
gggggggg gggggggg gggggggg gggggggg gggggggg gggggggg gggggggg gggggggg

2. REASON FOR OUTPUT

To print when any syntax failure is detected on a circuit maintenance system (CMS) input message. A notification of the failure and all input data collected are printed out at the maintenance (MTC) input/output (I/O) channel in the MOC. Syntax errors could point to program errors in CMS or errors in the CMS data base.

3. VARIABLE FIELD DEFINITIONS

- a The contents of TM4TAGTBL entry (CMS tag-input teletypewriter [TTY] channel). Contains the octal TTY input channel number.
- b Contain the nine characters representing the CMS TAG in American standard code for information interchange (ASCII).
- c-g Contents of the message data storage buffer (TM4MSGBUF) with the raw, unformatted data.

4. ACTION TO BE TAKEN

Report failure to CMS personnel. Give CMS personnel the CMS TAG.

5. REFERENCES

PIDENT
TMAD0005

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:CMS-TROUB
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:CMS TROUBLE a

2. REASON FOR OUTPUT

To indicate that after transmission of an output message to circuit maintenance system (CMS), a failure acknowledgement was received from CMS.

3. VARIABLE FIELD DEFINITIONS

- a Indication of the failure results.
- BACKUP CHANNEL OOS – Indicates the output message failed twice on the requested CMS channel, but could not be sent on the backup channel which was out of service.
- ERROR IN SENDING MESSAGE – Indicates the output message failed twice on the requested CMS channel, and then failed after switching to the backup channel. In this case, the requested channel is removed from service.

4. ACTION TO BE TAKEN

This message could indicate a problem with an input/output (I/O) unit controller (IOUC) or trouble with CMS. The IOUC that is out-of-service should be diagnosed and returned to service if all tests passed (ATP). If response is BACKUP CHANNEL OOS and the problem is long term, the CMS2 I/O channel should be rerouted to an assigned and in-service I/O channel in the TOC (i.e., TCA1 - TCA9) until the problem is resolved, and CMS2 or CMS4 is in service.

5. REFERENCES

PIDENT
IOCPIOH4

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:CODE
WORK CENTER.. NMOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:CODE BLOCK, a : b, c%
CODE: d

2. REASON FOR OUTPUT

To print whenever a manual code block is installed or removed by the network manager.

3. VARIABLE FIELD DEFINITIONS

a Type of code:
 DOMESTIC
 INTL

b Status of the code block:
 ACTIVATED
 DEACTIVATED

c Percent of calls to be blocked.

d Code affected by this control:
 DOMESTIC: eee-fff-gggg
 e — Numbering plan area (NPA).
 f — Office code.
 g — Line.
 INTL: hhh-kkk ; j
 h — Country code of pseudo country code.
 k — National number.
 j — Call types to be affected:
 ORIG — Originating outbound.
 TRAN(OP) — Transit to an operator.
 TRAN(REG) — Regular transit.

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENT
NMGTANAL

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:CS
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT:CS a FORCED OOS - CALL STORE BABBLING MAY BE POSSIBLE
DO NOT ATTEMPT RESTORE UNTIL SYSTEM FAULT HAS BEEN IDENTIFIED

2. REASON FOR OUTPUT

To report that the call store community experienced serious recovery actions. The fault must be identified and the community restored to a normal state.

3. VARIABLE FIELD DEFINITIONS

a Member number of store that was forced out-of-service (OOS) (0-45).

4. ACTION TO BE TAKEN

The store identified is in a special forced out state due to the processor configuration (PC) recovery. There will be no KCODE display on the master control complex (MCC) for this store. If it is powered back up the special forced out state will be cleared and babbling if it existed will begin again. The store should not be powered up until the fault causing the repeated PC has been pinpointed to a unit other than this store. If this store is believed to be the cause for the PC recovery then all memory boards should be swapped out before powering the store back up.

5. REFERENCES

PIDENTs
CSFRBASE
CSFRNORM

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:DEFENSIVE
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:DEFENSIVE CHECK FAILURE
OBB ERATMCU0 ENTERED WITH INSUFFICIENT TIME

2. REASON FOR OUTPUT

To indicate a defensive check has failed. The OBB ERATMCU0 was entered with a K-level interrupt pending. The system detected the problem and connected it. This is not an office problem.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

Inform Bell Telephone Laboratories (BTL) that this message came out. BTL will likely want several feet of the printout on each side of this message.

5. REFERENCES

PIDENT
ERATPEST

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:DEMOUNT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT:DEMOUNT TAPE FROM TUC a CODE b

2. REASON FOR OUTPUT

To request the user to demount a tape when a function has been completed.

3. VARIABLE FIELD DEFINITIONS

- a Member number of the tape unit controller (TUC) on which the tape is mounted.
- b Reason for report code number is as follows:

Code	Description
1	TUC restored with tape unassigned.
2	Client wants to use R0 TUC to write.
3	Tape has automatic message accounting (AMA) header.
4	User entered INH:TUC input message.
5	Repeated unsuccessful tape write operations.
6	Nonactive TUC unlinked because active TUC failed and function does not have trouble replacement option specified.
7	TUC audit finds non-AMA/SR TUC unlinked.
8	Client called release.
9	Client called change.
10	Client called switch with active TUC at end of tape (EOT) and no standby.
11	Standby TUC released by overflow routine.
12	Client requested function off.
13	Function aborted.
14	Unexpected key change occurred.
15	Request demount key operated.

4. ACTION TO BE TAKEN

Demount the tape from the specified TUC.

5. REFERENCES

PIDENTs
DUAD01
DUAD04

SEE PROPRIETARY NOTICE ON COVER PAGE

Practice 254-280-112, *Auxiliary Data System Operational Program*

Input Message
INH:TUC

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:DGSTAT-SL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:DGSTAT [a,] SLIP
DT/DIF MNUM UNIT DG POSSLIP NEGLSLIP COUNT
b c d e f g h

2. REASON FOR OUTPUT

To print if a slip occurs on a digroup that is on the digital synchronization list.

3. VARIABLE FIELD DEFINITIONS

- a (blank) — Digroup does not carry timing pulses.
ALT — Digroup is the alternate timing reference.
REG — Digroup is the regular timing reference.
- b DIF — Digital interface frame.
DT — Digroup terminal.
- c Member number of the DIF or DT.
- d DIU — Digital interface unit.
DTU — Digroup terminal unit.
- e Digroup number.
- f 0 — Positive slip did not occur.
1 — Positive slip did occur.
- g 0 — Negative slip did not occur.
1 — Negative slip did occur.
- h Slip count since the last digroup memory initialization.

4. ACTION TO BE TAKEN

Recover digroup slippage.

5. REFERENCES

PIDENT
DFRP

SEE PROPRIETARY NOTICE ON COVER PAGE

4ESS
OM-4B000-01

REPT:DGSTAT

Input Messages
MON: DGSTAT
STOP: MON-DGSTT

SEE PROPRIETARY NOTICE ON COVER PAGE

REPT:DGSTAT-SL-2

Issue 1.8
September 2001

ID REPT:DIAL-ABOR
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:DIAL UP PORT TDCU CONVERSATION ABORTING
CHANNEL: aaaa
CLIENT : bb
REASON: cccccccccccccccccccccccccccccccccc
DUMP OF MESSAGE 1 SENT BY CLIENT
ddd ddd ddd ddd ddd ddd ddd ddd ddd e e e
ddd ddd ddd ddd ddd ddd ddd ddd ddd e e e
ddd ddd ddd ddd ddd ddd ddd ddd ddd e e e

2. REASON FOR OUTPUT

To indicate that the Traffic Data Collection Unit (TDCU) dial-up port conversation in progress is being aborted.

3. VARIABLE FIELD DEFINITIONS

- a Channel number, for example, Data User Port 1 (DUP1).
- b Client Identification (ID), for example TU.
- c Reason dial-up port is aborting.
- d Octal representation of American Standard Code for Information Interchange (ASCII) character from message 1.
- e ASCII characters from message 1.

NOTE: Nonprinting characters print as periods.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
DUPTTDCU

Practice 234-180-140, *Traffic and Plant Measurements Programs*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:DIAL-COMP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:DIAL UP PORT TDCU CONVERSATION COMPLETED
CHANNEL aaaa
CLIENT bb
START DATE cc/dd/ee
STOP DATE ff/gg/hh
DATA TYPE REQ iii
SPEC REQ BYTE j
BLKS XMITTED kkkk
TOT XMISSIONS llll
RE XMISSIONS mmmm

2. REASON FOR OUTPUT

To report that a traffic data collection unit (TDCU) dial up port conversation has successfully completed.

3. VARIABLE FIELD DEFINITIONS

a	Channel number, for example, data user port 1 (DUP1).
b	Client identification (ID), for example TU.
c	Start month.
d	Start day.
e	Start year.
f	Stop month.
g	Stop day.
h	Stop year.
i	Type of data requested (MC1-MC9 or ALL).
j	Special request byte.
k	Number of data blocks read off the tape and transmitted.
l	Total number of transmissions (including retransmissions).
m	Number of retransmissions only.

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

4ESS
OM-4B000-01

REPT:DIAL UP PORT

5. REFERENCES

PIDENT
DUPTTDCU

SEE PROPRIETARY NOTICE ON COVER PAGE

REPT:DIAL-COMP-2

Issue 1.8
September 2001

ID REPT:DIAL-FAIL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:DIAL UP PORT TDCU CONVERSION FAILED TO FIND DATA
CHANNEL aaaa
CLIENT bb
START DATE cc/dd/ee
STOP DATE ff/gg/hh
DATA TYPE REQ iii

2. REASON FOR OUTPUT

To report that the system was unable to find any data, requested by the traffic data collection unit (TDCU) client, on the traffic (TRF) tape.

3. VARIABLE FIELD DEFINITIONS

a	Channel number, for example, data user port 1 (DUP1).
b	Client identification (ID), for example, TU.
c	Start month.
d	Start day.
e	Start year.
f	Stop month.
g	Stop day.
h	Stop year.
i	Type of data requested (MC1-MC9 or ALL).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
DUPTTDCU

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:DIAL-INV
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:DIAL UP PORT INVALID ATTEMPT ON CHANNEL aaac
50H OK b ID OK b ID IDLE b DB OK b DB IDLE b
DUMP OF INPUT BUFFER
 c c c c d
 c c c c d

2. REASON FOR OUTPUT

To report that an incoming message received on a dial up port channel does not conform to the specified format. Thus, a negative acknowledgment is returned to the client, the connection is torn down, and this message is printed at the maintenance operations center (MOC).

3. VARIABLE FIELD DEFINITIONS

a	Channel name.
b	1 — Pass. 2 — Fail
c	Octal number input buffer text string.
d	Translation of text string to characters. Nonprinting characters are converted to periods.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
DUPTEXST

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:DIAL-MAIL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:DIAL UP PORT TDCU CONVERSATION MAIL REQUEST
CHANNEL aaaa
CLIENT bb
DATA TYPE ccc
REQUESTED DATES dddddddddddddd
PLEASE MAIL THE TRF TAPE COVERING THE SPECIFIED
PERIOD TO ID ee

2. REASON FOR OUTPUT

To inform the office personnel that a traffic data collection unit (TDCU) dial-up client wishes to have the traffic (TRF) tape, covering the requested dates mailed.

3. VARIABLE FIELD DEFINITIONS

- a Channel number, for example, data user port 1 (DUP1).
- b Client identification (ID), for example, TU.
- c Data type (for example, T9).
- d Start and stop dates in the following format:
MM/DD/YY HH-> MM/DD/YY HH.
- e ID (for example TU).

4. ACTION TO BE TAKEN

Mail TRF tape to client.

5. REFERENCES

PIDENT
DUPTTDCU

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:DIAL-STAR
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT: DIAL UP PORT TDCU CONVERSATION STARTING
CHANNEL aaaa
CLIENT bb
START DATE cc/dd/ee:ff
STOP DATE gg/hh/ii:jj
DATA TYPE REQ kkk
SPEC REQ BYTE ->l

2. REASON FOR OUTPUT

To inform the office personnel that a dial-up-port conversation is starting.

3. VARIABLE FIELD DEFINITIONS

a	Channel number.
b	Client identification (ID).
c	Start month.
d	Start day.
e	Start year.
f	Start hour.
g	Stop month.
h	Stop day.
i	Stop year
j	Stop hour.
k	Type of data requested (MC5-MC9 or ALL).
l	Special request byte.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
DUPTTDCU

Practice 234-180-140, *Traffic and Plant Measurements Programs*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:DIAL-UP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:DIAL UP PORT CONVERSATION WITH CLIENT aa ABORTING
bbbbbbbbbbbbbbbbbbbbbbbbbbbbbb
ccc...c
ddd...d
THIS EVENT=hh iiiiiiiiiiiiiiiiii
LAST EVENT=jj kkkkkkkkkkkkkkkkk
FILE lmmmmmmmm READ=nnnn AWRITE=oooo XWRITE=pppp
FILE 2mmmmmmmm READ=nnnn AWRITE=oooo XWRITE=pppp
PCB ADDRESS qqqqqqqq
DUPTMAIN.AG+rrrr

2. REASON FOR OUTPUT

To indicate that a conversation with a distant computer (client) has encountered a terminal condition and is thus being abandoned. The channel connection is torn down and client 4ESS™ software is idled.

3. VARIABLE FIELD DEFINITIONS

- a Decimal client call back translation slot.
- b Process name (e.g., traffic data collection unit [TDCU] PROCESS or translation verification test 1 [TVT1] PROCESS).
- c The following line of format:
 wwwwww
 w — PIDENT class Dial Up Port (DUPT) suffix and procedure name,
 for example:
 EXST DATALINK__STIMULUS
 MAIN PROCESS__MONITOR
- d The following line of format:
 ABORT REASON=yyyyyyyyyyyyyyyy DATA=zzzzzzzz
 y — An 18-character abort description. Refer to Table 1 for possible
 values.
 z — Octal abort data.
- h Octal event code.
- i Event description.
- j Octal event code.

SEE PROPRIETARY NOTICE ON COVER PAGE

k	Event description.
l	Decimal system file number.
m	System file name (e.g., data user port 1 [DUP1] CHAN or TRF TAPE).
n	Decimal file read count.
o	Decimal file American Standard Code for Information Interchange (ASCII) write count.
p	Decimal file transparent write count.
q	Octal process control block address.
r	Octal offset of print call for this message.

4. ACTION TO BE TAKEN

If the dial-up client repeatedly aborts, the phone number being used by the Input/Output (I/O) Processor (IOP) may be in error. The phone number of the dial-up client can be obtained via input message VER:DIALUP. Recent Change (RC) forms 601 through OP:RCFORM 603 administer the client phone numbers and can be obtained with input message OP:RCFORM.

5. REFERENCES

PIDENTs
DUPTXST
DUPTMAIN
DUPTSRVC

Practice 234-180-140, *Traffic and Plant Measurements Programs*

Input Messages
OP:RCFORM
VER:DIALUP

SEE PROPRIETARY NOTICE ON COVER PAGE

TABLE 1
ABORT REASON AND DESCRIPTION

Abort Description	Explanation
BAD CNTL STATE	The DUPT control state is invalid. Possibly caused by memory mutilation.
BAD EVENT FOUND	The DUPT event word contains an undefined event. Possibly caused by memory mutilation.
BAD FILE TYPE	A DUPT process requested action on an invalid type of file. Possibly caused by program bug.
BAD RSVD FILE MSG	A DUPT process sent an acknowledgement for the initial dial in message that contains more than 24 characters. The initial dial in acknowledgement message is limited to 24 or less characters. Possibly caused by a program bug.
BAD RTN TO BASE LEV	The Dial Up Port (DUPT) program system did not return to base level processing correctly. Possibly caused by an interrupt that returns to the beginning of base level.
CANT WRT TRF TAPE	A DUPT process tried to write the TRF tape. DUPT has read only access to the TRF tape. Possibly caused by a program bug.
DL OPEN CLOSE FAIL	The DUPT system failed to establish a dial-up connection or failed to take down a dial-up connection. Caused by one of the following: problem in the IOP, the call failed to reach the far end, the far end did not answer, or an invalid dial-up number.
EVENT TIMEOUT	The DUPT system timed out waiting for an event to happen. Possibly the far end of a dial-up channel failed to respond in a timely manner or a system problem caused delay in sending a message to the far end.

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Abort Description	Explanation
FILE ACCESS DENIED	A DUPT process requested tried to open a file it does not have access to. Possibly caused by a program bug.
FILE ALRDY CLOSED	A DUPT process requested that a closed file be closed. Possibly caused by a program bug.
FILE IS OPEN	A DUPT process requested that a file be opened when the file is already opened. A file is the TRF tape or a dial-up channel. Possibly caused by program bug.
FILE NOT FOUND	A DUPT process requested a dial-up link and none was available. Possibly too many out-of-service dial-up channels, or not enough dial-up channels are equipped in the office.
FILE RW IS ACTIVE	A DUPT process requested a read or write to a file that has a read or write active. Possibly caused by a program bug.
IO DL OPEN DENIED	The DUPT system was unable to originate a call on a dial-up channel. Possibly a bad dial-up number. Verify using Recent Change (RC) forms 602-603. The dial-up channel may be in an unusable state.
IO DL WRITE DENIED	The I/O Control Program (IOCP) program would not accept a request to send a message on a dial-up channel. The IOCP program sends and receives messages on channels. Possibly caused by a program bug.
PACK IO BUF FAIL	A failure occurred reformatting a message (packing characters) destined for a dial-up channel. Possibly caused by a program bug.
SPURIOUS TASP RPLY	The DUPT system received an unexpected reply from the TASP program. Possibly caused by program bug.

SEE PROPRIETARY NOTICE ON COVER PAGE

Abort Description	Explanation
TASP CLOSE DENIED	The TASP program would not accept a request to close the TRF tape. Possibly caused by a program bug.
TASP DELAY FAIL	A read on the TRF tape failed. Possible bad spot on the TRF tape.
TASP OPEN DENIED	The DUPT system was denied access to the TRF Traffic Data Administration System (TDAS) tape by the TASP program. TASP program is used by DUPT to access the TRF tape. Possibly caused by program bug.
TRF TAPE PREMPT	The TRAFFIC measurement system requires the release of the TRF tape so that TDAS information can be written on the tape. This usually occurs on the hour when a DUPT process is actively reading the TRF tape and MEASREPT 0 is active.
UNEXPT DL STIMUL	An active dial-up channel disconnected when the associated process requires the channel to be connected. The loss of carrier could be caused by a far end disconnect.
UNEXPT MSG RCVD	A message was received on a dial-up channel that was not expected by the process linked to the dial-up channel. Possibly the far end sent a message the process was not expecting.

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:DOC
WORK CENTER.. NMOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT: DOC ACKNOWLEDGMENT INCONSISTENCY:
EITHER RECEIVED BUT NOT SENT OR SENT BUT NOT RECEIVED
a bb [cccc cc cc ccc ccc]
.
.
.

2. REASON FOR OUTPUT

To print when a dynamic overload control (DOC) acknowledgment failure has been detected by the system. The failure is due to either receiving an acknowledgment when no DOC signal was sent, or due to not receiving an acknowledgment in response to a DOC signal that was sent. The message can contain up to 12 such failures, and will be accompanied by the output message REPT:RAW DATA FOR DOC ACKNOWLEDGMENT FAILURES.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | DOC level:

1 — MC1.

2 — MC2.

3 — MC3. |
| b | DOC transmitter number (00-63). |
| c | Circuit identification number (CIN). If the DOC transmitter is not assigned, no value will be output. |

4. ACTION TO BE TAKEN

Using the DOC transmitter as a reference to start with, isolate the trouble causing the acknowledgment failure and correct the condition. The trouble may be associated with the transmission facilities or may be due to a bad scan or signal distributor (SD) point. Additional failure information can be obtained from the DOC acknowledgment raw data message which will also be printed out.

Consult with the network manager as locally required when working on network management equipment.

5. REFERENCES

PIDENT
NMGT3SD

SEE PROPRIETARY NOTICE ON COVER PAGE

4ESS
OM-4B000-01

REPT:DOC

Output Message
REPT:RAW

SEE PROPRIETARY NOTICE ON COVER PAGE

REPT:DOC-2

Issue 1.8
September 2001

ID REPT:DTFR
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT: DTFR INH DT a, DTU b

2. REASON FOR OUTPUT

To report that noise is detected on a T1 line of a digroup terminal unit (DTU) and no protection switch is available (or if the noise is detected on the spare DTU after a protection switch has been completed).

3. VARIABLE FIELD DEFINITIONS

a Member number of digroup terminal with T1 line noise.
b DTU number with T1 line noise.

4. ACTION TO BE TAKEN

Input appropriate OP:DGSTAT input message to isolate and correct the offending digroup. Use the AUD:PUSTAT input message to obtain a DTFRMAIN audit call which contains the current DTU T1 noise inhibit status; the first data word is the unit type and member number (UTMN) of the affected digroup terminal (DT). The second data word is the bit position of any DTU that is inhibited against T1 noise. Successful DTU restoral will remove the T1 noise inhibit.

5. REFERENCES

PIDENT
DTFRMAIN

Input Messages
AUD:PUSTAT
OP:DGSTAT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:E2A
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT:E2A a FAILURE

2. REASON FOR OUTPUT

To report that the E2A remote telemetry unit has failed and has set an alarm point in the peripheral processor interface (PPI).

3. VARIABLE FIELD DEFINITIONS

a Type of failure:
 CENTRAL POLLING
 POWER
 REMOTE

4. ACTION TO BE TAKEN

Determine the cause of the failure, then repair unit.

5. REFERENCES

PIDENTs
MCCMSCCP
MCCMSCCR

Practice 254-280-212, *Master Control Complex Common Control And Monitor Program*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:END
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT:END OF AMA TAPE ON TUC a

2. REASON FOR OUTPUT

To report that the end of tape has been detected by the active automatic message accounting (AMA) unit.

3. VARIABLE FIELD DEFINITIONS

a Member number of the tape unit controller (TUC) designated as the active AMA unit (0-15).

4. ACTION TO BE TAKEN

Mount a new AMA tape on TUC a. Assign TUC a or another TUC to the AMA function.

5. REFERENCES

PIDENTs
AMDX
IOCPOMC1

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:ERAP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

- [1] REPT:ERAP FS DATA AREA HAS LESS THAN a WORDS LEFT
CURRENT MFNUM = b
FILE STORE UPDATE HAS BEEN REQUESTED
- [2] REPT:ERAP STORAGE RESOURCES DEPLETED
MFNUM b

2. REASON FOR OUTPUT

Format [1] is printed to report that less than one-eighth of the total file storage space is available.

Format [2] is printed to report that the maximum number of stored records has been reached and additional records cannot be accepted.

Format [1] is printed each half-hour until the condition is corrected, and is followed each time by an UPD:ERAP output message.

Format [2] requires immediate action to avoid loss of subsequent data. It is printed when the program makes its first successful attempt to store a new record. The message is then turned off until the next half period at which time the next unsuccessful attempt to store a new record is reported.

3. VARIABLE FIELD DEFINITIONS

- a Number of words remaining in file store.
- b Maintenance file number (MFNUM).

4. ACTION TO BE TAKEN

Some existing data should be cleared from the data base by means of the CLR:ERAPDATA and UPD:ERAP input messages.

Format [2] messages need immediate attention to avoid loss of subsequent data. Selective clearing based on content can be accomplished by using the six search input messages.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
ERAP
ERIF

Practice 254-200-215, *Error Analysis Program Application*
Practice 254-280-320, *Error Analysis Program*

Input Messages
CLR:ERAPCOND
CLR:ERAPDATA
IN:ERAPCOND
OP:ERAPCOND
OP:ERAPSRES
OP:ERAPSUM
UPD:ERAP

Output Message
UPD:ERAP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:ERAT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT:ERAT CONDITION LAST ERR ANAL SEQUENCE TABLE INTERRUPT STATE COMPLETED
aa:bb c ddd

2. REASON FOR OUTPUT

To report that the last interrupt state for a given sequence table is processed.

3. VARIABLE FIELD DEFINITIONS

a	Sequence table number in decimal.
b	Interrupt state number in decimal.
c	Unit type involved.
d	Member number.

4. ACTION TO BE TAKEN

If this message is received more than once and shows identical information, then error analysis was not able to solve the problem; therefore, manually analyze the interrupt printouts for this unit to correct the problem.

This data plus the associated F-level interrupt report messages can identify the corrective actions attempted by error analysis.

5. REFERENCES

PIDENT
ERATSQTL

Practice 234-180-320, *Error Analysis Program Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:ERROR
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT: ERROR IN TRANSLATING OUTPUT MESSAGE, a ADR = bbbbbbbb
c

2. REASON FOR OUTPUT

To indicate that an error has occurred while translating an output message which results in an inability to complete the message. The message will be printed, but will be truncated at the point of the error.

3. VARIABLE FIELD DEFINITIONS

- a Type of structure being translated:
- CATALOG — The error occurred while translating a catalog.
- SUBCATALOG — The error occurred while translating a subcatalog.
- TEXT PHASE — The error occurred while translating a text phrase.
- b The start address of the catalog or subcatalog in which the error occurred.
- c Description of the error that occurred having one of following formats:
- (1) d CONTAINS BAD TRANSLATION UNIT AT WORD e, COLUMN f
- An invalid translation unit has been discovered in catalog, subcatalog, or text phrase. The translation unit pointed to is actually the one after the error.
- d — Type of structure being translated:
- CATALOG
- SUBCATALOG
- TEXT PHASE
- e — Relative address within the structure.
- f — Column position of the next translation unit after the error.
- 0 — Bits 16 through 23
- 1 — Bits 08 through 15
- 2 — Bits 00 through 07

SEE PROPRIETARY NOTICE ON COVER PAGE

- (2) DISK REQUEST FAILED
Request for catalog translation data from disk failed.
- (3) INTERNAL ERROR IN OUTPUT TRANSLATOR
An internal error in the output translator has been found and corrected.
- (4) MESSAGE EXCEEDS MAXIMUM NUMBER OF CHARACTERS ALLOWED.
Too much raw data was requested for a message, resulting in more characters than could be stored in 16 output message registers (OMRs).
- (5) OMR ALLOCATION ERROR
Insufficient output message registers (OMRs) available to translate message.
- (6) UNASSIGNED a NUMBER REQUESTED
An invalid subcatalog number or text phrase number has been detected in the raw data to be translated for an output message.
If type of structure being translated was:
SUBCATALOG — An invalid subcatalog number was detected.
TEXT PHRASE — An invalid text phrase number was detected.

4. ACTION TO BE TAKEN

Error (1) indicates an error in the data structure, either in the original source or because of garbage. The hash audit should find and correct the error if it is garbage.

Error (2) requires no action.

Error (3) is induced through garbage only, is self-correcting, and requires no action.

If errors (4), (5), or (6) are indicated, a program error exists that must be corrected. The catalog or subcatalog that is given should indicate the program that requested the message in error.

5. REFERENCES

PIDENTs
IOCPOMC1
IOCPOMC4
IOCPOMT1

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:ERROR-STOP
WORK CENTER.. MAC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT: NORMAL ERROR STOP PROCESSING HAS BEEN DISABLED,
AUDITS ARE INHIBITED, INTERRUPTS HAVE BEEN PESTED
SICOPRGM.AA+474

2. REASON FOR OUTPUT

This message alerts operational personnel that normal ERROR STOP processing has been suspended. It was suspended through the selection of DDI key 0 on the previous phase, or after a phase 3 level 3.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

Before taking action contact your next level of support per local practice.

To enable normal ERROR STOP processing, the following command should be input:
ALW:AUD:NUM 44!.

ERROR STOP is disabled by overwriting its entry in the transfer vector table. When DDI key 0 is selected, all audits are disabled. Audit number 44 will detect the changed ERROR STOP vector and will return it to its normal address.

5. REFERENCES

PIDENT
SICOPRGM

Input Message
ALW:AUD

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:EST
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:EST a ESU b, COULD NOT VERIFY
c IN d

2. REASON FOR OUTPUT

To print out when a protection switch/unprotection switch of an echo suppressor unit (ESU) could not be verified using the protection switch relay contact monitor in the indicated controller(s).

3. VARIABLE FIELD DEFINITIONS

a	Member number of the echo suppressor terminal (EST) (1-31).
b	ESU number (0-13).
c	SWITCH UNSWITCH
d	BOTH CONTR CONTR0 CONTR1

4. ACTION TO BE TAKEN

Run the protection switch phase of the controller diagnostic by using the DGN:EST input message.

5. REFERENCES

PIDENT
ESFRSUBS

Input Message
DGN:EST

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:EXCS-BOOT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT:a EXCESSIVE BOOTSTRAPS
DIAGNOSTICS NOT REQUESTED FOR THE CC, b STORES, AND c STORE BUS

2. REASON FOR OUTPUT

To indicate that the system has taken too many bootstraps within a period of time. These bootstraps may be caused by a unit (central control [CC], call store [CS], program store [PS], call store unit [CSB] or program store unit [PSB]) which when placed in diagnostic causes a fault which sends the system back into bootstrap. After four (4) bootstraps within a half-hour period, fault recovery is prevented from requesting any more diagnostics.

3. VARIABLE FIELD DEFINITIONS

- a Program requesting that this message be printed:
- CSFR — Call store fault recovery.
- PSFR — Program store fault recovery.
- b Type of store upon which diagnostics are NOT being requested (the recovery program that caused this message):
- CALL — Call stores.
- PROGRAM — Program stores.
- c Type of bus upon which diagnostics are NOT being requested (the recovery program that caused this message).
- CALL — Call store busses.
- PROGRAM — Program store busses.

4. ACTION TO BE TAKEN

Analyze printouts to determine which unit was in diagnostics at the time of each failure and subsequent entry into bootstrap. If a specific unit can be identified then remove that unit from service. Restore all other out-of-service units. If the system remains stable leave the bad unit out-of-service until repaired.

If bootstrap entries continue, re-analyze the printouts to find the faulty unit. Obtain further assistance.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
CSFRNORM
PSFRPSPG

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:FAILURE
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT:FAILURE TO a
b

2. REASON FOR OUTPUT

Error analysis program (ERAP) failure to carry out specified action. Will report failure to initialize the ERAP disk resident data base or a failure to pump the call store (CS) resident buffers to disk on phase or interrupt level.

3. VARIABLE FIELD DEFINITIONS

- a Action ERAP failed to carry out:
- INITIALIZE ERAP DATA BASE — ERAP failed to initialize its disk resident data base for reason given in b.
- PUMP ERAP INTERRUPT BUFFERS — ERAPs CS resident buffers were not pumped to disk for a reason given in b.
- b Reason for failure to carry out action:
- BUFFER UNLOADING INHIBITED — Could not pump interrupt buffers because buffer unloading was inhibited.
- DISK ACCESS DUPLEX FAILED — Could not pump because of duplex failure.
- DISK DATA BASE OVERFLOW — Buffer to be pumped would not fit into ERAP data base.
- DISK WRITE REQUEST FAILED — Disk write request to disk administration (DKAD) gave a fail completion return.
- DISK WRITE REQUEST TIMEOUT — Disk write request did not complete in the allotted time.
- NO PHASE IN PROGRESS — Phase record was to be saved, but interrupt level buffers could not be pumped because they were not executing on phase level (a = PUMP ERAP INTERRUPT BUFFERS only).
- NOT ON INTERRUPT LEVEL — Asked to pump interrupt level buffer but was not on interrupt level.
- POINTER ERROR — Disk data base pointer errors were found; audits requested.

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4. ACTION TO BE TAKEN

If the action is:

INITIALIZE ERAP DATA BASE — then correct file store (FS) problem and manually request initialization of ERAP data base using the AUD:ERAPDATA INIT! input message.

Otherwise, no action is needed.

5. REFERENCES

PIDENTs
ERAP
ERIF

Practice 254-280-320, *Error Analysis Program*

Input Message
AUD:ERAPDATA

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:FAN-AIR-FLOW
WORK CENTER.. MOC
GENERIC 4E21 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:FAN AIR FLOW a XTSI b FLN c

2. REASON FOR OUTPUT

Reports the status of the air flow on a Expanded Time Slot Interchange (XTSI) fan unit.

3. VARIABLE FIELD DEFINITIONS

- a Designates that a fan unit is suspected of failure. Fan alarm status:
- ALARM — Fan air flow is below minimum level, and fan unit is Out-Of-Service (OOS).
- RSTD — Fan air flow has been restored.
- b XTSI member number (0-63).
- c The Floor Location Number (FLN) of the miscellaneous frame containing the alarm grid equipment. For example, 1701.13 where 17=building floor number, 01=equipment lineup number, and 13=equipment frame number.

4. ACTION TO BE TAKEN

Replace/reset fuse, replace fan filter, or possible suspect fan equipment.

5. REFERENCES

PIDENTs
FRDIMCFW
IO4CATE
IOCPPTX4
MCFWIOCP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:FAN-FUSEALRM
WORK CENTER.. MOC
GENERIC 4E21 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:FAN AND FUSE ALARM CONDITION XTSI a FLN b

2. REASON FOR OUTPUT

Reports the status of the air flow and fuse alarm conditions on an Expanded Time Slot Interchange (XTSI) unit. Fan air flow is below minimum level, and fan unit is Out-Of-Service (OOS); and blown fuse has been detected, generating an alarm condition.

3. VARIABLE FIELD DEFINITIONS

- a XTSI member number (0-63).
- b The Floor Location Number (FLN) of the miscellaneous frame containing the alarm grid equipment. For example, 1701.13 where 17=building floor number, 01=equipment lineup number, and 13=equipment frame number.

4. ACTION TO BE TAKEN

Replace / reset fuse, replace fan filter, or possible suspect fan equipment.

5. REFERENCES

PIDENTs
XTSIFRDI
IO4CATE
IOCPPTX4
MEDICXTS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:FAN-ST
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT:FAN SYSTEM TROUBLE - FNS a

[b] [FRM: 1B PROC BAY a]
[c]
[d]

2. REASON FOR OUTPUT

Provides the results from software submitted requests to the Fan System (FNS).

Results provided include messages to help the user determine problem(s) with the fan system. These reports can contain one or more defective fan system parts. They can also include the environmental error HIGH FRAME TEMPERATURE. Other results provided include scan point value changes, and FNS sanity failure messages.

Problems reported could include the FNS being automatically inhibited due to an internal fan system condition, the Scan And Signal Distributor (SSD) being Out-Of-Service (OOS), a fan system Maintenance Control Program (MACP) job being aborted, or an incorrect response(s) from the FNS.

NOTE: Information about output messages generated from manually submitted requests (ALW:FNS, CLR:FNS, INH:FNS, or TEST:FNS) can be found on the respective output document pages.

3. VARIABLE FIELD DEFINITIONS

- a The FNS frame number (0-1).
- b Only reported under one of the following conditions:
- FNS ALW THRESHOLD EXCEEDED
 - FNS AUTOMATICALLY INHIBITED
 - FNS ERROR THRESHOLD EXCEEDED
 - FNS INVALID RESPONSE
 - FNS NOT RESPONDING
 - MACP JOB ABORTED
 - REPLACE FC — Replace the Fan Controller (FC).
 - SSD OOS — Scan and signal distributor out-of-service.

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- c If fan system errors were reported, the character string FAN SYSTEM ERROR SUMMARY will be displayed followed by one or more of the following error reports:

FAN 1 ERROR
FAN 2 ERROR
FAN 3 ERROR
FAN 4 ERROR
FAN 5 ERROR
FAN 6 ERROR
HIGH FRAME TEMPERATURE
LOWER FRONT TEMPERATURE SENSOR ERROR
LOWER REAR TEMPERATURE SENSOR ERROR
REPLACE AIR FILTER

- d If there is a failure, specific debugging and error information will be displayed. This information will identify the general software location when the error occurred, and the status of the interface between the 1B and the FNS. The layout and content of this information is described in the following list.

AUX DATA Stands for auxiliary data and identifies the debugging information.

“second character string“ Displays which fan system job has failed. This provides the general location when the error occurred.

SUBTASK Followed by single decimal digit (0-3). This number indicates the location within software or the specific task being executed when the error occurred.

SSDSTATES Followed by a twelve digit binary number in the form of eeeeefffffff, where e contains the value of the Signal Distributor (SD) bits and f is the scan points associated with the FNS when the error occurred.

SD Values		
Bits		Meaning
1000	—	ALW:FNS Initialize the FNS, or inhibit the FNS
1001	—	TEST:FNS Report all fan system errors
1010	—	Report fan status
1100	—	Clear fan air filter from the FNS error stack
1101	—	Verify FNS sanity
1110	—	Continue reporting

SEE PROPRIETARY NOTICE ON COVER PAGE

Scan Values (1st four, reading right to left)		
Bits		Meaning
0000	—	Fan controller fault (replace FC)
0001	—	Fan 1 error
0010	—	Fan 2 error
0011	—	Fan 3 error
0100	—	Fan 4 error
0101	—	Heartbeat (FNS sanity verified)
0110	—	Fan 5 error
0111	—	TEST : FNS in-progress
1000	—	Lower front temperature sensor error
1001	—	Lower rear temperature sensor error
1010	—	All Seems Well (ASW)
1011	—	Fan 6 error
1100	—	High frame temperature
1101	—	Replace air filter
1110	—	Not used
1111	—	FNS automatically inhibited

Scan Values (2nd four, reading right to left)		
Bits		Meaning
0001	—	Heartbeat (FNS sanity verified)
0010	—	ASW
0000-0001, 0011-1111	—	Invalid states: fault detected and reported

4. ACTION TO BE TAKEN

NOTE: Whenever the FNS becomes automatically inhibited, the first action should be to re-initialize the FNS by entering the ALW:FNS input command. The fan controller would normally be replaced when the FNS becomes automatically inhibited, but it is possible the error situation which caused the FNS to become inhibited can be cleared by re-initializing the FNS and fan controller. If the FNS passes the initialization, the previous error will have been cleared and the FNS should operate normally. If the initialization fails and the FNS becomes re-inhibited, the fan controller should then be replaced. However, this should only be used as a last resort measure when the FNS will not maintain an in-service state and repetitively becomes inhibited no matter how many re-initializations are attempted.

NOTE: At times, more than one output message can be reported back to back. In these cases, the action for the last reported output message should be followed.

SEE PROPRIETARY NOTICE ON COVER PAGE

Refer to variable field definition letters.

For variable b:

If FNS ALW THRESHOLD EXCEEDED, a request to inhibit the FNS will be submitted by the system. Replace the fan controller and reinitialize the FNS by submitting a ALW:FNS input message. After the ALLOW passes (ALLOW completed reported), submit a TEST:FNS input command request to capture a fan system error report, if desired.

If FNS AUTOMATICALLY INHIBITED, there is a power supply problem to the fan controller, or the fan controller is bad and should be replaced.

If FNS ERROR THRESHOLD EXCEEDED, a request to initialize or inhibit the FNS will be submitted by the system. If an ALLOW or initialization was submitted and it passed (ALLOW completed reported), submit a TEST:FNS input command request to capture a fan system error report, if desired. If a request to inhibit the FNS was submitted, replace the fan controller and reinitialize the FNS by submitting a ALW:FNS input message. After the ALLOW passes (ALLOW completed reported), submit a TEST:FNS input command request to capture a fan system error report, if desired.

If FNS INVALID RESPONSE, a request to initialize or inhibit the FNS will be submitted by the system. If an ALLOW or initialization was submitted and it passed (ALLOW completed reported), the FNS problem should have been cleared and the fan system should function normally. If a request to inhibit the FNS was submitted, replace the fan controller and reinitialize the FNS by submitting a ALW:FNS input message. After the ALLOW passes (ALLOW completed reported), the new fan controller should function normally.

If FNS NOT RESPONDING, a request to inhibit the FNS will be submitted by the system. Replace the fan controller and reinitialize the FNS by submitting a ALW:FNS input message. After the ALLOW passes (ALLOW completed reported), submit a TEST:FNS input command request to capture a fan system error report, if desired.

If MACP JOB ABORTED, submit a TEST:FNS input request to recapture the fan system error report.

If REPLACE FC, a request to inhibit the FNS will be submitted by the system. Replace the fan controller and reinitialize the FNS by submitting a ALW:FNS input message. After the ALLOW passes (ALLOW completed reported), submit a TEST:FNS input command request to capture a fan system error report, if desired.

If SSD 00S, check the Scan And Signal Distributor (SSD) status. Submit a TEST:FNS input command request when the SSD is in-service to recapture the fan system error report.

SEE PROPRIETARY NOTICE ON COVER PAGE

For variable c:

If a defective part exists, replace it.

If a HIGH FRAME TEMPERATURE exists, investigate and repair the cause of the high frame temperature, i.e., remove the blockage to the frame's air inlet.

5. REFERENCES

PIDENTs
MCCMEPS1
FNFRBASE

Input Messages
ALW:FNS
CLR:FNS
INH:FNS
TEST:FNS

Output Messages
ALW:FNS
CLR:FNS
TEST:FNS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:FEAT-CHK
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT:FEAT_CHK
{a|b}
[FEATURE OPTIONING CHECK COMPLETED AT d,e]

2. REASON FOR OUTPUT

To report check of feature optioning.

3. VARIABLE FIELD DEFINITIONS

- a NO INCONSISTENCIES
- b Any combination of one or more of the following results:
- [1] OPTIONS SELECTED FOR THIS OFFICE BUT NOT ACTIVATED
- C
- .
- .
- .
- [2] UNAUTHORIZED ACTIVATION OF OPTIONS NOT SELECTED
- C
- .
- .
- .
- [3] UNAUTHORIZED POPULATION OF DATA RELATED TO OPTIONS NOT SELECTED
- C
- .
- .
- .
- c Any combination of one or more of the following options:
- ACCESS BILLING
- ACCESS TANDEM
- ENFIA-C
- FRAUD
- INC ACCESS

SEE PROPRIETARY NOTICE ON COVER PAGE

	MEET - ME
	NEMOS
	PBX
	SDN
	STP
d	Time.
e	Date.

4. ACTION TO BE TAKEN

If NO INCONSISTENCIES is printed, no action is necessary. Otherwise, contact national electronic switching assistance center (NESAC).

5. REFERENCES

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:FERA
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:FERA {DEMAND ANALYSIS STRATEGY|DIAGNOSTIC STRATEGY|TIMED STRATEGY}
FOR a, b, {DAT|DST|TST} c, {DATS|DSTS|TSTS} d
FERA REQUESTED THE FOLLOWING ACTION(S):
[1. SUCCESSFULLY COPY SOFT TO HDWR FOR a b]
[2. SUCCESSFULLY FORCE REMOVE a, b]
DATA:ERROR ANALYSIS HISTORY DATA FILE FOR a b
e...e f...f g...g h...h i...i j...j
k...k l...l m...m n...n o...o p...p
q...q r...r s...s t...t u...u v...v
w...w x...x y...y z...z a¹...a¹ b¹...b¹
c¹...c¹ d¹...d¹ e¹...e¹ f¹...f¹ g¹...g¹ h¹...h¹
i¹...i¹ j¹...j¹ k¹...k¹

2. REASON FOR OUTPUT

Reports actions requested by failure error analysis (FERA) strategies of demand analysis (DAT), diagnostic strategy (DST) and timed strategy (TST).

3. VARIABLE FIELD DEFINITIONS

a	Unit type and member number (UTMN).
b	Subunit type & member number (SUTMN).
c	Strategy number for demand analysis (DAT), diagnostic strategy (DST), or test (TST).
d	Strategy state number for demand analysis state (DATS), diagnostic strategy state (DSTS), or test state (TSTS).
DAT	Demand analysis.
DST	Diagnostic strategy.
TST	Timed strategy.
e	Word 0: Bits 0-13 — UTMN type. 14 — Zero. 15-16 — Configuration indicator type. 17 — Zero. 18-19 — Strategy type.

SEE PROPRIETARY NOTICE ON COVER PAGE

- 20 — Zero.
- 21-23 — Date file state type.
- f Word 1:
- Bits 0-16 — SUTMN type.
- 17-20 — Zero.
- 21-22 — Type.
- 23 — Subunit previously implicated.
- g Word 2:
- Bits 0-13 — Level type.
- 4-5 — Zero.
- 6-13 — Number of interrupting types.
- 14 — Zero.
- 15-21 — Control type.
- 22-23 — Zero.
- h Interrupting time type.
- i Word 4:
- 0-13 — Interrupting unit type member number.
- 14 — Zero.
- 15-16 — Service test system (STS) type.
- 17 — Zero.
- 18-19 — Service test (ST) type.
- 20-23 — Zero.
- j Word 5:
- Bits 0-4 — PSTS type.
- 5 — Zero.
- 6-10 — PST type.
- 11 — Zero.
- 12-16 — PSTS type.
- 17 — Zero.
- 18-22 — PST type.
- 23 — Zero.
- k Word 6:
- Bits 0-2 — Special service test system (SSTS) type.

SEE PROPRIETARY NOTICE ON COVER PAGE

- 3-4 — SST type.
- 6-8 — SST type.
- 9-11 — SST type.
- 12-14 — Timed SST type.
- 15-17 — Timed ST type.
- 18-20 — Demand ATS type.
- 21-23 — Demand AT type.

l

Word 7:

- Bits 0-2 — ANTS type.
- 3-5 — Alternate number translations (ANT) type.
- 6-8 — ANTS type.
- 9-11 — ANT type.
- 12-14 — Originator class type.
- 15-17 — Zero.
- 18 — Demand at trigger type.
- 19-20 — Zero.
- 21 — BOOL type.
- 22-23 — Zero.

m

Word 8:

- Bits 0-7 — Point of maximum definition (PMD) number type.
- 8 — Zero.
- 9-12 — Fault class type.
- 13-14 — Zero.
- 15-16 — Resolution class type.
- 17 — Zero.
- 18-19 — Retry status type.
- 20 — Zero.
- 21 — BOOL type.
- 22-23 — Zero.

n

Word 9:

- Bits 0-13 — UTMN type.
- 14 — Zero.
- 15 — DST OVRID type.

SEE PROPRIETARY NOTICE ON COVER PAGE

	16-17 — Zero.
	18 — Diagnose progress type.
	19-20 — Zero.
	21-22 — TA type.
	23 — Zero.
o	Word 10: Bits 0-16 — SUTMN type. 17-23 — Zero.
p	Word 11: Bits 0-1 — DSTS type. 2-3 — DST type. 4-5 — DSTS type. 6-7 — DST type. 8-9 — All tests passed (ATP) restore internal count type. 10-13 — Diagnose request type. 14-16 — Diagnose count type. 17-20 — Diagnose terminal code type. 21-22 — Diagnose result type. 23 — Audit request type.
q	Timed reentry word type.
r-a ¹	Suspect array type.
b ¹ -f ¹	Sequential table data type.
g ¹	Maintenance file number (MFNUM) type.
h ¹	Internal type.
i ¹ , j ¹	Subunit fault reference array type.
k ¹	Data file age type.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
FERAX

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:FHCTHRESH
WORK CENTER.. MOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT : FHCTHRESH

FHC	COUNT	TRAP	[a]
b	c	d	

2. REASON FOR OUTPUT

To indicate whether a final handling code (FHC) has exceeded the office data (ODA) threshold value.

3. VARIABLE FIELD DEFINITIONS

- a Day — If threshold exceeded was a daily.
- b Final handling code number.
- c Count at which threshold value occurred.
- d Three letter trap index of FHC.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPPOM4
TMAD0002
TMADTRAP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:FILE
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT: FILE STORES a AND b DUPLEX FAILED

2. REASON FOR OUTPUT

To indicate that two file store mates have been duplex failed and removed from service.

3. VARIABLE FIELD DEFINITIONS

a Member number of the file store.
b Member number of the mate file store.

4. ACTION TO BE TAKEN

To repair faulty units, refer to: Practice 231-369-002, *Trouble Clearing Data*

5. REFERENCES

PIDENT
FSFRDISK

Practice 231-369-002, *Trouble Clearing Data*
Practice 254-280-110, *File Store Administration Program*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:FOR-ATR
WORK CENTER.. MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] REPT:FOR ATR ON
- [2] REPT:FOR ATR OFF

2. REASON FOR OUTPUT

To report that the foreign alarm transfer feature has been turned on or off in all alarm grids containing this optional feature. This request is initiated by operating the "FOR ATR" switch on the master control complex (MCC).

Format [1] allows foreign alarms to interface with the 4ESS™ office alarm grids equipped with this hardware option. With Format [2] foreign alarms are not recognized by 4ESS™ offices equipped with this hardware option.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

Observe the "FOR ATR" lamp and the "PROGRAM CONTROL OFF NORM" lamp on the MCC (lit for ON, extinguished for OFF).

5. REFERENCES

PIDENT
ALRM01

Practice 234-100-040, *Office Alarm System Description and Theory*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:FUSE-ALARM
WORK CENTER.. MOC
GENERIC 4E21 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:FUSE ALARM CONDITION XTSI a FLN b

2. REASON FOR OUTPUT

Reports the status of the air flow and fuse alarm conditions on an Expanded Time Slot Interchange (XTSI) unit. A blown fuse has been detected, generating an alarm condition.

3. VARIABLE FIELD DEFINITIONS

- a XTSI member number (0-63).
- b The Floor Location Number (FLN) of the miscellaneous frame containing the alarm grid equipment. For example, 1701.13 where 17=building floor number, 01=equipment lineup number, and 13=equipment frame number.

4. ACTION TO BE TAKEN

Replace / reset fuse, or possible suspect fan equipment.

5. REFERENCES

PIDENTs
XTSIFRDI
IO4CATE
IOCPPTX4
MEDICXTS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:GAP-CNTRL
WORK CENTER.. NMOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:GAP CONTROL, CODE aaa-bbb-ccc, INTERVAL dd, e

2. REASON FOR OUTPUT

To report that gap control has been activated, deactivated, or that the gap interval for an existing gap control is modified.

3. VARIABLE FIELD DEFINITIONS

a	Numbering plan area (NPA).
b	Exchange number (NXX).
c	Line number.
d	Gap interval.
e	Gap control status:
	ACTIVATED
	DEACTIVATED

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
NMGTSUBS

Practice 234-180-130, *Network Management Control and Display Programs - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:IAOFC
WORK CENTER.. MOC, TOC
GENERIC 4E24 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

```
REPT:IAOFC, TRAPN a, bbb [c]
[defgh [DEL:i, NEXT DIGIT NUM:j, PRE:k] [FINAL ROUTE: l] [IAID: m] ...
nop q r [TOS: s, CID: t, INTL: u ,ITC: v] [w] [TNSI: x, INTL: u] ...
[CAUS: y DATA: z] [TNSI: a1, INTL: u, CID: t, DRTC: b1] ...
[EAANI: c1 OLIDIG: d1] [ISCAUS: e1 LOC: f1] ...
[SAN: g1 MAN: h1 EXDC: i1] [IIDIG: j1|OLIDIG d1] ...
[TRK GRP: k1, NSN: l1
ORIG: m1, SST: n1, DNST: o1, DEST: p1, TC: q1] ...
[RII: r1, TC: q1] s1 t1 u1 v1 w1 x1 y1 z1 a2 [VALKEY: b2 c2 d2 e2]]
[SDSERV: f2]
[SDPC:g2 SSN: h2]
[SPPC:i2 SSN:j2]
[SDRSN: k2]
[PNG: l2]
[CIC: m2]
[LRN: n2]
[SDTT: o2[,SPQRY: p2]]
[LATA:q2]
[CSI:r2]
FHCODE: s2,IFHCODE: t2,u2,{TRCODE|SVICT}: v2,{TRSUB|SVOGT|EAS}: w2x2
[** DATA LOST **]
y2
```

2. REASON FOR OUTPUT

To report an event specified on an MON:IAOFC input message trap whose schedule is or has occurred. The data relevant to a call irregularity is displayed.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | Trap number (32-35) of the trap that caused the output. |
| b | Three characters describing Ineffective Attempt (IA) type. See Practice 234-103-018 for description. |
| c | Final Handling Announcement (FHI) override. See COMPOOL encoding of XL4RD_FHI. |
| d | Incoming Trunk (ICT) identity associated with the trapped event. |
| e | Outgoing Trunk (OGT) identity, if present, associated with the trapped event. |
| f | Service Circuit (SVC), if present, associated with the trapped event. |

SEE PROPRIETARY NOTICE ON COVER PAGE

- g Digits (DIG) present when the event was trapped.
- h Calling Party Digits (CPDIG), if present, when the event was trapped. May be either a billing number or an Automatic Number Identification (ANI).
- i Number of digits that were deleted from the DIG variable.
- j The number of the next digit to be outputted after deleting and prefixing operations have been applied to DIG data.
- k The actual digits to be prefixed prior to outputting, blank if none.
- NOTE:** Example: If DIG = 6903452, DEL = 3, PRE = 1, and NEXT DIGIT NUM = 4, then digit 5 will be the next digit to be outputted, since it is the fourth digit left after 690 was deleted and the digit 1 was prefixed.
- NOTE:** Since the 4ESSTM switch gives up to four digits at a time to the Signaling Processor (SP) for Multifrequency (MF) outputting, the TRAP can only indicate what the next group of digits to be given to the SP will be, not what digit the SP will actually cause to be outputted next.
- l Circuit Identification Number (CIN) of trunk subgroup which was the final route hunted in a No Circuit Available (NCA) condition.
- m The internal Public Announcement Service (PAS) frame identity for those call irregularities that are associated with PAS calls, either a customer call to listen to a PAS announcement or a call to create or update a PAS announcement. PAS announcement number.
- n Domain Incoming (DOMI) from Call Register (CR). See COMPOOL encoding of CR4DOMI.
- o Dynamic Non-Hierarchical Routing (DNHR) Incoming Class Mark (DNHRICM). See COMPOOL encoding of CR4CIDNHRI.
- p DNHR Outgoing Class Mark (DNHROCM). See COMPOOL encoding of CR4CODNHRO.
- q Blue Box Digits (BBDIG) collected when event was trapped.
- r Previously Stored Number (PSN).
- s Type Of Service (TOS).
- t Carrier Identification (CID).
- u International (INTL) flag.
- v Incoming Trunk Class (ITC).
- w Service index number (see COMPOOL encoding of CR4CBC_SERV).
- x Transit network selection index.

SEE PROPRIETARY NOTICE ON COVER PAGE

y	Q931 cause value.
z	Octal data (16 bits).
a1	Integrated Services Digital Network (ISDN) User Part (ISUP) dire translation. Transit network selection index.
b1	Data rate transport capability (XL4DRTC).
c1	Originating Line Information (OLI) Equal access Automatic Number Identification (ANI) type.
d1	OLI digits.
e1	ISUP cause value.
f1	Location data.
g1	Subaccount number.
h1	Mandatory / optional subaccount number.
i1	Expected digit count.
j1	Equal access Information Digits (IIs).
k1	Real Time Network Routing (RTNR) class of service. Trunk Group (TRK GRP) circuit identification number.
l1	Network Switch Number (NSN).
m1	Class Of Service (COS) Origination (ORIG).
n1	COS Signaling Service Type (SST).
o1	COS Dial Number Service Type (DNST).
p1	COS Destination (DEST).
q1	Transport Capability (TC).
r1	RTNR service routing information.
s1	Service Circuit System (SCS) expanded Final Handling Announcement (FHANN) value.
t1	Byte Length (BLEN) of User To User Information (UUI) / Access Transport (ATP).
u1	Adjunct Logical Address (ALA).
v1	Originating Point Code (OPC).
w1	Invoke (INVK) Identification (ID).
x1	Credit Card Digits (CARD).
y1	Destination Point Code (DPC).
z1	Subsystem Number (SSN).
a2	Operator (OPER) requested call.

SEE PROPRIETARY NOTICE ON COVER PAGE

b2	Validation Key (VALKEY) data. Feature identification.
c2	Trigger identification.
d2	Call state.
e2	Call directionality.
f2	Segmentation Directory (SD) service indicator. Refer to the 4ESS TM <i>Domestic Call-Irregularity Maintenance Reference Handbook</i> .
g2	SD point code.
h2	SD subsystem number.
i2	SD service processor point code.
j2	SD service processor point code subsystem number.
k2	SD reason. Refer to the 4ESS TM <i>Domestic Call-Irregularity Maintenance Reference Handbook</i> .
l2	Ported number gap.
m2	Carrier identification code.
n2	Local routing number.
o2	Segmentation Directory (SD) transition type value. See COMPOOL encoding of CR4SD_TRAN_TYPE.
p2	SD service processor query status. See COMPOOL encoding of CR4SD_SPQRY_STAT.
q2	Local Access Transport Area (LATA) number.
r2	Carrier Selection Information (CSI) number.
s2	Final Handling Code (FHCODE). This is the raw data describing the failure at the level of detail internal to the program. See COMPOOL encoding of FH4FHIDIDEN item.
t2	Input Final Handling Code (IFHCODE). Raw data for the final handling code which was input to TMAD0002 program prior to possible clarification into the more detailed FHCODE variable.
u2	Q931 or ISUP message pointer. COMPOOL encoding is Q94_MESS_TYPE (Q931) and C74 MSGTYPE (ISUP), respectively.
TRCODE	Trunk register code.
SVICT	State vector, incoming trunk.
v2	Raw data for Call Register (CR) incoming state vector or Trunk Register (TR) code. See COMPOOL encoding for CR4SVICT and TR4CODE, respectively.
TRSUB	Trunk register substate code.
SVOGT	State vector, outgoing trunk.

SEE PROPRIETARY NOTICE ON COVER PAGE

EAS	Equal Access Signaling (EAS).
w2	Raw data for CR outgoing state vector or TR substate code. See COMPOOL encoding of CR4SVOGT and TR4CODE, respectively.
x2	Equal Access Signaling (EAS) state.
DATA LOST	Possible text stating that data has been lost due to the collection of more data than can be buffered for output. At most, 32 messages can be buffered to all monitoring channels.
	blank — if no message failed to be buffered prior to the current message and the previous successfully buffered message.
y2	Time of call irregularity occurrence.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPOM4
TMAD0002
TMAD0005
TMADTRAP

Practice 234-010-315, *4ESSTM Domestic Call-Irregularity Maintenance Reference Handbook*

Practice 234-103-018, *Trunk Operations Center (TOC) - Call Irregularity Raw Data Trap*

Input Messages

ALW: IAOFC
INH: IAOFC
MON: IAOFC
STOP: MON - IAOFC

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:IATSG
WORK CENTER.. MOC, TOC
GENERIC 4E24 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

```
REPT:IATSG, TRAPN a, bbb [c]
[defgh [DEL:i, NEXT DIGIT NUM:j, PRE:k] [FINAL ROUTE: l] [IAID: m] ...
nop q r [TOS: s, CID: t, INTL: u ,ITC: v] [w] [TNSI: x, INTL: u] ...
[CAUS: y DATA: z] [TNSI: a1, INTL: u, CID: t, DRTC: b1] ...
[EAANI: c1 OLIDIG: d1] [ISCAUS: e1 LOC: f1] ...
[SAN: g1 MAN: h1 EXDC: i1] [IIDIG: j1|OLIDIG d1] ...
[TRK GRP: k1, NSN: l1
ORIG: m1, SST: n1, DNST: o1, DEST: p1, TC: q1] ...
[RII: r1, TC: q1] s1 t1 u1 v1 w1 x1 y1 z1 a2 [VALKEY: b2 c2 d2 e2]]
[SDSERV: f2]
[SDPC:g2 SSN: h2]
[SPPC:i2 SSN:j2]
[SDRSN: k2]
[PNG: l2]
[CIC: m2]
[LRN: n2]
[SDTT: o2[,SPQRY: p2]]
[LATA:q2]
[CSI:r2]
FHCODE: s2,IFHCODE: t2,u2,{TRCODE|SVICT}: v2,{TRSUB|SVOGT|EAS}: w2x2
[** DATA LOST **]
y2
```

2. REASON FOR OUTPUT

To report an event specified on an MON:IATSG input message trap whose schedule is or has occurred. The data relevant to a call irregularity is displayed.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | Trap number (1-31) of the trap that caused the output. |
| b | Three characters describing Ineffective Attempt (IA) type. See Practice 234-103-018 for description. |
| c | Final Handling Announcement (FHI) override. See COMPOOL encoding of XL4RD_FHI. |
| d | Incoming Trunk (ICT) identity associated with the trapped event. |
| e | Outgoing Trunk (OGT) identity, if present, associated with the trapped event. |
| f | Service Circuit (SVC), if present, associated with the trapped event. |

SEE PROPRIETARY NOTICE ON COVER PAGE

- g Digits (DIG) present when the event was trapped.
- h Calling Party Digits (CPDIG), if present, when the event was trapped. May be either a billing number or an Automatic Number Identification (ANI).
- i Number of digits that were deleted from the DIG variable.
- j The number of the next digit to be outputted after deleting and prefixing operations have been applied to DIG data.
- k The actual digits to be prefixed prior to outputting, blank if none.
- NOTE:** Example: If DIG = 6903452, DEL = 3, PRE = 1, and NEXT DIGIT NUM = 4, then digit 5 will be the next digit to be outputted, since it is the fourth digit left after 690 was deleted and the digit 1 was prefixed.
- NOTE:** Since the 4ESSTM switch gives up to four digits at a time to the Signaling Processor (SP) for Multifrequency (MF) outputting, the TRAP can only indicate what the next group of digits to be given to the SP will be, not what digit the SP will actually cause to be outputted next.
- l Circuit Identification Number (CIN) of trunk subgroup which was the final route hunted in a No Circuit Available (NCA) condition.
- m The internal Public Announcement Service (PAS) frame identity for those call irregularities that are associated with PAS calls, either a customer call to listen to a PAS announcement or a call to create or update a PAS announcement. PAS announcement number.
- n Domain Incoming (DOMI) from Call Register (CR). See COMPOOL encoding of CR4DOMI.
- o Dynamic Non-Hierarchical Routing (DNHR) Incoming Class Mark (DNHRICM). See COMPOOL encoding of CR4CIDNHRI.
- p DNHR Outgoing Class Mark (DNHROCM). See COMPOOL encoding of CR4CODNHRO.
- q Blue Box Digits (BBDIG) collected when event was trapped.
- r Previously Stored Number (PSN).
- s Type Of Service (TOS).
- t Carrier Identification (CID).
- u International (INTL) flag.
- v Incoming Trunk Class (ITC).
- w Service index number (see COMPOOL encoding of CR4CBC_SERV).
- x Transit network selection index.

SEE PROPRIETARY NOTICE ON COVER PAGE

y	Q931 cause value.
z	Octal data (16 bits).
a1	Integrated Services Digital Network (ISDN) User Part (ISUP) dire translation. Transit network selection index.
b1	Data rate transport capability (XL4DRTC).
c1	Originating Line Information (OLI) Equal access Automatic Number Identification (ANI) type.
d1	OLI digits.
e1	ISUP cause value.
f1	Location data.
g1	Subaccount number.
h1	Mandatory/optional subaccount number.
i1	Expected digit count.
j1	Equal access Information Digits (IIs).
k1	Real Time Network Routing (RTNR) class of service. Trunk Group (TRK GRP) circuit identification number.
l1	Network Switch Number (NSN).
m1	Class Of Service (COS) Origination (ORIG).
n1	COS Signaling Service Type (SST).
o1	COS Dial Number Service Type (DNST).
p1	COS Destination (DEST).
q1	Transport Capability (TC).
r1	RTNR service routing information.
s1	Service Circuit System (SCS) expanded Final Handling Announcement (FHANN) value.
t1	Byte Length (BLEN) of User To User Information (UUI) / Access Transport (ATP).
u1	Adjunct Logical Address (ALA).
v1	Originating Point Code (OPC).
w1	Invoke (INVK) Identification (ID).
x1	Credit Card Digits (CARD).
y1	Destination Point Code (DPC).
z1	Subsystem Number (SSN).
a2	Operator (OPER) requested call.

SEE PROPRIETARY NOTICE ON COVER PAGE

b2	Validation Key (VALKEY) data. Feature identification.
c2	Trigger identification.
d2	Call state.
e2	Call directionality.
f2	Segmentation Directory (SD) service application. Refer to the 4ESS TM <i>Domestic Call-Irregularity Maintenance Reference Handbook</i> .
g2	SD point code.
h2	SD subsystem number.
i2	SD service processor point code.
j2	SD service processor point code subsystem number.
k2	SD reason. Refer to the 4ESS TM <i>Domestic Call-Irregularity Maintenance Reference Handbook</i> .
l2	Ported number gap.
m2	Carrier identification code.
n2	Local routing number.
o2	Segmentation Directory (SD) transition type.
p2	SD service processor query status.
q2	Local Access Transport Area (LATA) number.
r2	Carrier Selection Information (CSI) number.
s2	Final Handling Code (FHCODE). This is the raw data describing the failure at the level of detail internal to the program. See COMPOOL encoding of FH4FHIDIDEN item.
t2	Input Final Handling Code (IFHCODE). Raw data for the final handling code which was input to TMAD0002 program prior to possible clarification into the more detailed FHCODE variable.
u2	Q931 or ISUP message pointer. COMPOOL encoding is Q94_MESS_TYPE (Q931) and C74 MSGTYPE (ISUP), respectively.
TRCODE	Trunk register code.
SVICT	State vector, incoming trunk.
v2	Raw data for Call Register (CR) incoming state vector or Trunk Register (TR) code. See COMPOOL encoding for CR4SVICT and TR4CODE, respectively.
TRSUB	Trunk register substate code.
SVOGT	State vector, outgoing trunk.
EAS	Equal Access Signaling (EAS).

SEE PROPRIETARY NOTICE ON COVER PAGE

w2	Raw data for CR outgoing state vector or TR substate code. See COMPOOL encoding of CR4SVOGT and TR4CODE, respectively.
x2	Equal Access Signaling (EAS) state.
DATA LOST	Possible text stating that data has been lost due to the collection of more data than can be buffered for output. At most, 32 messages can be buffered to all monitoring channels.
	blank — if no message failed to be buffered prior to the current message and the previous successfully buffered message.
y2	Time of call irregularity occurrence.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPPOM4
TMAD0002
TMAD0005
TMADTRAP

Practice 234-010-315, *4ESSTM Domestic Call-Irregularity Maintenance Reference Handbook*

Practice 234-103-018, *Trunk Operations Center (TOC) - Call Irregularity Raw Data Trap*

Input Messages
ALW: IATSG
INH: IATSG
MON: IATSG
STOP: MON - IATSG

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:INFO1
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:INFO1 ***LINKSTAT*** NVIDN a NVID b
ADSI c LACID d EXCEEDED RTND MSG THRESHOLD

2. REASON FOR OUTPUT

This REPT:INFO1 output message is issued to the 1A maintenance channel to inform office personnel that the output link access circuit identifier (LACID) of a particular 800 INFO-1 pair is experiencing problems. This message may be output up to three times before the LACID is removed from service. If the LACID recovers from the problem during a 90-second monitor period, these messages could serve as warnings that particular links are experiencing periodic difficulties.

3. VARIABLE FIELD DEFINITIONS

- a INFO-1 national vendor identification number (0-127).
- b INFO-1 national vendor identification name.
- c Automatic number identification (ANI) delivery service index (ADSI).
- d Link access circuit identifier (LACID).

4. ACTION TO BE TAKEN

The office personnel is expected to investigate the reason for the LACID failures being reported.

5. REFERENCES

PIDENT
ADJSCNTL

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:INVD
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT: INVD ENTRY CC FR PROG

2. REASON FOR OUTPUT

To indicate that the central control (CC) fault recognition (CCFR) program was entered in an invalid manner. System implications are:

- (1) CCFR may have left the system in an invalid state (bus routing, system status, memory, control flip-flops, status of standby CC, etc.).
- (2) There is a hardware, software, translation, or parameter error causing entry to CCFR at some invalid point.
- (3) Some paged program caused entry. This could indicate an auxiliary unit (AU)-CC-program store (PS)/call store (CS) transmission problem.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

- (1) Observe system status and operation to determine if further manual actions are required.
- (2) Request program and data audits.
- (3) Request phase of memory regeneration.
- (4) In worst case, initiate processor configuration (PC) for complete system verification.

5. REFERENCES

PIDENT
CCFRMAIN

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:IOCP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT:IOCP - APS 0 MESSAGE SYSTEM ADDR=a
b

2. REASON FOR OUTPUT

To report an error condition that occurred during attached processor message (APMSG) message processing.

3. VARIABLE FIELD DEFINITIONS

a Program address where error was detected.

b One of the following messages:

(1) APS 0 REJECTED MESSAGE FROM IOCP CODE d [e]

The attached processor system (APS) is unable to process the message from the 1A processor's input/output (I/O) control program (IOCP).

d — Message status code returned from attached processor message handler (APMH):

1 — Time out before APS message processing completed.

2 — Invalid character string.

3 — 3B DMERT interface (DMI) failed execution of command.

4 — Invalid DMI message type.

41 — Invalid APS client identification (ID).

e — Text of input message that was not processed. This identifies which input message failed.

(2) BUFFER TIMEOUT

The IOCP buffer used to store APS messages was busy for more than ten minutes and was set to idle.

(3) IOCP REJECTED MESSAGE FROM APS 0

DATA: MESSAGE HEADER

HEAD+0 HEAD+1 HEAD+2 HEAD+3 HEAD+4 HEAD+5 HEAD+6

HEAD+7 HEAD+8 HEAD+9 DATA+0 DATA+1 DATA+2 DATA+3

SEE PROPRIETARY NOTICE ON COVER PAGE

IOCP rejected the 3B message for one of the following reasons:

- Message status was not success.
- Sending client was not recognized.
- Message type was not recognized.

DATA layout:

HEAD+0

Bits 0-7 = Size of message.

8-15 = Receiving client.

16-23 = Sending client.

HEAD+1

Bits 0-7 = Message sequence number.

8-15 = APMH status (see variable c).

16-23 = APMH message type:

0 — Short message (< 54 words).

1 — Message acknowledgment.

4 — Write request.

5 — Write request activate.

14 — Write activate (type 2).

15 — Write activate (type 2)
acknowledgment.

HEAD+2,3 — Not used.

HEAD+4 — Checksum over message.

HEAD+5

Bits 0-7 = Sending buffer number.

8-15 = Receiving buffer number.

16-23 = Not used.

HEAD+6

Bits 0-15 = Number of words in block transfer.

16-23 = Time allotted for request.

HEAD+7 — Main memory address for write operations.

HEAD+8,9 — Not used.

SEE PROPRIETARY NOTICE ON COVER PAGE

DATA+0

Bits 0-7 = Priority of APS output message:

- 0 — Critical alarm.
- 1 — Major alarm.
- 3 — Minor alarm.
- 5 — Manual request.
- 6 — Action.
- 7 — Information.
- 10 — Default (information).

8-15 = IOCP status:

- 0 — Successful.
- 377 — Not enough resources.

16-23 = IOCP message type:

- 0 — Long nonsegmented output message (> 54 data words).
- 1 — Master control complex (MCC) panel status lamp update.
- 2 — APS messages allowed notice.
- 3 — APS inhibited notice.
- 4 — Segmented message: start section.
- 5 — Segmented message: continue section.
- 6 — Segmented message: end section.

DATA+1 — First word of message from 3B.

Content dependent on message type:

For message types 0,4,5, or 6 — First three characters of 3B message.

For message type 1 — State of 3B status:

- 0 — No 3B unit is out-of-service.
- 1 — At least one 3B unit is out-of-service.

For message types 2,3 — Unused.

DATA+2,3 — Second and third words of message from 3B.

Content based on IOCP message type.

- 0,4,5 or 6 — Characters 3-8 of 3B message.
- 1,2, or 3 — Unused.

SEE PROPRIETARY NOTICE ON COVER PAGE

(4) IOCP UNABLE TO SEND MESSAGE TO APS 0
APMH STATUS = c

IOCP submitted a request to send a message to the APS but the request was rejected.

c — Attached processor message handler (APMH) status:

- 4 — Invalid message type.
- 5 — Circular buffer invalid.
- 6 — Circular buffer empty.
- 7 — Invalid message ID.
- 10 — Checksum error in message.
- 11 — Sequence number error.
- 13 — No buffer found.
- 14 — Too many words for direct memory access (DMA) job.
- 15 — Protection bit does not match address.
- 16 — Job buffer and message do not agree.
- 17 — Not enough resources.
- 20 — Buffer idle.
- 21 — Buffer active.
- 22 — Bad buffer request.
- 23 — Invalid message size in message header.
- 24 — Invalid client ID in message header.
- 25 — APMH not initialized.
- 26 — Invalid APS number.
- 27 — Invalid request type.
- 30 — Bad currency pointers.
- 31 — DMA job timeout.
- 32 — Invalid time field in message header.
- 33 — Circular buffer full.
- 41 — Invalid 3B client ID.
- 377 — No block transfer buffers available.

(5) SEGMENTED MESSAGES LOST OR TRUNCATED

The block transfer job buffers have timed out or the APS requested a block transfer before completion of the previous request resulting in loss of message or message segment.

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

Error reported is a transient condition. If errors occur repeatedly, use the INH:APMSG input message to inhibit APMSG processing until the error is located and corrected.

5. REFERENCES

PIDENT
IOCPUSR1

Input Messages
ALW:APMSG
INH:APMSG

Output Message
REPT:APMSG

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:IOUS
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT:IOUS a, IOUC b CONNECTED

2. REASON FOR OUTPUT

To indicate that the specified channel has made connection to the destination.

3. VARIABLE FIELD DEFINITIONS

a Input/output (I/O) selector member number (0-7).
b I/O channel number (0-15).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
IOCPIOH1

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:LCHAN-AT
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:LCHAN a b AT c d

2. REASON FOR OUTPUT

This message reports either the release or the reservation of a logical input/output (I/O) channel in an external user's session.

3. VARIABLE FIELD DEFINITIONS

- a The channel number in octal of the affected logical channel.
- b The action occurring in the channel:
- ACTIVE — The channel has been reserved and is now active in an external user's session.
- RELEASED — The channel has been released from the external session and may be available for the next user.
- c The time of day the action was taken.
- d The month, day, and year of the action.

4. ACTION TO BE TAKEN

Both formats report normal system activity and no craft action is expected.

5. REFERENCES

PIDENT
IOCPMACC

Input Messages
ALW:LCHAN
INH:LCHAN
OP:LCHAN

Output Message
OP:LCHAN

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:LCHAN-AUDIT
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:LCHAN a AUDIT AT b
DATA:REGISTERS
c d e f
g h i j

2. REASON FOR OUTPUT

Reports an error condition found during the logical channel status and data structure audit.

3. VARIABLE FIELD DEFINITIONS

a If present, this variable is the channel number in octal of the affected logical channel.
b Program address where the problem was discovered.
c - j This area contains central control (CC) registers in the following order: F, G, J, K, L, X, Y, and Z.

4. ACTION TO BE TAKEN

The audit will correct or initialize errors or inconsistencies found in the channel states or data structures. The problem can be determined by consulting the PIDENT listing.

5. REFERENCES

PIDENT
IOCPMACC

Input Message
OP:LCHAN

Output Message
OP:LCHAN

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:LCHAN-ERR
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

```
REPT: LCHAN a b ERR AT c
DATA: APMH MESSAGE HEADER
      d      d      d      d      d      d      d
      d      d      d      d      d      d      d
DATA: REGISTERS
      e      f      g      h
      i      j      k      l
```

2. REASON FOR OUTPUT

This message reports on trouble encountered during logical input/output (I/O) channel operational processing.

3. VARIABLE FIELD DEFINITIONS

- a The channel number in octal of the affected logical channel.
- b This reports which of the logical channel program's functional areas called for the report. The possible areas are input, output, acknowledgement, control, direct memory access (DMA), or message transfer.
- c The program address where the error was encountered.
- d This field is the first 14 words of the attached processor message handler (APMH) message buffer. This will include the 10-word header and the first four words of the actual message area.
- e - l This area contains central control (CC) registers in the following order: F, G, J, K, L, X, Y, and Z.

4. ACTION TO BE TAKEN

In the case of CONTROL TROUBLE, this message may indicate attempts by an external user to establish a session on an improperly defined or ineligible logical I/O channel. The channel's status can be checked using the OP:LCHAN input message.

In other cases, this messages is meant to be informational and available as an aid in trouble reconstruction and problem resolution. Consult the source code listing for the PIDENT at the address appearing as variable c.

5. REFERENCES

PIDENT
IOCPMACC

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Message
OP : LCHAN

Output Message
OP : LCHAN

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:LCHAN-TIME
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT: LCHAN a TIMEOUT AT b
DATA: REGISTERS
c d e f
g h i j

2. REASON FOR OUTPUT

Reports timeout and initialization of a logical channel state.

3. VARIABLE FIELD DEFINITIONS

a The channel number in octal of the effected logical channel.
b Program address where the timeout was processed.
c - j This area contains central controller (CC) registers in the following
 order: F, G, J, K, L, X, Y, and Z.

4. ACTION TO BE TAKEN

No craft action is necessary. The particular type of timeout and program action taken can be determined by consulting the PIDENT listing.

5. REFERENCES

PIDENT
IOCPMACC

Input Message
OP: LCHAN

Output Message
OP: LCHAN

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:LIB
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT:LIB KC HASH FAILED IN BINK a

2. REASON FOR OUTPUT

To indicate that the library program store has been hashed and the hashsums have failed. Hashing is performed when maintenance control program (MACP) aborts a library client program and is about to transfer to the client's abort address in LBKC.

3. VARIABLE FIELD DEFINITIONS

a The BINK (in decimal) where the hash error was detected.

4. ACTION TO BE TAKEN

Reload the package that was in LBKC from tape. The source of the hash failure will have to be resolved; program data has been mutilated.

5. REFERENCES

PIDENT
LIBRTRP1

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:MACLI
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT:MACLI CLASS MTCE INHIBITED
AUTOMATIC JOB SCHEDULING DISALLOWED

2. REASON FOR OUTPUT

To inform the user that the maintenance control program (MACP) has been put in the inhibit mode by manual request. This message will print hourly accompanied by a spurt minor alarm. The inhibit mode will time out in 24 hours or may be terminated by manual request. See the ALW:MACLI input message to terminate manually.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
MACPROUT

Practice 254-280-210, *Maintenance Control Program*

Input Message
ALW:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:MACLI-GUTL
WORK CENTER.. MOC, TEC, TOC
GENERIC 4E23 Rel. 3 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT:MACLI, CLASS GUTL ABORTS a

2. REASON FOR OUTPUT

Prints in response to either the ALW:MACLI or INH:MACLI input messages.

3. VARIABLE FIELD DEFINITIONS

a Message status:

ALLOWED — Maintenance Control Program (MACP) aborting of
Generic Utility Program (GULP) commands are
allowed.

INHIBITED — MACP aborting of GULP commands are inhibited.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
MACPROUT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:MACP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT:MACP AUTOMATIC JOB SCHEDULING RESUMED

2. REASON FOR OUTPUT

To report that the maintenance control program (MACP), which inhibits either routine exercises or all automatically scheduled jobs in the maintenance class, has either timed out after 24 hours or has been terminated by manual request.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
MACPROUT

Practice 254-280-210, *Maintenance Control Program*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:MAN
WORK CENTER.. MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT: MAN PWR RMVD a b [c] [d] e

2. REASON FOR OUTPUT

To report that a unit is manually powered down.

3. VARIABLE FIELD DEFINITIONS

a	Unit type.
b	Member number.
c	Subunit type.
d	Submember number.
e	Frame type and number.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
MCCMEPS1

Practice 254-280-212, *Master Control Complex Common Control and Monitor Program*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:MANUAL
WORK CENTER.. NMOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT: MANUAL a b% c ON THIS TSG: dddd eeee ee ee eee eee

2. REASON FOR OUTPUT

To print whenever the network manager institutes or removes a manual cancel to, cancel from, reroute, or skip control for a trunk subgroup (TSG).

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | The control taken:
CANCEL FROM
CANCEL TO
REROUTE
SKIP
TSG ACCESS RESTRICTION (TSAR) |
| b | Percentage of traffic to be controlled. |
| c | Status of the control:
ACTIVATED
DEACTIVATED |
| d | Base traffic number. |
| e | Circuit identification number (CIN) of the trunk subgroup which was affected. |

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
NMGTCTRT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:MANUAL-OR
WORK CENTER.. NMOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT: MANUAL OVERRIDE OF OUTBOUND DOC IN EFFECT.

2. REASON FOR OUTPUT

This message reports that the manual override that inhibits sending dynamic overload control (DOC) is in effect for the entire office, resulting in DOC not being sent as requested by the overload program.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

The network manager should verify the reason that all outbound DOC for the office is being inhibited via manual override. The manual control was established by a CONTROL PAGE 4 input. If the control is not wanted, the network manager should release the control via CONTROL PAGE 4.

Because of the rapid rate at which this message could be generated during periods of overload or congestion, the system will only output the message once, e.g., the first time the condition is encountered. Override lamp on at N.M. display panel (green override).

5. REFERENCES

PIDENTs
NMGTCTRF
NMGTODT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:MANUAL-OV
WORK CENTER.. NMOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT: MANUAL OVERRIDE OF OUTBOUND DOC IN EFFECT

2. REASON FOR OUTPUT

To report that the manual override that inhibits sending dynamic overload control (DOC) is in effect for the entire office, resulting in DOC not being sent as requested by the overload program.

Because of the rapid rate at which this message could be generated during periods of overload or congestion, the system will only output the message once, i.e., the first time the condition is encountered.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

The network manager should verify the reason that all outbound DOC for the office is being inhibited via manual override. The manual control was established by a DOMESTIC GENERAL CONTROL PAGE input. If the control is not wanted, the network manager should release the control via DOMESTIC GENERAL CONTROL PAGE in the network management document. The green override (OVRD) lamp is lit at the network management display panel.

5. REFERENCES

PIDENTs
NMGTCTRF
NMGTODT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:MC
WORK CENTER.. NMOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT: MCa DOC b ON THIS TSG: cccc cc cc ccc ccc

2. REASON FOR OUTPUT

To report that this office has received a dynamic overload control (DOC) signal from another office.

3. VARIABLE FIELD DEFINITIONS

- a Level (degree) of DOC received:
- 0 — No DOC signal is being received (ie, the previously received DOC signal has been removed).
- 1
- 2
- 3
- b RECEIVED
- REMOVED
- c Circuit identification number (CIN) identifying the trunk subgroup for which the DOC was received.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
NMGTANAL
NMGTRMFD

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:MC3
WORK CENTER.. NMOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT: MC3 DOC LEVEL a

2. REASON FOR OUTPUT

To print when an machine congestion level 3 (MC3) dynamic overload control (DOC) signal is sent by 4ESSTM.

3. VARIABLE FIELD DEFINITIONS

a Status of the DOC control:

 ACTIVATED

 DEACTIVATED

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
MNGTODT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:MCC
WORK CENTER.. MOC
GENERIC 4E20 and later
APPLICATION .. 4E, 1B
TYPE Output

1. FORMAT

REPT: MCC REQUEST DENIED - a b c d

2. REASON FOR OUTPUT

To report the denial of a master control complex (MCC) request due to an invalid request code or an invalid unit type (UTYP).

3. VARIABLE FIELD DEFINITIONS

- a Reason for denial:
- INVD REQ CODE — The request code was not valid. Refer to values assigned for MC1OPER.
- INVLD UTYP — The unit type received by MIRA was not valid for the operation requested by the MCC.
- b Request code (octal).
- c Unit type (octal). Refer to the *4ESSTM Switch Maintenance Reference Handbook* for unit type codes.
- d Member number (decimal).

4. ACTION TO BE TAKEN

Identify the source of the invalid data, correct the problem and try again.

5. REFERENCES

PIDENTs
MIRA

Practice 234-310-107, *4ESSTM Switch Maintenance Reference Handbook*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:MCCWRITE
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT:MCC WRITE a

2. REASON FOR OUTPUT

To report that the master control complex (MCC) has been allowed or inhibited to write memory.

3. VARIABLE FIELD DEFINITIONS

a One of the following:

 ALLOWED — Memory could be changed by the MCC.

 INHIBITED — Memory cannot be changed by the MCC.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
MCCMEPS1

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:MDF
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT:MUP DUPLEX FAILED

2. REASON FOR OUTPUT

To report that the master control complex (MCC) and utility processors (MUPs) have been duplexed failed during configuration or interrupt-level processing.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

Determine cause of problem.

5. REFERENCES

PIDENT
MCFRCNFG

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:MEASREPT
WORK CENTER.. MAC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

```
REPT:MEASREPT aa b
cccc de de PRIM f
ggg hh/ii/jj ACCUMULATION TIME kkk llmm - nnn oopp
LAST MEASREPT CHANGE qq/rr/ss
t
.
.
.
t
```

2. REASON FOR OUTPUT

To print on a scheduled basis at the beginning of every partition of a measurement report and is followed by the output measurements.

3. VARIABLE FIELD DEFINITIONS

a	Measurement report number (1 - 23).
b	Partitioned message header: MSG COMPL — Message completed. MSG IP — Message in progress. MSG START — Message started.
cde	City, state, and building of the area of primary responsibility for the report.
f	Input/output (I/O) channel on which changes can be made to the report, in addition to the maintenance (MTC) and the secondary record channels.
g	The current day of the week on which the report is output.
hh/ii/jj	The current date on which the report is output (month / day / year).
k	The day at the start of the accumulation interval.
llmm	The time at the start of the accumulation interval; where l is the hour of the day (00 - 23), m is the number of minutes (00,15,30,45).
n	The day at the end of the accumulation interval.
oopp	The time at the end of the accumulation interval; where o is the hour of the day (00 - 23), p is the number of minutes (00,15,30,45).

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qq/rr/ss	The date that the last change (addition to or deletion from a report) was made to the measurement report (month / day / year).
t	The measurements assigned to the measurement report by the SCHED:MEASREPT input message.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
TRAFPOUT

Practice 234-100-045, *Plant Measurements and Machine Performance Report Description*

Translation Guide, 4ESSTM, Division 10, Section 3h

Input Message
SCHED:MEASREPT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:MSG
WORK CENTER.. MAC, MOC, NMOC, TEC,
 TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:MSG INH

a

.

.

.

2. REASON FOR OUTPUT

To report those messages that have been inhibited from printing.

3. VARIABLE FIELD DEFINITIONS

a

Messages which have been inhibited:

AUD REPT — Audit report.

INT REPT — Interrupt report.

NONE — No messages inhibited.

SINT REPT — Supplementary interrupt report.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
MCFWAPMO
MCFWAUD

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:NCATANOM
WORK CENTER.. MOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:NCATANOM, TRAPN a, bbb
TSG IN: [c] TSG OUT: [d]
[DOMI:e,] [DIG: F]
[PSN:g] [,h]
[FINAL ROUTE: i]
NACODE: j [** DATA LOST **]
k

2. REASON FOR OUTPUT

To report that a non-call associated temporary signaling connection (NCAT) anomaly has occurred. All data relevant to the NCAT anomaly is displayed.

3. VARIABLE FIELD DEFINITIONS

a	NCAT anomaly trap number (0 or 1).
bbb	Three-character NCAT anomaly code category.
c	Circuit identification number (CIN) of the incoming trunk subgroup associated with the NCAT anomaly trap.
d	CIN of the outgoing trunk subgroup associated with the NCAT anomaly trap, and printed only if it is known.
e	Incoming domain in which the digits are translated.
f	Digits taken from the NCAT register on which the call is currently being routed.
g	Previously stored number; those digits that originally came with the call and were sent to the database.
h	Additional data that further defines the anomaly. Interpretation depends on the NAC.
i	CIN of the trunk subgroup which was the final route hunted in a no circuit available (NCA) condition.
j	NCAT anomaly code (NAC). This is the raw data describing the anomaly at program level.
** DATA LOST **	will be printed if a message failed to be buffered between the current message and the previous successfully buffered message.
k	Time of the NCAT anomaly occurrence.

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4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
NCATFH

Input Messages

ALW:NCATANOM
INH:NCATANOM
MON:NCATANOM
OP:NCATANOM
STOP:MON-NCATANOM

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:NCSU-FAST
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:NCSU 0: FAST START COMPLETE, NORMAL MODE ENTERED

2. REASON FOR OUTPUT

Results from a network clock (NCLK) synchronization unit (NCSU) error analysis unit dependent code. Indicates that the NCSU has completed synchronization of the NCLK to the external reference signal by way of the fast start firmware routine.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
CLFRFERA

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:NCSU-FREE
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:NCSU 0: FREERUN 10 MINUTES

2. REASON FOR OUTPUT

Results from a network clock synchronization unit (NCSU) error analysis unit dependent code. This message indicates that the NCSU has been decoupled from its external reference. This occurs after the active reference has had an outage for longer than 10 minutes. The minor spurt alarm is also activated.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

Use task oriented practices (TOP) procedure to determine problem.

5. REFERENCES

PIDENT
CLFRFERA

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:NCSU-FRNT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:NCSU 0: FAST START COMPLETE, FREERUN ENTERED

2. REASON FOR OUTPUT

Results from a network clock synchronization unit (NCSU) error analysis unit dependent code. This message indicates that this is a freerun office with no references equipped.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

None. This indicates that the state of the NCSU has changed.

5. REFERENCES

PIDENT
CLFRFERA

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:NCSU-HR
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:NCSU 0: FREERUN 24 HOURS

2. REASON FOR OUTPUT

Results from a network clock synchronization unit (NCSU) error analysis unit dependent code. This message indicates that the master oscillator has been free running for more than 24 hours because the active reference has had an outage for more than 24 hours. The major alarm is also rung.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

Use the task oriented practices (TOP) procedure to repair this problem.

5. REFERENCES

PIDENT
CLFRFERA

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:NCSU-NCLK
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:NCSU 0: NCLK OSCILLATOR BACK IN RANGE

2. REASON FOR OUTPUT

Results from a network clock synchronization unit (NCSU) error analysis unit routine dependent code. This message indicates that the frequency adjustment offset between the master oscillator and the incoming reference has returned to within its permitted range (80 percent).

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

None. This message indicates that the oscillator range has been corrected, either by a new oscillator or by the NCSU.

5. REFERENCES

PIDENT
CLFRFERA

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:NCSU-OFCE
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:NCSU 0: OFFICE PHASE LOCKED

2. REASON FOR OUTPUT

Results from a network clock synchronization unit (NCSU) error analysis unit dependent code. This message indicates that the active reference is phase locked in the normal mode after having an outage of between 10 minutes and 24 hours.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

None. This message is for information only, unless a problem is recognized; in that case, take appropriate action.

5. REFERENCES

PIDENT
CLFRFERA

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:NCSU-OSC
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:NCSU 0: OSC RANGE EXCEEDED

2. REASON FOR OUTPUT

Results from a network clock synchronization unit (NCSU) error analysis unit dependent code. This message indicates that an oscillator has exceeded its permitted adjustment range. The minor spurt alarm is also rung.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

Determine if the problem is with the oscillator, and whether replacement will be required.

5. REFERENCES

PIDENT
CLFRFERA

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:NCSU-STBY
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:NCSU 0: STDBY REF OUT

2. REASON FOR OUTPUT

Results from a network clock synchronization unit (NCSU) error analysis unit dependent code. This message indicates that the standby reference has had an outage for longer than 10 minutes. The minor spurt alarm is also rung.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

Investigate the standby reference outage and switch to the standby, if required.

5. REFERENCES

PIDENT
CLFRFERA

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:NETEX
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:NETEX ENVIRONMENT ERROR

2. REASON FOR OUTPUT

To report every five minutes when NETEX has been abnormally aborted.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

Restart NETEX to clean up network paths.

5. REFERENCES

PIDENT
SICOPRGM

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ID REPT:NM
WORK CENTER.. MAC, MOC, NMOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT: NM TBL: DISP SYS PRT FAIL ON CRT a

2. REASON FOR OUTPUT

To report that the network management display system has encountered a blockage when trying to output to a network management display terminal or a failure to retrieve data from the file store for the terminal. As a result, this message will be printed at the network management printer. The system will then attempt to display the control page directory on the affected terminal.

3. VARIABLE FIELD DEFINITIONS

a A cathode ray tube (CRT) number (1-3), representing input/output (I/O) channels NMDT1 to NMDT3.

4. ACTION TO BE TAKEN

Inform the person operating the network management display terminal of the blockage. The terminal can reinitiate the action causing the failure.

5. REFERENCES

PIDENT
NMDSEXEC

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:NTC
WORK CENTER.. NMOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT: NTC MESSAGE a
b TSG = c d

2. REASON FOR OUTPUT

To respond to two conditions:

- (a) When an out-of-chain call cannot be routed from the via office and consequently a national trunk congestion (NTC) message is being sent to the preceding office. An international originating call routed out-of-chain from one incoming signaling characteristic (ISC) to another ISC fails to be routed from the via office if it cannot be routed on any in-chain route. A domestic out-of-chain call fails to be routed from the via office if it cannot be routed on the first choice route.

NOTE: The sending of the NTC message for a particular code and trunk subgroup (TSG) more frequently than one per 30 seconds may indicate that a manual reroute is in effect in the preceding office.

- (b) When a national trunk congestion message is received from a subsequent office for a call that was routed automatically out-of-chain. This results in turning off the entire out-of-chain route that received the NTC message. (The entire out-of-chain route is defined as all TSGs within the same TG for which the NTC was received.) This route is turned back on every 30 seconds. But a filter is applied to the message which allows only one message TSG/automatic out of chain (AOOC) routing data block (RDB)/5 minutes.

3. VARIABLE FIELD DEFINITIONS

- a SENT — Sent for out of chain (OOC) call.
RECEIVED — Received, AOOC route turned off.
- b Numbering plan area (NPA) and exchange number (NXX) called, if it is a domestic call.
Country code called, if it is an international call.
- c Trunk (TRK) number.
- d Circuit identification number (CIN) of TSG.

4. ACTION TO BE TAKEN

None.

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5. REFERENCES

PIDENT
NMGTANAL

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ID REPT:OA
WORK CENTER.. MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT: OA a b, c, FLOOR d

2. REASON FOR OUTPUT

To report the alarm activated or alarm retired condition of the 128 office-dependent alarms, such as fire, air conditioning, and other non-ESSTM office resident features. Also, a summary message is reported hourly for any alarms in the activated state.

3. VARIABLE FIELD DEFINITIONS

a Office dependent alarm number (0-127)

	MNEMONIC	COMMENT
OA 0	_____	_____
OA 1	_____	_____
OA 2	_____	_____
OA 3	_____	_____
OA 4	_____	_____
OA 5	_____	_____
OA 6	_____	_____
OA 7	_____	_____
OA 8	_____	_____
OA 9	_____	_____
OA 10	_____	_____
OA 11	_____	_____
OA 12	_____	_____
OA 13	_____	_____
OA 14	_____	_____
OA 15	_____	_____
OA 16	_____	_____
OA 17	_____	_____
OA 18	_____	_____
OA 19	_____	_____
OA 20	_____	_____
OA 21	_____	_____
OA 22	_____	_____
OA 23	_____	_____
OA 24	_____	_____

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	MNEMONIC	COMMENT
OA 25	_____	_____
OA 26	_____	_____
OA 27	_____	_____
OA 28	_____	_____
OA 29	_____	_____
OA 30	_____	_____
OA 31	_____	_____
OA 32	_____	_____
OA 33	_____	_____
OA 34	_____	_____
OA 35	_____	_____
OA 36	_____	_____
OA 37	_____	_____
OA 38	_____	_____
OA 39	_____	_____
OA 40	_____	_____
OA 41	_____	_____
OA 42	_____	_____
OA 43	_____	_____
OA 44	_____	_____
OA 45	_____	_____
OA 46	_____	_____
OA 47	_____	_____
OA 48	_____	_____
OA 49	_____	_____
OA 50	_____	_____
OA 51	_____	_____
OA 52	_____	_____
OA 53	_____	_____
OA 54	_____	_____
OA 55	_____	_____
OA 56	_____	_____
OA 57	_____	_____
OA 58	_____	_____
OA 59	_____	_____
OA 60	_____	_____
OA 61	_____	_____
OA 62	_____	_____
OA 63	_____	_____
OA 64	_____	_____
OA 65	_____	_____
OA 66	_____	_____
OA 67	_____	_____
OA 68	_____	_____

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	MNEMONIC	COMMENT
OA 69	_____	_____
OA 70	_____	_____
OA 71	_____	_____
OA 72	_____	_____
OA 73	_____	_____
OA 74	_____	_____
OA 75	_____	_____
OA 76	_____	_____
OA 77	_____	_____
OA 78	_____	_____
OA 79	_____	_____
OA 80	_____	_____
OA 81	_____	_____
OA 82	_____	_____
OA 83	_____	_____
OA 84	_____	_____
OA 85	_____	_____
OA 86	_____	_____
OA 87	_____	_____
OA 88	_____	_____
OA 89	_____	_____
OA 80	_____	_____
OA 91	_____	_____
OA 92	_____	_____
OA 93	_____	_____
OA 94	_____	_____
OA 95	_____	_____
OA 96	_____	_____
OA 97	_____	_____
OA 98	_____	_____
OA 99	_____	_____
OA 100	_____	_____
OA 101	_____	_____
OA 102	_____	_____
OA 103	_____	_____
OA 104	_____	_____
OA 105	_____	_____
OA 106	_____	_____
OA 107	_____	_____
OA 108	_____	_____
OA 109	_____	_____
OA 110	_____	_____
OA 111	_____	_____
OA 112	_____	_____
OA 113	_____	_____

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	MNEMONIC	COMMENT
	OA 114	
	OA 115	
	OA 116	
	OA 117	
	OA 118	
	OA 119	
	OA 120	
	OA 121	
	OA 122	
	OA 123	
	OA 124	
	OA 125	
	OA 126	
	OA 127	
b	12 characters of 8-bit American Standard Code for Information Interchange (ASCII).	
c	ACTIVATED RETIRED SUMMARY	
d	Floor number.	

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
MCFWIOCP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:OSOR-STAT
WORK CENTER.. MAC, MOC, NMOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:OSOR STATUS
NOTICE OSOR RESTART
[OSOR SCHEDULES INITIALIZED]
[COUNT DATA BASE INITIALIZED]

2. REASON FOR OUTPUT

To print when a different issue of a network management tape is loaded in the machine.

3. VARIABLE FIELD DEFINITIONS

OSOR SCHEDULES INITIALIZED — On site operations report (OSOR) schedules have been initialized to zero.

COUNT DATA BASE INITIALIZED — Count data base has been initialized to zero.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

None.

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ID REPT:OTAN
WORK CENTER.. MOC, TEC, TOC
GENERIC 4E22 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] REPT:OTAN a;b c;STAT d:SC e;MB f;NT g:[{h|TAD} ii jj kk ll,][b...b]
- [2] REPT:OTAN a;m n;STAT d:SC e;MB f;NT g:[{h|TAD} ii jj kk ll,]
- [3] REPT:OTAN a;o;STAT d:SC e;MB f;NT g:[{h|TAD} ii jj kk ll,]...
[p][q][CID {r|s}]
- [4] REPT:OTAN a;OPR ttuu;STAT e:SC f;MB g;NT z:[{h|TAD} ii jj kk ll,]...
[v][w][h]
- [5] REPT:OTAN a;HAW x;STAT d:SC e;MB f;NT g:[{h|TAD} ii jj kk ll,]
- [6] REPT:OTAN a;y z;STAT d:SC e;MB f;NT g:[{h|TAD} ii jj kk ll,]...
OTAN2 a'[,y...y]

2. REASON FOR OUTPUT

To report trunk state and group status changes.

Format 1 prints for digroup reasons.

Format 2 prints for group reasons.

Format 3 prints for individual reasons.

Format 4 prints for individual reasons with the OPR keyword. A routine or automatic (as the result of a call failure) operational trunk test has failed. Depending on the type of failure, the 4ESSTM switch will attempt to remove the trunk from service or just report the failure and not attempt to remove the trunk from service.

Format 5 prints for international trunks only. The last clearing sequence that was run by the high and wet PIDENT.

Format 6 prints Expanded Time Slot Interchange (XTSI) Digital Signal Level 3 (DS3) alarm and alarm abatement reasons.

The REPT:OTAN message is output every time a trunk has its basic maintenance state changed, or has its maintenance state qualifier changed. Thus, this message is generated when a trunk makes the transition from Active (ACT), Maintenance (MTC), Circuit Administration Disabled (CAD), or Blocked (BLK) to any different state of ACT, MTC, CAD, or BLK.

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To report that the REPT:OTAN message with TAD is a trunk state change or trouble report message which was directed to TOPAS/CONNECT-VU. It should never appear on an ESSTM Teletypewriter (TTY) unless the message could not be sent to TOPAS/CONNECT-VU, was routed away from TOPAS/CONNECT-VU, or is a monitor of a TOPAS/CONNECT-VU output channel.

The message is the TOPAS/CONNECT-VU equivalent to the REPT:CIN message which is directed to ESSTM TTYs for troubles on trunks which are in a control area not reporting to TOPAS/CONNECT-VU.

If TAD not present, then the report is for a trunk which does not have a Circuit Identification Number (CIN). Otherwise the message is identical to REPT:CIN.

3. VARIABLE FIELD DEFINITIONS

- a Octal Trunk Appearance Number (TAN) of trunk.
- b c Major event and number. Additional values are listings of previous events:
 - ACP 24 — Digroup has been taken out of ignore state.
 - AID 24 — Alarm Indication Signals Daily (AID) seconds - path. A measure of the number of one second intervals where Alarm Indication Signals occur within a 24 hour period.
 - AIS 24 — Alarm Indication Signals (AIS) seconds - path. A measure of the number of one second intervals where Alarm Indication Signals occur within a 15 minute period.
 - ASA 24 — Blue alarm on an XTSI digroup.
 - ASC 24 — Blue alarm on an XTSI digroup has cleared.
 - BVH 24 — Digroup bipolar violation high (or out-of-service) threshold has been reached. Trunks are not removed from service for this reason. (Digroup Terminal [DT] only.)
 - BVL 24 — Digroup bipolar violation low (or maintenance) threshold has been reached. Trunks are not removed from service for this reason. (DT only.)
 - CSD 24 — Controlled Slip Seconds Daily (CSD) - path. A measure of the number of one second intervals where one or more controlled slips occurred within a 24 hour period.
 - CSS 24 — Controlled Slip Seconds (CSS) - path. A measure of the number of one second intervals where one or more controlled slips occurred within a 15 minute period.
 - CVD 24 — Coding Violations Daily (CVD) from Digital Signal Level 1 (DS1) superframe format frame synchronization bit errors or extended superframe format Cyclic Redundancy Check Level 6 (CRC-6) errors within a 24 hour period.

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- CVP 24 — Coding violations from Digital Signal Level 1 (DS1) superframe format frame synchronization bit errors or extended superframe format Cyclic Redundancy Check Level 6 (CRC-6) errors within a 15 minute period.
- DSI 8 — Digital service circuits on an MF type DIU have been restored to service after a PSW.
- DSO 8 — Digital service circuits on an MF type DIU have been removed from service due to a Protection Switch (PSW).
- ESD 24 — Errored Seconds Daily (ESD) - path. A measure of the number of one second intervals where events such as frame synchronization errors, CRC-6 errors, SEF defects, AIS or controlled slips occurred within a 24 hour period.
- ESP 24 — Errored Seconds - path. A measure of the number of one second intervals where events such as frame synchronization errors, CRC-6 errors, SEF defects, AIS or controlled slips occurred within a 15 minute period.
- FBH 24 — Digroup framing bit high (or out-of-service) threshold has been reached. Trunks are not removed from service for this reason (DIF and XTSI).
- FBL 24 — Digroup framing bit low (or maintenance) threshold has been reached. Trunks are not removed from service for this reason (DIF only).
- FCH 24 — Digroup framing bit high (or out-of-service) threshold.
- FCL 24 — Digroup framing bit low (or maintenance) threshold has been cleared (DIF only).
- IGN 24 — Digroup on a DT or Digital Interface Frame (DIF) or XTSI has been put into the ignore state via a manual request.
- LAC 24 — Local alarm on a digroup on a DT, DIF or XTSI has cleared.
- LAC 30 — Local alarm on an digital interface frame E1 master digroup has cleared.
- LCA 24 — Local alarm on a digroup on a DT, DIF or XTSI.
- LCA 30 — Local alarm on an digital interface frame E1 master digroup has occurred.
- OFH 24 — Digroup out of frame high (or out-of-service) threshold has been reached. Trunks are not removed from service for this reason.
- OFL 24 — Digroup out-of-frame low (or maintenance) threshold has been reached. Trunks are not removed from service for this reason.
- RAC 24 — Remote alarm on a digroup on a DT, DIF or XTSI has cleared.

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- RAC 30 — Remote alarm on an digital interface frame E1 master digroup has cleared.
- RMA 24 — Remote alarm on a digroup on a DT, DIF or XTSL.
- RMA 30 — Remote alarm on an digital interface frame E1 master digroup has occurred.
- SAD 24 — SEF/AIS Seconds Daily (SAD) - path. A measure of the number of one second intervals where Severely Errored Frame or Alarm Indication Signal defects occur within a 24 hour period.
- SAS 24 — SEF/AIS Seconds - path. A measure of the number of one second intervals where Severely Errored Frame or Alarm Indication Signal defects occur within a 15 minute period.
- SED 24 — Severely Errored Seconds Daily (SED) - path. A measure of the number of one second intervals where any of the following occur within a 24 hour period:
1. DS1 superframe format with F(t) bit errors being measured, four or more frame synchronization bit errors occurred.
 2. DS1 superframe format with F(t) and F(s) bit errors being measured, eight or more frame synchronization bit errors occurred.
 3. DS1 superframe format with 320 or more CRC-6 errors.
 4. One or more Severely Errored Frame defects.
 5. One or more Alarm Indication Signals.
- SES 24 — Severely Errored Seconds (SES) - path. A measure of the number of one second intervals where any of the following occur within a 15 minute period:
1. DS1 superframe format with F(t) bit errors being measured, four or more frame synchronization bit errors occurred.
 2. DS1 superframe format with F(t) and F(s) bit errors being measured, eight or more frame synchronization bit errors occurred.
 3. DS1 superframe format with 320 or more CRC-6 errors.
 4. One or more Severely Errored Frame defects.
 5. One or more Alarm Indication Signals.
- SLH 24 — Digroup slip high (or out-of-service) threshold has been reached. Trunks are not removed from service for this reason.

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- SLL 24 — Digroup slip low (or maintenance) threshold has been reached. Trunks are not removed from service for this reason. has been cleared (DIF and XTSI).
- UAD 24 — Unavailable Seconds Daily (UAD) - path. A measure of the number of one second intervals in which the DS1 path is unavailable within a 24 hour period, i.e. at the onset of 10 contiguous SESs. The 10 contiguous SESs are included in the unavailable time.
- UAS 24 — Unavailable Seconds (UAS) - path. A measure of the number of one second intervals in which the DS1 path is unavailable within a 15 minute period, i.e. at the onset of 10 contiguous SESs. The 10 contiguous SESs are included in the unavailable time.
- d Maintenance status:
- ACT — Active. Indicates the trunk(s) is still in service.
- BLK — Blocked.
- CAD — Circuit Administration Disabled.
- MTC — Maintenance. Indicates an automatic removal from service.
- e Trunk study class. This field will not be populated (default = 0) for DS3 Alarm and Alarm Abatement messages (L3A, L3C, R3A, R3C, A3A and A3C).
- f Number of maintenance busy trunks in the trunk subgroup. This field will not be populated (default = 0) for DS3 Alarm and Alarm Abatement messages (L3A, L3C, R3A, R3C, A3A and A3C).
- g Number of assigned trunks in the trunk subgroup. This field will not be populated (default = 0) for DS3 Alarm and Alarm Abatement messages (L3A, L3C, R3A, R3C, A3A and A3C).
- h (blank) — Not a TOPAS/CONNECT-VU message. CIN of the trunk does not exist.
- i Decimal month
- j Decimal day
- k Decimal hour
- l Decimal minutes
- m n Major event and number:
- CAC 12 — Analog carrier group alarm cleared.
- CAC 24 — Digital carrier group alarm cleared.
- CAR 12 — Analog carrier group alarm.
- CAR 24 — Digital carrier group alarm.

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CFA 1 — Continuity failure analysis removed a Common Channel Signaling System (CCITT) number 7 trunk.

CFA 12 — Software carrier group alarm (CCIS continuity failure analysis) removed up to 12 CCIS trunks.

CFR 1 — Continuity failure analysis restored a CCITT No. 7 trunk.

CFR 12 — Software carrier group alarm restored up to 12 CCIS trunks.

CTS — MF signaling frame common tone supply duplex failure.

DCI 1 — D - Channel has been restored to service.

DCO 1 — D - Channel has gone out of service.

GRB 1 — Group blocking received on a band of CCIS trunks report to TOPAS/CONNECT-VU.

GRB 16 — Group blocking received on a band of CCIS trunks report to TCA channels.

GRU 1 — Group unblocking to TOPAS/CONNECT-VU.

GRU 16 — Group unblocking to a TCA channel.

PWA — Loss of power to a group of circuits.

RPF 12 — Software carrier group alarm (receive path failure), number of Ear & Mouth (E&M) trunks removed.

RPR 12 — Software carrier group alarm, number of E&M trunks restored.

RSB — CCIS reset band received on a band with some blocked trunks, number of blocked trunks which were unblocked.

TFA 16 — Transfer allowed received from Signaling Transfer Point (STP) on a band of trunks. Trunks restored to service.

TFP 16 — Dual transfer prohibit received from STP on a band of trunks. When a CCIS total signaling failure occurs, Transfer Prohibited (TFP) is not printed per band removed. Instead the link failure message which is printed at the maintenance channel is broadcast to all TCA channels.

TPF 12 — Software carrier group alarm (transmit path failure), number of E&M trunks removed.

TPR 12 — Software carrier group alarm, number of E&M trunks restored.

0

Major event:

BAT — 1-minute time-out waiting for a blocking acknowledgment signal on a CCITT No. 6 trunk has occurred.

BLK — A blocking signal has been received and not removed within 2 minutes on a CCIS trunk or 5 minutes on a CCITT No. 6 trunk.

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- BMT — Received maintenance service message on Q931 trunk; trunk marked blocked.
- BOS — Received out-of-service message on Q931 trunk; trunk marked blocked.
- BSC — A Remote Office Test Line (ROTL) or 105 responder has been removed from service because of a bad self check.
- CCF — Individual CCIS trunk encountered continuity check failure and failed retest. Attempted to make trunk MTC.LKD subject to Automatic Test Control (ATC) or Magic Number Control (MGC).
- CTO — Call time-out. A stable call involving a CCITT No. 5, CCITT No. 6, or CCIS trunk has been in progress for more than one hour after a phase 3. Suspect call is really not there any more and monitor from 51A test position.
- ERA — Trunk error analysis has detected a trunk or service circuit which is failing at a rate high enough to warrant removing the trunk from service or just reporting the trunk and not removing it from service.

For a report only case, ie, the error rate is not high enough to automatically remove the trunk from service, maintenance status will be ACT and variable h will be null.

Variable h will be null if the trunk was actually removed from service, or maintenance status will be ACT and variable h will indicate either a Magic Number Control (MGC) or trunk subgroup Error Analysis Control (EAC) prevented the trunk from being removed from service.

- FAL — A circuit has been removed from service because of a fuse alarm.
- HAW — The trunk went high and wet.
- HWC — A high and wet trunk came clear, ie, it went idle.
- MAN — A TTY SET:TRKSTAT input message, 51A test position state control button, or manual ROTL request caused the trunk to change state.
- MSP — Multiple scan points off-hook on a CCITT No. 5 trunk.
- PSR — Protection switch removal has allowed a circuit removed by PSW to be restored to service.
- PSW — Protection switching of a VIU has caused the removal of a trunk maintenance test circuit that does not have a protection switch relay.

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- QTF — Prior to TPF carrier restoral, the last failing trunk is retested. If a failure is encountered, an attempt is made to mark the trunk MTC.LKO, subject to Automatic Test Control (ATC) or Magic Number Control (MGC).
- RTL — The trunk was requested to be removed or restored by ROTL via Centralized Automatic Reporting On Trunks (CAROT). Maintenance status variable indicates the state; if a removal request, variable h will indicate ATC or MGC if automatic test control or magic number control prevented the removal.
- RTR — A restart message has been returned on a Q931 trunk. Trunk has been placed in the out-of-service, Disabled (DSA) automatic state.
- SVC — An automatic service circuit test has failed. The 4ESSTM switch will always try to remove the trunk from service.
- If successfully removed, maintenance status will be MTC and h will be null.
- If the trunk could not be removed, maintenance status will be ACT and variable h will indicate that an Automatic Test Control (ATC) or Magic Number Control (MGC) was in effect.
- Variable i will always be null. The failing results data must be obtained via the TEST:TRK message.
- TAL — Tone alarm on tone trunks.
- TQB — Trunk query has blocked a CCIS trunk.
- TQU — Trunk query has unblocked a CCIS trunk.
- TUE — Trunk query has removed a trunk from service because the far end is unequipped.
- UAT — Time-out waiting for an unblocking acknowledgment signal on a CCITT No. 6 or CCITT No. 7 trunk has occurred.
- UBL — A CCIS/CCITT No. 6 trunk previously reported as BLK has been unblocked due to receipt of unblocking.
- ULB — Unequipped label has received on a CCIS trunk. The trunk is put in MTC.DSA<AUT> state.
- VFC — A CCIS Voice Frequency Link (VFL) has been automatically restored to service because of a successful test message sent by the STP.
- VFL — A CCIS voice frequency link has been automatically removed from service due to loss of synchronization or a failing test result message sent by the STP.

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p	ATC — Automatic Test Control (ATC) EAC — Error Analysis Control (EAC) MGC — Magic Number Control (MGC)
q	Contains data about the type and number of failures observed. See Practice 234-100-050 for complete description.
r	Call back identity of the source of the request, up to 9 characters in length.
s	Call back identity of CAROT requesting the state change, up to 9 characters in length.
ttuu	Trouble number indicating how the test failed.
t	The phase number where the test failed: If 4 Failure occurred during outpulsing. If > 4 Failure occurred after successful outpulsing. In this case, see TEST:TRK output message, Heading 3.1, for how to interpret the trouble number for the type of test indicated. If the type of failure does not warrant automatic removal from service, maintenance status will be ACT and h will be null. If the type of failure indicates that the trunk should be removed from service, maintenance status will be MTC and variable h will be null if the trunk was successfully removed from service. If the trunk could not be removed from service, maintenance status will be ACT and variable h will indicate that a trunk subgroup Automatic Test Control (ATC) or Magic Number Control (MGC) was in effect.
u	The failure type.
v	Final handling code data.
w	Type of operational test that was run.
x	Clearing sequence number: 1 CCITT No. 5 with permanent signal on idle Outgoing Trunk (OGT) or 2-way trunk. 2 CCITT No. 5 with permanent signal on idle Incoming Trunk (ICT). 3 CCITT No. 5 quiet trunk used as OGT. 4 CCITT No. 5 quiet trunk used as ICT. 5 CCITT No. 5 with permanent signal used as OGT. 6 CCITT No. 5 with permanent signal used as ICT.

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- 7 CCITT No. 5 2-Way trunk memory mutilation sequence.
- 8 CCITT No. 6 used as OGT (send Clear Forward [CLF]).
- 9 CCITT No. 6 used as ICT (send Call Failure [CFL]).
- 10 CCITT No. 6 2-Way trunk memory mutilation sequence (send CFL, CLF).
- 11 CCITT No. 6 used as ICT (wait for response).
- y Major DS3 event:
- A3A — XTSI DS3 Blue/ AIS alarm.
- A3C — XTSI DS3 Blue/ AIS alarm abatement.
- L3A — XTSI DS3 Local/ Red alarm.
- L3C — XTSI DS3 Local/ Red alarm abatement.
- R3A — XTSI DS3 Remote/ Yellow alarm.
- R3C — XTSI DS3 Remote/ Yellow alarm abatement.
- z Number of trunks for DS3 event:
- 336 — Trunks assigned on one XTSI/ DS3 half.
- 672 — Trunks assigned on both XTSI/ DS3 halves.
- a' Octal Trunk Appearance Number (OTAN) of second half of XTSI DS3;
if 0 no assigned trunks.

4. ACTION TO BE TAKEN

If in TOPAS/CONNECT-VU format, determine why message was not successfully sent to TOPAS/CONNECT-VU. Take appropriate action to get the data in the message into TOPAS/CONNECT-VU.

5. REFERENCES

PIDENTs
CGAP00
SVCTCNTL
TERA00
TMAD0001
TMAIHCW5
TMAIHCW6
TMAIHWET
TOPT0000

Practice 234-103-016, *Trunk Error Analysis (TERA)*
Practice 234-180-240, *Trunk Maintenance Administration Program Description*
Practice 234-180-241, *Trunk Error Analysis Program Description*
Practice 234-180-242, *Service Circuit Test Program (SVCT) - Description*
Practice 234-180-245, *Carrier Group Alarm Program Description*
Practice 234-180-246, *Trunk Testing Programs - Description*

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Input Messages
SET:TRKSTAT
TEST:TRK

Output Messages
REPT:CIN
TEST:TRK

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ID REPT:OVER
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:OVER 32 CAMA CALLS HAVE BEEN ACTIVE FOR 2 OR MORE MIDNIGHTS

2. REASON FOR OUTPUT

To report that the buffer to store trunk block & member numbers (TBMNs) of centralized automatic message accounting (CAMA) calls up over two or more midnights is full. Messages implicating 32 trunks will be printed. This message is printed every time an attempt is made to store the TBMN of a CAMA incoming trunk (ICT) active for two or more midnights in the buffer when the buffer already has 32 entries in it.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
CAMA0000

Practice 234-180-110, *Call Processing Programs*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:OVER-BILL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT: OVER 32 BILLED CALLS HAVE BEEN ACTIVE FOR
2 OR MORE MIDNIGHTS

2. REASON FOR OUTPUT

To report that either the CAMA midnight passed function or other (e.g., direct services dialing capability [DSDC]) billing midnight passed function has found 32 calls up for two or more midnights. The output message buffer used to report these can only handle 32 reports. When the buffer is full, this message will print for the 33rd and all subsequent calls that are up for 2 or more midnights.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
CAMA0000
DSDCBILL

Practice 234-180-110, *Call Processing Programs*

Output Message
REPT:CALL

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:OVLD
WORK CENTER.. MAC, MOC, NMOC, TEC,
 TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT: OVLD CONTROL a:b

2. REASON FOR OUTPUT

To print whenever the overload control program activates or deactivates a control. Controls are activated when either congestion is detected upon a call type facility (multi-frequency [MF], DP, common channel interoffice signaling [CCIS]) or when real-time is lost. Respective examples are insufficient CRs, MF transmitters or receivers, and the base level cycle time becoming excessive.

3. VARIABLE FIELD DEFINITIONS

a Action taken by the overload control program:
 ACTIVATED
 DEACTIVATED

b The specific control activated or deactivated:
 CCIS DOC MC1
 CCIS DOC MC2
 CCIS DOC MC3
 CCIS VPA
 DP DOC MC1
 DP DOC MC2
 DP DOC MC3
 INUP DOC MC1
 INUP DOC MC2
 INUP DOC MC3
 ISUP DOC MC1
 ISUP DOC MC2
 ISUP DOC MC3
 LOAD CHANGE 1 LEVEL 2
 LOAD CHANGE LEVEL 1
 LOAD CHANGE LEVEL 3
 MAC RESTR 1 SEG
 MAC RESTR 2 SEG
 MF DOC MC1
 MF DOC MC2
 MF DOC MC3
 PEAK SEC SZ ACC A
 PEAK SEC SZ ACC B
 SEGMENT RESTRICTION
 TIME ACC A CHANGED

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TIME ACC B CHANGED
TOTAL DOC MC1
TOTAL DOC MC2
TOTAL DOC MC3

4. ACTION TO BE TAKEN

Determine the cause of the overload condition and take the appropriate remedial action. To inhibit all overload controls, depress the "CANCEL OVERLOAD CONTROL" button on the master control complex (MCC).

5. REFERENCES

PIDENTs
OVLDDATA
OVLDPGM

Practice 234-180-131, *Overload Control Program - Description, 4ESS™ Electronic Switching System*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:PA
WORK CENTER.. MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT:PA a b [c] [d] [e]

2. REASON FOR OUTPUT

To report the occurrence of a power or fuse alarm.

3. VARIABLE FIELD DEFINITIONS

a	Unit type.
b	Member number.
c	Subunit type and submember number.
d	Frame type and number.
e	Frame location number.

4. ACTION TO BE TAKEN

Check cause for power alarm.

5. REFERENCES

PIDENT
MCCMEPS1

Practice 254-280-212, *Master Control Complex Common Control and Monitor Program*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:PFLR
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1A-APS
TYPE Output

1. FORMAT

REPT:PFLR: IOUS a IOUC b CHANNEL = D(ccc) PORT = d e

2. REASON FOR OUTPUT

A clear to send (CTS) failure or carrier failure (CF) condition exists on an input/output (I/O) processor (IOP) channel. The channel is out of service (OOS) and waiting for the condition to be resolved. When the condition is resolved the channel will restore automatically.

3. VARIABLE FIELD DEFINITIONS

- a I/O unit selector member number (0-7).
- b I/O unit controller member number (0-15).
- c Software channel number in decimal.
- d Affected PORT (0-2).
- e CARRIER FAILURE — Interface lead CD not satisfied.
CLEAR TO SEND — Interface lead CTS not satisfied.

4. ACTION TO BE TAKEN

Determine point of failure, i.e., local cabling data facilities or remote problem. If local, resolve failure, channel will restore to service automatically. If remote, take action as need dictates for affected channel. Line unit equipment is suspect if all other interface equipment is known to be good.

5. REFERENCES

PIDENT
PFLRBLMH

Input Messages
OP:OOSUNITS
RST:IOUS

Output Messages
OP:OOSUNITS
RST:IOUS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:PHASE-INF
WORK CENTER.. MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT PHASE INFORMATION
ACTION REQUESTED BY: a
[MULTIPLE OR REDUNDANT REQUEST CODE: b]
[CONTENTS OF CAR: cccccccc]
ACTION TAKEN: PHASE d
ACTION REQUESTED: e f
[TYPE OF ERROR: gggg]
[DATA STRUCTURE INVOLVED: hhhh]
[TRIGGER: i]
[TRIGGER CODES: jkl]
TIME OF ERROR: mm/mm/mm
DATE: nn/nn/nn
MFNUM: 00000000
[HARDWARE LEVEL: p]
[DIRECT DATA INSERT KEYS: qqqqqqqqqqqq]
[rrrrrrrr]
OUTPUT MESSAGES SAVED ON FS: s
PROCESSOR CONFIGURATION RUN: t
[INTERNAL ERROR ADDRESS: u]
[ORIGINAL PHASE TRIGGER: v]
[STACK STKCNT-wwwwwwww T=xxxxxxxxx yyyyyyyy yyyyyyyy yyyyyyyy]
[yyyyyyyy yyyyyyy yyyyyyy yyyyyyy yyyyyyy]
.
.
[yyyyyyy yyyyyyy yyyyyyy yyyyyyy yyyyyyy yyyyyyy]
[yyyyyyyy]
[z PERIPHERAL UNITS FAILED]
[a¹ b¹]
.
.
[a¹ b¹]
[c¹]
[RC ROLLBACK d¹]
[RC ROLLED BACK e¹]
[RC SYSTEM STOPPED f¹]
[RC TIMED OUT, g¹]
[ROLLBACK AREA LEFT IN INDETERMINATE STATE - REINITIALIZATION]
[REQUIRED]

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2. REASON FOR OUTPUT

To communicate pertinent information relating to the cause of each phase of initialization and the state of the system at the time of the phase. This message is printed after each phase is completed during the initialization process.

3. VARIABLE FIELD DEFINITIONS

- a Source that initiated the action which resulted in a phase:
- MAINTENANCE — A maintenance program.
 - MANUAL — A manual request.
 - OVLD — Overload control.
 - SICO — Software integrity control program.
 - SIM — System integrity monitor program.
 - SIMB — System integrity monitor program on base level.
- b Code telling type of multiple or redundant request. It is only printed when the phase was initiated by a multiple or redundant request for a phase or an action which escalates to a phase. When this is not the case, this line is suppressed. Code is as follows:
- 1 — Operational and maintenance requests for the same audit.
 - 2 — Two maintenance requests for the same audit.
 - 3 — Two operational requests for the same audit.
 - 4 — Two or more Phase 1 requests, ran a general Phase 1.
 - 5 — Identical requests for the same action were found.
- c This line is printed when a defensive check failure instigated the phase. It displays the auxiliary failure address that was passed to the audit system.
- d Phase that was run.
- e Type of action requested:
- AUDIT
 - OVERLOAD CONTROL
 - PHASE
- f The specific action requested. For PHASE: 1-4. For AUDIT: 1-102. See the AUD:NUM input message for descriptions of audits 1 through 102. For OVERLOAD CONTROL: 1-29. These numbers are defined in Table 1.

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TABLE 1

Overload Control Numbers

Overload Control	Definition
1	Invalid
2	Cancel voice path assurance (VPA) testing for common channel interoffice signaling (CCIS)
3	Restrict segments for input/output (I/O) program
4	Restrict segments for recent change program
5	Restrict segments for network management program
6	Restrict segments for traffic program
7-11	Invalid
12	Total dynamic overload control (DOC) - MC3
13	Total DOC - MC2
14	Total DOC - MC1
15	CCIS DOC - MC3
16	CCIS DOC - MC2
17	CCIS DOC - MC1
18	Multi-frequency (MF) DOC - MC3
19	MF DOC - MC2
20	MF DOC - MC1
21	DP DOC - MC3
22	DP DOC - MC2
23	DP DOC - MC1
24	Machine administration center (MAC) - Restrict to two segments
25	MAC - Restrict to one segment
26	MAC - Restrict to one-third segment
27	Load Control - level 3
28	Load Control - level 2
29	Load Control - level 1
g	Defines the type of error that caused the defensive check failure.
h	Defines the data structures involved in the defensive check failure.
i	Code (0-220) for the trigger that caused the phase. These codes are defined in Table 2.

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TABLE 2
Trigger Codes

Code	Trigger
0	IOCPIOH1 interject entry failure
1-6	Invalid
7-15	Reserved
16	Invalid
17	Interject protection flag failure
18	Base cycle too long
19	Software clock inconsistent
20	K-level interrupts are excessive
21	Three (or more) trigger flags set (by SIM) - see Table 3
22	Two trigger flags set (by SIM) - see Table 3
23	Base cycle above overload (OVL D) threshold
24	Software integrity control program (SICO) error count exceeded threshold
25	Excessive total interrupts
26	Excessive pulse source B levels
27	Excessive C levels
28	Excessive stack counter D levels
29	Excessive protected area D levels
30	Excessive control unit failures (D levels)
31	Excessive call store failure (D levels)
32	Excessive ORD levels (D levels)
33	Excessive program store failures (E levels)
34	Excessive peripheral unit failures (PUFs) (F levels)
35	Excessive autonomous peripheral unit failure (APUFs) (F levels)
36	Excessive ERRORSTOPs
37	Duplex failure removal or zero start
38	Total out-of-range interrupts for B, D, E, and F
39	Software integrity control (SIC) error leg in phase control routine was activated (SICOPRE)
40	SIMB reentry check on SICO failed
41	B-level interrupt
42	SICONTRY base entry failure
43	MAINDLPB base entry failure
44	CCISLPTD base entry failure
45	DKADANS base entry failure
46	MAINDBTE base entry failure
47	MAINDBTR base entry failure
48	MAINDBCR base entry failure

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TABLE 2 (continued)
Trigger Codes

Code	Trigger
49	EXECMD1 base entry failure
50	EXECCMD base entry failure
51	IOCPITRC base entry failure
52	EXECMD2 base entry failure
53	EXECHMNT base entry failure
54	MAINDDGB base entry failure
55	OVLDCRDR base entry failure
56	MAINDORG base entry failure
57	IOCPXLAT base entry failure
58	PAGSEXNT base entry failure
59	MAINDMFT base entry failure
60	EXECDEFS base entry failure
61-73	Reserved
74-80	Long-term interject program entry failures; same programs as 0 through 6
81-89	Reserved
90	Long-term interject clock failure
91	Base cycle too short
92	Adjacent base cycle difference too large
93	Base cycle time not equal to number of interjects
94	Inconsistent base cycle time
95	Teletypewriter (TTY) functional check failure
96	Request I/O mask audit
97	Disk statistical check failed
98	Invalid - excessive out-of-range disk requests
99	Disk read/write failure
100-102	Invalid
103	Minimum base cycle long-term failure
104	Base cycle - base cycle long-term failure
105	Base cycle - interject long-term failure
106	Inconsistent base cycle time long-term failure
107	Test call unsatisfactory
108	Overload check failed
109	Demand audits not completing
110-113	Invalid
114-132	Long-term base program entry failures. Same programs as 42 through 60.
133-145	Reserved
146-152	Invalid
153	Time-out of recent change

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TABLE 2 (continued)
Trigger Codes

Code	Trigger
154-160	Invalid
161	Request audit to verify demand audit scheduling
162	T-bit audit request
163	Trunk register (TR) audit request
164	Call register (CR) audit request
165	Service circuit audit request
166	Block/integrity (B/I) bit audit request
167	Test call data audit request
168	TR timing audit request
169	CR timing audit request
170	Idle link list audit request
171	Nonregister timing audit request
172	Network audit request
173	Call timeouts excessive
174-209	Invalid
210	Load control
211	Cancel VPA tests for CCIS
212	Restrict segments for I/O program
213	Restrict segments for recent change program
214	Restrict segments for network management program
215	Restrict segments for traffic program
216	Restrict segments given to machine administration center (MAC)
217	Total DOC
218	CCIS DOC
219	DP DOC
220	MF DOC

jkl Codes for the first, second, and third triggers if two or more occurred. See Table 3.

TABLE 3

Trigger	Description
21	All three trigger codes are used and are 0-20,23. Same as 0 through 20 and 23 in Table 2.
22	Only right-adjusted two trigger codes are used and are 0-21,23. Same as 0 through 21 and 23 in Table 2.

m Time of day the error occurred that instigated the phase.

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n	Date the error occurred.
o	The number of the phase maintenance file in octal. This and preceding files may contain more detailed information relative to the cause of the phase, e.g., duplex failure details, interrupts, etc.
p	Hardware level executed (1-4). If hardware recovery is executed, the last level is printed. If hardware recovery is not executed, this phrase is suppressed.
q, r	If the modify recovery action (MRA) key was set, the contents of the direct data insert register are printed. In addition, if a manual recent change rollback is requested, the contents of the DATA INSERT 1 KEYS are also printed. If the MRA key was not set, this phrase is suppressed. q — Contents of the direct data insert register in octal. r — Contents of the data insert 1 keys in octal.
s	Indicates whether the I/O system was able to save the OMRs on the file store prior to reinitialization in the phase. N — No. Y — Yes.
t	Indicates whether or not processor configuration was executed as part of the phase. N — No. Y — Yes.
u	Address where the first internal error was detected. Output when an internal error is detected during the execution of a phase request which, in turn, triggers succeeding requests. If no internal errors are detected, this phrase is suppressed.
v	Trigger code of trigger that caused the original phase request. See Table 2. If an error occurred during the execution of a phase request, this phrase is output indicating the original phase trigger. If no error occurred, this phrase is suppressed.
w, x, y	This message is printed after every phase is It gives the contents of the first 32 entries of the stack at the time of the error. w — Octal stack counter. x — Octal address in top of stack (T register). y — Octal contents of stack.
z	Number of failing peripheral units.
a ¹	Unit type of the peripheral unit.
b ¹	Member number of the peripheral unit.

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- c¹ Additional relevant duplex failure information. If printed, it will display:
- a — Number of failing subunits.
 - b — Unit type.
 - c — Member number.
 - d — Subunit type.
 - e — Subunit number.

- d¹ Relevant recent change rollback information. This line may be printed in one of the following three formats:

Format 1:

```
RC ROLLBACK IMPOSSIBLE DUE TO INDETERMINATE  
ROLLBACK  
AREA
```

This message is printed if a manually requested rollback cannot be performed because a recent change lockout is in effect. The lockout occurred because of an indeterminate rollback area.

Format 2:

```
RC ROLLBACK NULL
```

This message is printed if no rollback information exists for the amount and mode of rollback manually requested.

Format 3:

```
RC ROLLBACK NULL, ORNU NOT FOUND
```

This message is printed if rollback was requested through a specific order number but that order number was not represented in the rollback area since the latest translation tape dump was made. No rollback was performed except for any message which was in progress when the phase was started.

- e¹ Relevant recent change rollback information. This line may be printed in one of two formats as shown:

Format 1:

```
RC ROLLED BACK a BLOCKS THROUGH ORNU b,c
```

This message is printed following a successful automatic or manual rollback.

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a — The number of rollback blocks that were rolled back.

For an automatic rollback, ie, rollback of a recent change in progress when the phase occurred, this should be 1.

For a manual rollback, the number of rollback blocks rolled back as a result of the manual request excluding any recent change in progress when the phase began.

b — The order number of the last rollback block rolled back.

c — AS REQUESTED — If all the requested blocks were rolled back.

LIMITED BY TAPE INDEX — If rollback was requested for more blocks than were in the system since the latest system tape dump.

Format 2:

RC ROLLED BACK a BLOCKS AND FAILED AT OR AFTER
ORNU b, ERROR c, ADDRESS dddddddd,

This message is printed following an unsuccessful automatic or manual rollback.

a — The number of rollback blocks which were successfully rolled back before the failure.

For an automatic rollback this should be 0.

For a manual rollback, any recent change in progress when the phase began will not be included in the count.

b — The order number of the rollback block that was being processed when the failure occurred.

c — A number to identify the type of error that occurred.

d — The program address where the failure was detected.

f¹

Printed whenever a phase interrupts a recent change operation but the rollback is not performed. This variable is printed as one of two lines identifying why the rollback was not performed:

ALL TRANSLATION CHANGES COMPLETE BUT OUTPUT POSSIBLY
ABORTED — This is printed when the phase interrupts a recent change operation after all data modifications have been performed but before the recent change system has been idled. All data changes associated with the operation should exist in the system following the phase. However, the rollforward tape might not have been properly updated. It should be noted that the test and activate operations are separate operations

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(even if a recent change was activated directly by specifying ACT in the action field of a form). It should be obvious from the system output as to which operation was occurring when the phase was initiated.

NO ROLLBACK NECESSARY — This is printed when the phase interrupts recent change operations that do not require any rollback or operations that have not progressed to the point of needing rollback.

g¹

This line is printed when a recent change operation is timed out by the system integrity monitor program and a phase 1 is initiated. It identifies the disposition of the recent change (RC) operation:

ALL TRANSLATION CHANGES COMPLETE BUT OUTPUT POSSIBLY ABORTED — This is printed when a time-out occurs after all data modifications of a recent change operation have been completed but before the recent change system has been idled. In particular, the rollforward tape might not have been updated properly. It should be noted that the test and activate operations are separate operations (even if a recent change was activated directly by specifying ACT in the action field of a form). It should be obvious from the system output as to which operation was occurring when a time-out occurred.

NO ROLLBACK NECESSARY — This is printed when the recent change operation that timed out does not require rollback or when the time-out occurred before any data was modified that needs to be rolled back.

ROLLBACK AREA LEFT IN INDETERMINATE STATE — REINITIALIZATION REQUIRED — This message is printed if the rollback area cannot be written properly following the rollback. As a result, a recent change lockout is put into effect.

ROLLBACK SCHEDULED — This is printed when a time-out occurs during an interval in which data is being modified. The recent change system is set up to roll back the current operation and a message should follow giving the result of the rollback.

4. ACTION TO BE TAKEN

Retire the major alarms which accompany the phase message.

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5. REFERENCES

PIDENTs
HDWRL123
HDWRLEV4
RCMU00
SICOPRGM

Practice 234-105-005, *Recent Changes, Verification System, Rollback/Rollforward - Description*
Practice 234-180-150, *Recent Changes, Verification System, Rollback/Rollforward - Program*
Practice 234-180-330, *System Recovery, Initialization and Reinitialization Description*

Input Message
AUD : NUM

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ID REPT:PHASE-NOT
WORK CENTER.. MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT: PHASE NOT STARTED: ILLEGAL MCC OPTIONS

2. REASON FOR OUTPUT

To report that illegal master control complex (MCC) phase options were requested via DDI keys and modify recovery action (MRA) key; phase was not run, and control returned through A-level processing.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

Remove illegal options and repeat manual phase request.

5. REFERENCES

PIDENT
SICOPRGM

Practice 234-180-210, *Software Integrity - Monitor and Control Programs - Description*

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ID REPT:PMOS-LVS
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:PMOS TASKID a LVS b EXCEEDED

LVS DEPTH c LVTOPSTACK d LVS START ADR e
STACK COUNT f
CONTENTS OF T-STACK
g
.
.
.
g

2. REASON FOR OUTPUT

To report that a Peripheral Maintenance Operating System (PMOS) task has surpassed a predefined threshold of variable stack usage.

3. VARIABLE FIELD DEFINITIONS

- a Task name.
- b Local Variable Stack (LVS) usage violation:
- ALLOCATION — A stack violation has occurred. A task has used greater than the allowed stack memory defined in the PMOS task tables.
- THRESHOLD — The predefined stack depth indicated on the input message has been exceeded.
- c Local variable stack depth.
- d Top of the current ESSTM Programming Language Extended (EPLX) procedures stack frame.
- e Start address of the PMOS task local variable stack memory.
- f Stack count value.
- g T-stack address data.

4. ACTION TO BE TAKEN

If a stack violation occurred, overwrite to the PMOS Stack Tables (PMOSTBLE) to increase LVS size. Use the INIT:PMOS-UTIL input message to turn the utility off.

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5. REFERENCES

PIDENTs
PMOSMAIN
PMOSPRIM
PMOSTBLE

Input Message
INIT:PMOS-UTIL

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ID REPT:PMOS-TSKID
WORK CENTER.. MOC
GENERIC 4E24 Rel. 2 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT: PMOS a OF TASKID b

REASON FOR ACTION: c
STACK COUNT d
CONTENTS OF T-STACK
e
. . .
CONTENTS OF TCB PTR ARRAY
f
. . .
CONTENTS OF TCB
g
. . .
CONTENTS OF REQUEST STRUCTURE
h
. . .

2. REASON FOR OUTPUT

To report important Peripheral Maintenance Operating System (PMOS) actions.

3. VARIABLE FIELD DEFINITIONS

a HARD ABORT — A task completely aborted from PMOS.
 MEDIUM ABORT — A task restarted on the next entry.
 REQUEST DENIAL — A task execution was denied.
 SOFT ABORT — A task is allowed to run abort routine.

b Task name.

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c	Reason for action: BLOCKING — Task interferes with a currently active task. INTERNAL INTERRUPT — An internal PMOS or PMOS task program interrupt has occurred. INVALID PARAMETERS — Request parameters do not match those allowed. LVS MEM UNAVAILABLE — Insufficient local variable stack to fulfill a request. MANUAL — The task is aborted by an input request. TASK REQUESTED — The PMOS task is requested for the abort. TCB MEM UNAVAILABLE — All Task Control Blocks (TCBs) in use.
d	Stack depth of the process.
e	T-stack address data.
f	Contents of task control block pointer memory. See Table 1.
g	Contents of task control block memory. See Table 2.
h	Contents of task request structure. See Table 3.

4. ACTION TO BE TAKEN

Use the information provided in this message to analyze PMOS, PMOS task, and fault recovery system errors.

5. REFERENCES

PIDENTs
PMOSIOHN
PMOSMAIN
PMOSPRIM
PMOSTBLE

Input Message
INIT:PMOS-UTIL

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Table 1
TCB Pointer Array Data Layout

WORD	BIT POSITION	CONTENT
0	0-7	PM4TCB_FORWARD_PTR - Indicates next active TCB pointer array structure.
0	8-15	PM4TCB_BACK_PTR - Indicates previous active TCB pointer array structure.
0	16-19	PM4TCB_LEVEL - Task execution level: 0 = F-level. 1 = Phase level. 2 = Autonomous Peripheral Unit Trouble (APUT) level. 3 = Base Level Maintenance (BLM) level. 4 = Interject level. 5 = Base level. 6 = Error stop. 7 = A- through E- or K-levels. 10 = Current level.
0	20	PM4TCB_IN_USE - TCB in use: 0 = Active. 1 = Inactive.
1	0-22	PM4TCB_START_PTR - Address of the Task Control Block (TCB).

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Table 2
TCB Structure Data Layout

WORD	BIT POSITION	CONTENT
0	0-22	PM4TCB_MEM_FORWARD_PTR - Static forward memory link.
1	0-22	PM4TCB_MEM_BACKWARD_PTR - Static backward memory link.
1	23	PM4TCB_MEM_IN_USE - TCB memory in use: 0 = Memory in use. 1 = Memory not in use.
2	0-7	PM4TCB_NUMBER - TCB number.
2	8-14	PM4TCB_TASK_IDENT - Task identifier number. See Table 4.
3	0-13	PM4TCB_UTMN - Unit type and member number associated with the task.
4	0-16	PM4TCB_SUTMN - Subunit type and member number associated with the task.
4	17-23	PM4TCB_PRIORITY - TCB priority: 0 = Lowest. 100 = Highest.
5	0	PM4TCB_PAGED - TCB paging: 0 = Paged program. 1 = Not paged.

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Table 2
TCB Structure Data Layout (continued)

WORD	BIT POSITION	CONTENT
5	1	PM4TCB_PAGING_COMPLETE - TCB paging complete: 0 = Yes. 1 = No.
5	2	PM4TCB_ACTIVE - Local Variable Stack (LVS) memory allocated: 0 = Yes. 1 = No.
5	3	PM4TCB_START - Task execution started: 0 = Yes. 1 = No.
5	4	PM4TCB_ABORT - Task requested abort: 0 = Yes. 1 = No.
5	5	PM4TCB_WAIT - Task suspended: 0 = Yes. 1 = No.
5	6-8	PM4TCB_WAIT_REASON - Reason for the suspend: 0 = No wait. 1 = Timing wait. 2 = Input/Output (I/O) wait. 3 = Parallel task wait. 4 = Message dispenser wait.

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Table 2
TCB Structure Data Layout (continued)

WORD	BIT POSITION	CONTENT
5	9	PM4TCB_DISK_REQUEST_ACTIVE - Disk request active: 0 = Yes. 1 = No.
5	10	PM4TCB_DISK_COMP_RTN - Disk completed return: 0 = Success. 1 = Failure.
5	11-14	PM4TCB_DISK_FAILURE_CODE - Disk failure code: 0 = Initial value. 1 = Request canceled. 2 = Software error. 3 = Hardware error.
5	15-18	PM4TCB_DISK_FAILURE_REASON - Reason for TCB disk failure: 0 = Initial value. 1 = Logical copy not available. 2 = Disk address Out-Of-Service (OOS). 3 = 1B canceled request. 4 = Request time out.
6	0-22	PM4TCB_WAIT_TIME - The Peripheral Maintenance Operating System (PMOS) clock value of the end of the task wait.
7	0-22	PM4TCB_INHIBITS
8	0-7	PM4TCB_HELD_BY_NUM - TCB number of a spawned task.
8	8-15	PM4TCB_HOLDS_NUM - TCB number of parent task.

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Table 2
TCB Structure Data Layout (continued)

WORD	BIT POSITION	CONTENT
8	16-23	PM4TCB_CHILD_COUNT - Number of tasks spawned by this parent task.
9	0	PM4TCB_PARALLEL_CHILD - Any parallel child tasks: 0 = Yes. 1 = No.
9	1	PM4TCB_HOLDS_MACP_JOB: 0 = Yes. 1 = No.
9	2-9	PM4TCB_MACP_JOB_ID - Program class bits 2-5 and program subclass bits 6-9.
9	10-17	PM4TCB_BUFF_NUM - Buffer number.
9	18-19	PM4UTIL_LVS_PRINT - Output indicator used by the LVS audit utility: 0 = Print enable. 1 = LVS threshold exceeded. 2 = LVS allocation exceeded.
10	0-22	PM4TCB_REQUEST_ACK_PTR - Address of task request acknowledge.
11	0-20	PM4TCB_STACK_PTR - Address of local variable stack memory.
12	0-20	PM4TCB_PAGED_PROGRAM_ADDRESS - Address of paged program.
13-23	0-23	PM4TCB_PARM_LIST - Task input parameter list.

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Table 3
Task Request Structure Data Layout

WORD	BIT POSITION	CONTENT
0	0-6	PM4TASKID - Task identifier of requested task. See Table 4.
1	0-22	PM4PARM_PTR - Address of task input parameters.
2	0-22	PM4PARM_SIZE - Number of words the parameters are contained.
3	0-22	PM4TASK_TIME - Task time.
4	0-2	PM4TASK_MODE - Task mode: 0 = Run immediately. 1 = Schedule and hold 2 = Maintenance Control Program (MACP) schedule and hold. 3 = Parallel schedule. 4 = Schedule.
4	3-6	PM4TASK_LEVEL - Task level: 0 = F-level. 1 = Phase level. 2 = Autonomous Peripheral Unit Trouble (APUT) level. 3 = Base Level Maintenance (BLM) level. 4 = Interject level. 5 = Base level. 6 = Error stop level. 7 = A- through E- and K-level. 10 = Current level.
4	7-20	PM4TASK_UTMN - Unit type and member number of related frame.
5	0-16	PM4TASK_SUTMN - Subunit type and member number.

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Table 3
Task Request Structure Data Layout (continued)

WORD	BIT POSITION	CONTENT
5	17-18	PM4TASK_PRIORITY - Task priority: 0 = Lowest. 100 = Highest.
6	0-22	PM4REQ_ACK_PTR - Address of Peripheral Maintenance Operating System (PMOS) schedule acknowledgment.

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Table 4
TASK IDENTIFICATION

<i>Value</i>	<i>Task Name</i>
0	PUFR
1	TNFR_ISOL
2	SYNC_ISOL
3	DIFR_ISOL
4	SCSFR_ISOL
5	FRDIMREQ
6	FRDILAUD
7	FRDILAMP
10	FRDIPCSC
11	XTSI_PSC_FRDIPCSC
12	FRDIPRE
13	FRDIPOST
14	FRDISWCH
15	TOPIC
16	FERA_FREQ
17	FERA_ROUTINE
20	FERA_DF_AUDIT
21	FERA_TST_RTN
22	FERA_DF_TIMEOUT
23	BOOTCNTL
24	DIF_BOOTSTRAP
25	SCS_BOOTSTRAP
26	DIF_PEST_UPDATE
27	SCS_PEST_UPDATE
30	DIFR_TIMED_AUDIT
31	SCS_TIMED_AUDIT
32	CLK_SWIP
33	RUN_ESTAB_CLK
34	AUTON_MESSDISP
35	MESSDISP_POLLING
36	PMOS_TTY
37	MEDIC_AUDIT
40	TIMED_ENTRY
41	DIF_PEST_APUFS
42	DIF_PST_CLEANUP
43	SCS_PST_CLEANUP
44	SCS_PEST_APUFS
45	DIF_UNPEST_BOVFL

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Table 4
TASK IDENTIFICATION (continued)

<i>Value</i>	<i>Task Name</i>
46	SCS_UNPEST_BOVFL
47	DIFEPUMP
50	UTIL_AUDIT
51	PREDFN_OD_ALARMS
52	PARALLEL_DIF_POLLING
53	PARALLEL_SCS_POLLING
54	SCS_ANN_UPD_RESP_HNDLR
55	SCS_COPY_RESP_HNDLR
56	SCS_FORMAT_RESP_HNDLR
57	SCS_DISK_COPY
60	SCS_DISK_FORMAT
61	SCS_DISK_LOAD
62	SCS_DISK_DUMP
63	SCS_START_3B_COPY
64	COPY3B_SCS_FILES
65	SCS_CONTR_GEN_UPD
66	FERA_UNPEST_APUT
67	SCS_BP_MEM_UTIL
70	SCS_BP_RESP_HNDLR
71	XTSI_BOOTCNTL
72	XTSI_BOOTSTRAP
73	XTSI_PEST_UPDATE
74	PARALLEL_XTSI_POLLING
75	XTSI_DISK_COPY
76	XTSI_DISK_DUMP
77	XTSI_DISK_LOAD
100	XTSI_START_3B_COPY
101	COPY3B_XTSI_FILES
102	XTSI_START_GEN_UPD
103	XTSI_READ_CONTR_MEM_UTIL
104	XTSI_WRITE_CONTR_MEM_UTIL
105	XTSI_READ_D3U_MEM_UTIL
106	XTSI_WRITE_D3U_MEM_UTIL
107	XTSI_BP_UTIL
110	XTSI_ORD_LPBK
111	XTSI_AUDIT_LPBK
112	XTSI_DIAG_REQ

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Table 4
TASK IDENTIFICATION

<i>Value</i>	<i>Task Name</i>
113	DIF_INITDG
114	XTSI_FILE_COPY
115	XTSI_FILE_DUMP
116	XTSI_FILE_LOAD
117	XTSI_PEST_APUFS
120	XTSI_PST_CLEANUP
121	Internal PMOS spare task ID (not available for use)
122-123	Spare TASK IDS available for future use
124	XTSI_SPU_MULTI_RRES
125-126	Spare TASK IDS available for future use
127	XTSI_UPDATE_PSC_PARMS
130	XTSI_PM_24HR_SYNC
131	XTSI_SU_ODA_AUD
132	XTSI_SCHED_SU_ODA_AUD
133	XTSI_UNPEST_APUT

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ID REPT:PMOS-UTIL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:PMOS UTILITY SYSTEM OPERATIONAL
ACTIVE UTILITIES:
a
.
.
.

2. REASON FOR OUTPUT

To report the status of operational Peripheral Maintenance Operating System (PMOS) utility functions.

3. VARIABLE FIELD DEFINITIONS

a Utility name:
FRMR0UT — Frame or Central Control (CC) bus routing trap.
LVSAUD — Local variable stack audit.

4. ACTION TO BE TAKEN

If the active utility or utilities are not desired, use the INIT:PMOS-UTIL input message.

5. REFERENCES

PIDENTs
PMOSPRIM
PMOSTBLE

Input Message
INIT:PMOS-UTIL

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ID REPT:POWER-DOWN
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT:POWER DOWN a b
c d FORCED OOS - e STORE BABBLING MAY BE POSSIBLE

2. REASON FOR OUTPUT

To report that a store was forced out of service during a repeated processor configuration (PC) or because of a modified recovery request. The store must be powered down to eliminate possible service-affecting trouble.

3. VARIABLE FIELD DEFINITIONS

- a Unit type of store:
CS Call store.
PS Program store.
- b Member number of store to be powered down (0-45).
- c Unit type of store:
CS Call store.
PS Program store.
- d Member number of store forced out-of-service (OOS) (0-45).
- e Community identifier:
CALL
PROGRAM

4. ACTION TO BE TAKEN

Power down the store specified. The store is in a special forced-out state due to the PC recovery. There will be no KCODE display on the master control complex (MCC) for this store. If it is powered back up, the special forced out state will be cleared and babbling if it existed will begin again. The store should not be powered up until the fault causing the repeated PC has been pinpointed to a unit other than this store. If this store is believed to be the cause for the PC then all memory boards should be swapped out before powering the store back up.

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5. REFERENCES

PIDENTs
CSFRBASE
CSFRNORM
PSFRBSLV
PSFRCSPG
PSFRPSPG

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ID REPT:PROG
WORK CENTER.. MOC, TEC, TOC
GENERIC 4E23 Rel. 3 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT:PROG CONT OFF-NORMAL

a

-
-
-

2. REASON FOR OUTPUT

To report the program controls that are in an off-normal state. The off-normal controls may have been initiated by Teletypewriter (TTY) or Master Control Complex (MCC) keys.

3. VARIABLE FIELD DEFINITIONS

a

Program controls which are off-normal:

ALM ROUTING — Alarms are transferred or grouped.

APS MESSAGE INHIBITED — 3B Maintenance (MTC) channel
Input/Output (I/O) inhibited.

AUD INH — Some or all audits are inhibited.

AUD INH QM — Some or all audits are inhibited or in the quiet mode
or both.

AUTO MAC — Inhibit automatically scheduled jobs.

CC STOP ALLOWED — The hardware switch has been manually
operated, allowing the Central Controllers (CCs) to be
stopped by the utility system.

CGA INH — Carrier group alarm(s) are inhibited.

DUPLEX FAIL — 1A file access duplex failed.

ELEV AUD — Output priority of audit printouts are elevated.

FOR ATR ACT — Foreign alarm transfer is in effect.

GUTL ABORT INHIBITED — Generic Utility Program (GULP)
commands not aborted during interrupts.

IO CLASS — I/O classes have been changed.

IO MON — I/O channels are monitored.

IO ROUTE — I/O channels are rerouted.

MCC WRITE ALLOWED — MCC has been allowed to overwrite
memory (MCC Page 1000).

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MUP AUD INH — Some or all audits of Master Control Complex And Utility Processor (MUP) are inhibited.

NONE — All program controls are normal.

OM SAVED — Output messages are saved.

OPT UTIL — Optional utility messages are active.

OVLD CONT CANCELED — Overload controls are canceled.

RC RESTRICTED — Recent changes are restricted to Maintenance Operations Center (MOC).

SINT REPT — Supplementary interrupt report inhibited.

SUPPLEMENTARY PRINTOUT INHIBITED — Inhibit printing of supplementary interrupt message.

SYSTEM ON UPDATE FILE — 1B is running on the update file.

UTIL ACT — Generic utilities are active.

UTILITY SYSTEM ALLOWED — The utility system has access to the CC(s) (MCC Page 200).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPOM4
MCFWAPM0

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ID REPT:PROT-HDLR
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT:PROTOCOL HANDLER aaaaaaaaaaaaaaaaaa
CLIENT:bb cccccc
CHANNEL(s):dddddd ddddddd ddddddd
FAIL CODE:ee ffffffffffffffffffffff
FAIL ADDR:IOCPpggg-hhhhhh
AVD WORDS:0-31

i...i i...i i...i i...i i...i i...i i...i i...i
i...i i...i i...i i...i i...i i...i i...i i...i
i...i i...i i...i i...i i...i i...i i...i i...i
i...i i...i i...i i...i i...i i...i i...i i...i

2. REASON FOR OUTPUT

To report the failure or recovery of a protocol handler. This message also prints the PIDENT, location of failure, and action taken.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | Protocol handler status: |
| | RECOVERY |
| | BAD INPUT HEADER |
| b | Application number (1-17). |
| c | Application identification (ID). |
| d | Channel names (3 to 6 characters). |
| e | Decimal failure code. |
| f | Failure information. |
| g | PIDENT that failed. |
| h | Address of the PIDENT that failed. |
| i | First 32 application variable data (AVD) words in octal. |

4. ACTION TO BE TAKEN

Verify that the client application is still functioning.

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5. REFERENCES

PIDENTs
IOCPPM21
IOCPPRC1

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ID REPT:PS-FRC
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT:PS a FORCED OOS - PROGRAM STORE BABBLING MAY BE POSSIBLE.
DO NOT ATTEMPT RESTORE UNTIL SYSTEM FAULT HAS BEEN IDENTIFIED.

2. REASON FOR OUTPUT

To report that the program store (PS) community experienced serious recovery actions.
Fault must be identified and community restored to a normal state.

3. VARIABLE FIELD DEFINITIONS

a Member number of store that was forced out-of-service (OOS) (0-23).

4. ACTION TO BE TAKEN

The store identified is in a special forced out state due to the processor configuration (PC) recovery. There will be no KCODE display on the master control complex (MCC) for this store. If it is powered back up the special forced out state will be cleared and babbling if it existed will begin again. The store should not be powered up until the fault causing the repeated PC has been pinpointed to a unit other than this store. If this store is believed to be the cause for the PC recovery then all memory boards should be swapped out before powering the store back up.

5. REFERENCES

PIDENTs
PSFRBSLV
PSFRCSPG
PSFRPSPG

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ID REPT:PUFR
WORK CENTER.. MOC
GENERIC 4E22 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT:PUFR AUDIT OF XTSI SUBUNITS
XTSI a, {D3U b|SPU c}, CNFG DATA WORD d MISMATCHES
WORD IN SHARED MEMORY = e
 WORD IN ODA = f
SUBUNIT WILL BE RE-RESTORED

2. REASON FOR OUTPUT

Mismatch is detected between the configuration data in the shared memory of an Expanded Time Slot Interchange (XTSI) subunit, Digital Signal Level 3 Unit ([D3U], Signal Processing Unit [SPU]), and its respective data in Office Data Assembler (ODA). This audit is timed to run once an hour or can be called by the Recent Change (RC) forms. Subunit that have mismatches are re-restored.

3. VARIABLE FIELD DEFINITIONS

a	XTSI member number (0-63).
b	D3U subunit member number (0-7).
c	SPU subunit member number (0-11).
d	Decimal word number in shared memory (D3U 0-21), (SPU 0-2).
e	Octal word value in shared memory.
f	Octal word value in ODA.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
XTSISUBS

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ID REPT:PULSE
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT: PULSE SCE EER NO CC SW

2. REASON FOR OUTPUT

To report that pulse source failures are occurring at an excessive rate but the central controllers (CCs) cannot be switched because the standby CC is marked in trouble. This message is printed on B-level interrupt by the CC fault recognition program.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

Switch CCs unconditionally unless standby CC is known to be faulty. In this case, consider setting pulse source failure pest.

5. REFERENCES

PIDENT
CCFRMAIN

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ID REPT:PWR
WORK CENTER.. MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT:PWR RMVD a b c d e

2. REASON FOR OUTPUT

To print as a result of a unit being manually powered down.

3. VARIABLE FIELD DEFINITIONS

a	Unit type.
b	Member number.
c	Subunit type.
d	Submember number.
e	Frame type and number.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
MCCMEPS1

Practice 254-280-212, *Master Control Complex Common Control and Monitor Program*

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ID REPT:RATE-BASE
WORK CENTER.. NMPR1, NMPR2
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:RATE BASED REROUTE [ACTIVATED]
[DEACTIVATED]
ON CIN a

2. REASON FOR OUTPUT

To indicate that a rate based reroute has been activated or deactivated on a trunk subgroup (TSG).

3. VARIABLE FIELD DEFINITIONS

a Base traffic number and circuit identification number (CIN) of TSG.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPPOM4
NMGTDDEM
NMGTEXPN
NMGTSPPR

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:RAW
WORK CENTER.. NMOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT: RAW DATA FOR DOC ACKNOWLEDGMENT FAILURES

aaaaaaaaaaaaaaaaaaaa
bbbbbbbbbbbbbbbbbb
cccccccccccccccccc
dddddddddddddddddd
eeeeeeeeeeeeeeeeee
ffffffffffffffffffff
gggggggggggggggggg
hhhhhhhhhhhhhhhhh
iiiiiiiiiiiiiiiiiii
jjjjjjjjjjjjjjjjj
kkkkkkkkkkkkkkkkk
lllllllllllllllll
mmmmmmmmmmmmmmmm

2. REASON FOR OUTPUT

To give the raw data representing the acknowledgment check. This message accompanies the dynamic overload control (DOC) acknowledgment inconsistency message that is output when the acknowledgment failure has been detected by the system.

3. VARIABLE FIELD DEFINITIONS

- | | |
|-----|--|
| a-m | The results of the acknowledgment check. Each line contains a bit per transmitter indicating the results of the check. The bit positions, from left to right indicate transmitter numbers 15 through 0. A 1 in a bit position indicates a failing check. |
| a | Check results for DOC transmitter unit 0, level machine congestion level 1 (MC1). |
| b | Check results for DOC transmitter unit 0, level machine congestion level 2 (MC2). |
| c | Check results for DOC transmitter unit 0, level machine congestion level 3 (MC3). |
| d | Check results for DOC transmitter unit 1, level MC1. |
| e | Check results for DOC transmitter unit 1, level MC2. |
| f | Check results for DOC transmitter unit 1, level MC3. |
| g | Check results for DOC transmitter unit 2, level MC1. |

SEE PROPRIETARY NOTICE ON COVER PAGE

- h Check results for DOC transmitter unit 2, level MC2.
- j Check results for DOC transmitter unit 2, level MC3.
- k Check results for DOC transmitter unit 3, level MC1.
- l Check results for DOC transmitter unit 3, level MC2.
- m Check results for DOC transmitter unit 3, level MC3.

4. ACTION TO BE TAKEN

Isolate the trouble causing the acknowledgment failure and correct the condition. The trouble may be associated with the transmission facilities, or be due to a bad scan or signal distributor (SD) point.

Consult with the network manager as locally required when working on network management equipment.

5. REFERENCES

PIDENT
NMGT3SD

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:RC-ACTIV
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:RC ACTIVATION IS ILLEGAL FROM THIS CHANNEL

2. REASON FOR OUTPUT

To report activation of a recent change message that was attempted from an illegal channel.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
RCMAMAIN

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:RC-DUMP
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:RC DUMP OF UNIT TYPE ENTRY AS IT WILL APPEAR
AFTER THE MESSAGE IS ACTIVATED.

WORD 0	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa
	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa
WORD 10	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa
	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa
WORD 20	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa
	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa

2. REASON FOR OUTPUT

To display the contents of the unit type entry being changed by recent change as it will look when the change is activated.

3. VARIABLE FIELD DEFINITIONS

a Contents of a memory word in octal.

4. ACTION TO BE TAKEN

Verify that the data is correct according to the change being made.

5. REFERENCES

PIDENT
RCMPMISC

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:RC-ERROR
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:RC SYSTEM ERROR DETECTED
[a]
[b]

2. REASON FOR OUTPUT

To indicate a time-out of the recent change (RC) system and/or the initialization of the system due to control data discrepancies.

3. VARIABLE FIELD DEFINITIONS

a	SYSTEM TIMED OUT OR FOUND INCONSISTENT CONTROL INFORMATION
b	NO ROLLBACK NECESSARY ROLLBACK HAS BEEN SCHEDULED ALL TRANSLATION CHANGES COMPLETED

4. ACTION TO BE TAKEN

Verify this message. If necessary, input the message again.

5. REFERENCES

PIDENT
RCCP0000

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:RC-IB
WORK CENTER.. MAC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

```
REPT:RC IB DUMP a
b      b      b      b
.      .      .      .
.      .      .      .
.      .      .      .
b      b      b      b
```

2. REASON FOR OUTPUT

To print the contents of the recent change interface block after it is built by the recent change (RC) message processing system.

3. VARIABLE FIELD DEFINITIONS

a Status of message:

MSG COMPL — Message complete.

MSG IP — Message in progress.

MSG STARTED — Message started.

b Octal number representing the contents of the words of the recent change interface block. Up to 32 lines of this variable may print.

4. ACTION TO BE TAKEN

None. This message is for information only.

5. REFERENCES

PIDENT
RCMPCNTL

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:RC-INFO
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:RC INFORMATION
a

2. REASON FOR OUTPUT

To report status of certain recent change activity.

3. VARIABLE FIELD DEFINITIONS

a DLN UPDATE INFORMATION NOT AVAILABLE.

DLN UPDATE STATUS FOR ORNU xxxxxx

DLN xx xx:b DLN xx xx:b

DLN xx xx:b

DLN xx xx:b

b COMPLETED

FAILED

NO UPDATE PERFORMED

NOT AVAILABLE

4. ACTION TO BE TAKEN

If a DLN update failed or information was not available, monitor audit activity regarding DLN data.

5. REFERENCES

PIDENT
RCMU00

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:RC-INTERR
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:RC MESSAGE PROCESSING STOPPED: INTERRUPT

2. REASON FOR OUTPUT

To report that non-unwindable interrupt occurred during recent change processing of a message.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

Resubmit message. If repeated, call for technical assistance.

5. REFERENCES

PIDENT
RCMAMAIN

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:RC-MESS-A
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:RC MESSAGE PROCESSING STOPPED: AUDIT CALLED.

2. REASON FOR OUTPUT

To report that the internal pointers in the recent change message assembly program are in an illegal state.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

Resubmit message. If repeated, request technical assistance.

5. REFERENCES

PIDENT
RCMAMAIN

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:RC-MESS-P
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:RC MESSAGE PROCESSING STOPPED: DISK FAILURE

2. REASON FOR OUTPUT

To report that a disk failure has occurred during the message assembly processing of a recent change data, action, or administrative message.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

Resubmit message.

5. REFERENCES

PIDENT
RCMAMAIN

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:RC-MESS-S
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:RC MESSAGE STOPPED: BAD DISK REQUEST
a
DISK ADDRESS=bbbbbbbbb
CORE ADDRESS=cccccccc
NUMBER OF WORDS=ddddddddd
CLIENT DATA=eeeeeeee

2. REASON FOR OUTPUT

To indicate garbaging of a disk head table in the recent change area.

3. VARIABLE FIELD DEFINITIONS

a	READ WRITE
b	Octal disk address.
c	Octal core address.
d	Decimal number of words to be read or written.
e	Octal client data.

4. ACTION TO BE TAKEN

Technical assistance is required.

5. REFERENCES

PIDENT
RCMAMAIN

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:RC-MESSAG
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:RC MESSAGE STOPPED: BUFFER FOUND IN ERROR STATE
IT HAS BEEN CLEARED.

2. REASON FOR OUTPUT

To report that the disk message buffer head table was found in an illegal state. The table is cleared automatically, and processing continues with a clear buffer. The current input message is not processed unless it was a CLR:RCB input message.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

Resubmit the messages that were in the recent change buffer.

5. REFERENCES

PIDENT
RCMAMAIN

Input Message
CLR:RCB

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:RC-ORNU
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:RC ORNU aaaaaa STOPPED:ORNU NOT IN BUFFER

2. REASON FOR OUTPUT

To respond to an RCCNL:RCBORNU, RCTST:ORNU, or OP:RCBMSG input message. The requested order number cannot be found in the disk buffer area.

3. VARIABLE FIELD DEFINITIONS

a Order number.

4. ACTION TO BE TAKEN

Check order number; if in error, resubmit with the correct order number.

5. REFERENCES

PIDENT
RCMAMAIN

Input Messages
OP:RCBMSG
RCCNL:RCBORNU
RCTST:ORNU

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:RC-PRINT
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:RC SYSTEM PRINT FAILURE, VERIFY LAST RC INPUT

2. REASON FOR OUTPUT

To indicate a print time-out that follows completion of test or activates state processing.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

Verify this message. If necessary, input the message again.

5. REFERENCES

PIDENT
RCCP0000

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:RC-STOP-LOCK
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:RC STOPPED: ROLLBACK AREA STATUS PREVENTS UPDATING
TRANSLATION DATA

2. REASON FOR OUTPUT

To report that a rollback area lockout is in effect.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
RCMAMAIN

Input Message
RCCNL : ROLLBACK

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:RC-STOPPED
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT: RC STOPPED: ROLLBACK AREA STATUS PREVENTS UPDATING
TRANSLATION DATA

2. REASON FOR OUTPUT

To report that if the recent change message is input, it has been buffered. The state of the rollback area prohibits updating recent change messages.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

Reinitialize the rollback area. This will occur when the next translation tape dump is made.

5. REFERENCES

PIDENT
RCMAMAIN

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:RC-SYSTEM
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:RC SYSTEM STOPPED: TIMED OUT WAITING FOR RETURN FROM
a

2. REASON FOR OUTPUT

To report that the recent change (RC) program times out on any of the following: a disk request, an output request, or testing or activation of an RC message.

3. VARIABLE FIELD DEFINITIONS

a Reason for the timeout:

Waiting for disk read.

Waiting for disk write.

Waiting for recent change message processing (RCMP)/recent change message update (RCMU) processing.

Waiting for partitioned message (print request) return.

4. ACTION TO BE TAKEN

Resubmit the message. If repeated, technical assistance is required.

5. REFERENCES

PIDENT
RCMAMAIN

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:RC-TST
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:RC TST STATE MESSAGE, ORNU a b
c, ADDRESS ddddddd
e
e

2. REASON FOR OUTPUT

To respond to a cancel test state recent change message and give the disposition of the request.

3. VARIABLE FIELD DEFINITIONS

a	Order number.
b	Disposition of the request: HAS BEEN CANCELED — Cancel completed. IS NOT IN TST STATE — The specified order number is not in the test state. WAS NOT CANCELED — Order number is valid, but the cancel was aborted.
c	Program that found the error.
d	Program address of failure.
e	Text explanation of error and corrective action.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
RCMAMAIN
RCMPMISC

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:RC-WARN-FAIL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT: RC WARNING
RC ROLLED BACK a BLOCKS AND FAILED AT OR AFTER ORNU b,
ERROR c, ADDRESS d,
e

2. REASON FOR OUTPUT

To report an unsuccessful teletypewriter (TTY) rollback.

3. VARIABLE FIELD DEFINITIONS

a	Number of recent change operations.
b	Order number of a recent change.
c	Error code number.
d	Failure address.
e	Error description (text).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
RCMV00

Input Message
RCCNL:ROLLBACK

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:RC-WARNIN
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT:RC WARNING
a
b

2. REASON FOR OUTPUT

To present status information on the rollback area including overflow and hash sum inconsistency, or to report the occurrence of a successful or unsuccessful rollback attempt.

3. VARIABLE FIELD DEFINITIONS

a Indicates the status of the recent change rollback area which stores rollback information or indicates the occurrence of a recent change rollback:

RB TAPE INDEXES MOVED
COMPLETE ROLLBACK TO THE LATEST TRANSLATION TAPE IS
NO LONGER AVAILABLE

This message indicates rollback area overflow. When this occurs, the oldest rollback information in the rollback area is overwritten with the latest information. As a result, rollback can no longer be performed to the point of the latest system tape dump.

ROLLBACK TO THE NEXT TO THE LATEST TAPE IS NO LONGER
AVAILABLE

This message indicates that the rollback area has been filled to the point of overtaking the index corresponding to the next to the latest system tape dump. As a result, this index has been moved to the point of the latest system tape dump, and the maximum rollback which can now occur is to the point of the latest system tape dump.

ROLLBACK AREA OVER a% FULL

a 40, 60, 80 or 90

This message indicates the approximate amount of space used in the rollback area since the latest system tape dump. The message is first printed when the rollback area becomes 40% full. Following this point, it is printed every time additional space is used and until a new tape dump is made.

SEE PROPRIETARY NOTICE ON COVER PAGE

ROLLBACK INITIATED AND COMPLETED THROUGH ORNU a

- a The order number of the message rolled back.

This message indicates that an automatic rollback of the recent change message that was being processed has occurred. The cause of the rollback is printed in the message which states that the RC message was rejected.

ROLLBACK INITIATED AND FAILED AT ORNU a, ERROR b, ADDRESS c,

- a The order number of the message attempted to be rolled back.
- b A number indicating the cause of the rollback failure.
- c The program address where the failure was detected.

This message indicates that an automatic rollback of the recent change message that was being processed was attempted and failed. The cause of the rollback failure is printed following this message and states that the RC message was rejected.

Unless ROLLBACK AREA LEFT IN INDETERMINATE STATE - REINITIALIZATION REQUIRED is printed, the recent change system should be left in a state which allows the rollback to be reinitiated manually.

ROLLBACK AREA LEFT IN INDETERMINATE STATE - REINITIALIZATION REQUIRED

This message indicates that the rollback area was not updated properly following a rollback attempt. This message should only occur in conjunction with a message warning of a rollback.

(See a - ROLLBACK INITIATED AND COMPLETED THROUGH ORNU a,

and a - ROLLBACK INITIATED AND FAILED AT ORNU a, ERROR b, ADDRESS c,)

A recent change lockout is initiated whenever this message is printed to avoid the use of a potentially bad rollback area. Recent change capability can be restored by initializing the rollback area. Operations which initialize the rollback area include: taking a translation tape dump; performing a phase with the ZERO DISK option; and restoring the translation data from tape.

ROLLBACK AREA INITIALIZED PRIOR TO THIS RC

This message indicates that the rollback area has been zeroed prior to this recent change, possibly as a result of system update or system

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reinitialization. The current RC message will provide the first entry in the rollback area.

INCOMPLETE ROLLBACK FOR ORNU a b

This message indicates that not all of the rollback information for a recent change message is stored in the rollback area. This could be a result of an aborted recent change which could not be completely rolled back. It is also possible that all the rollback information for a given message is there, but the final information was not identified properly as control was passed between programs. This indicates a program error.

- a Order number of the message for incomplete rollback.
- b Letter (T,A, or C) indicating the operation (test, activate, or cancel test) for which the data is involved.

**RC RESTRICTED DUE TO INCONSISTENT HASH
ROLLBACK AREA LEFT IN INDETERMINATE STATE -
REINITIALIZATION REQUIRED**

This message indicates that the audit system discovered an unresolvable hash sum inconsistency over the rollback area. It does not mean that there is anything wrong with translation data or with data that was entered via recent changes into the translators.

Because the content of the rollback area is questionable, all recent change activities which create rollback information and all rollbacks are prohibited until the rollback area is initialized by an operation such as taking a translation data tape dump.

- b Indicates the cause of a rollback failure (only applicable if a is a message to indicate that a rollback attempt failed).

4. ACTION TO BE TAKEN

If there is a rollback failure message, the recent change may only be partially in the system, for example core is updated but the file store backup is not updated. Verify messages should be used to check the status of the recent change, and audit number 43 should be requested to see if all data is consistent. It may be necessary to use other recent changes to work around a problem or even to manually initiate another rollback.

If there is an indeterminate rollback area message, the rollback area should be reinitialized.

No action is required for the other messages.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENT
RCMV00

Practice 234-105-005, *Recent Changes, Verification System, Rollback/Rollforward - Description*
Practice 234-180-150, *Recent Changes, Verification System, Rollback/Rollforward - Program*
Practice 234-151-002, *Peripheral Equipment Maintenance - Maintenance Operations*
Center (MOC) TAP 119 - recent change failures
Practice 234-151-002, *Peripheral Equipment Maintenance - Maintenance Operations*
Center (MOC) DLP 524 - performing tape dumps
Practice 234-151-002, *Peripheral Equipment Maintenance - Maintenance Operations*
Center (MOC) DLP 526 - performing manual rollback
Practice 234-151-002, *Peripheral Equipment Maintenance - Maintenance Operations*
Center (MOC) DLP 527 - performing rollforward

Input Message
OP:RCRORNU

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:RC-WARNING
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:RC WARNING
RC ROLLED BACK a BLOCKS THROUGH ORNU b AS REQUESTED

2. REASON FOR OUTPUT

To report a successful teletypewriter (TTY) rollback.

3. VARIABLE FIELD DEFINITIONS

a Number of recent change operations.
b Order number of a recent change.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
RCMV00

Input Message
RCCNL : ROLLBACK

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:RCAS
WORK CENTER.. MOC
GENERIC 4E20 Rel. 3 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:RCAS UPDATE ABORTED - AUDITS CALLED

2. REASON FOR OUTPUT

To report that a Recent Change Administration System (RCAS) update was aborted. The core changes have been backed out. The status of the file system's update is unknown. There could be data corruption; therefore the System Audit of Writable Stores (SAWS) audit has been scheduled.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

If the SAWS audit is unable to correct a mismatch then seek technical assistance.

5. REFERENCES

PIDENTs
RCVSSERV

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:RCCNL-INIT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:RCCNL TTY ROLLBACK INITIATED

2. REASON FOR OUTPUT

Warns the maintenance (MTC) channel that a teletypewriter (TTY) rollback request has been made by a maintenance operations center (MOC) TTY channel. A major alarm is sounded.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

Prepare for possible audits or phases caused by a TTY rollback that is not initiated in a phase.

5. REFERENCES

PIDENTs
RCMAMAIN
RCMV00

Input Message
RCCNL : ROLLBACK

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:READY
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT:READY FOR TAPE PAGING REQUESTS

2. REASON FOR OUTPUT

To indicate that TPAD execution has begun and the tape has been positioned to the file store (FS)-only data. Any tape paging requests will be rejected if submitted prior to this message.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

Tape paging requests may now be entered as desired.

5. REFERENCES

PIDENT
TPAD

Practice 234-180-330, *System Recovery, Initialization and Reinitialization Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:RING-OVLDCD
WORK CENTER.. MAC, MOC, NMOC, TEC,
 TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT: RING OVLD
CONTROLS DEACTIVATED

2. REASON FOR OUTPUT

To report that the common network interface (CNI) ring is no longer experiencing overload and controls have been deactivated.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
OVLDPGM

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:RING-OVLDIF
WORK CENTER.. MAC, MOC, NMOC, TEC,
 TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT: RING OVLD
INFORMATION FROM THE RING:
 INCOMING DLN aaaaaaa
 INCOMING DLN TOO BUSY b
 OUTGOING DLN aaaaaaa
 OUTGOING DLN TOO BUSY b

2. REASON FOR OUTPUT

To report that the common network interface (CNI) ring is experiencing overload and is processing messages too slowly. Controls have been initiated.

3. VARIABLE FIELD DEFINITIONS

a Direct link nodes (DLNs) identification.
b N — No. The DLNs cycles are not too long.
 Y — Yes. The DLNs cycles are too long.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
OVLDPRGM

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:RING-OVLDNR
WORK CENTER.. MAC, MOC, NMOC, TEC,
 TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT: RING OVLD
RING NOT RETURNING MESSAGES

2. REASON FOR OUTPUT

To report that the common network interface (CNI) ring is experiencing overload and is not returning messages to the 1A processor. Controls have been initiated.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
OVLDPRGM

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:RMSD2-ALM
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:RMSD2:ALM

2. REASON FOR OUTPUT

To report that an outage has been detected on the remote measurement system digital (RMSD2).

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

Determine the cause of the RMSD2 outage and take corrective action.

5. REFERENCES

PIDENTs
CGAP00
IOCPOM4

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:RST
WORK CENTER.. MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:RST SCHED-a DIF b, CONTR c

2. REASON FOR OUTPUT

To report that an audit of the digital interface frame (DIF) found one of the following: The unit maintenance exercises turned off; the update bit set; the MPHALT bit set; or the SP STOPPED for that DIF frame.

3. VARIABLE FIELD DEFINITIONS

- a Unit maintenance failure:
 MPHALT SET
 STOP SET
 UPDATE SET
- b Digital interface frame (DIF) or digital interface frame-export 1 (DIF-E1) member number (0-31).
- c Submember number (0 or 1).

4. ACTION TO BE TAKEN

No action needs to be taken. A peripheral maintenance operating system (PMOS) restoral of the active controller will be scheduled.

5. REFERENCES

PIDENT
DIFRSUBS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:SADK-UNABLE
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT:SADK UNABLE TO CHECK UPDATE STATE STATUS

2. REASON FOR OUTPUT

To report that the hourly check by the system audit disk (SADK) to determine whether the system is running on the update file failed due to unsuccessful status of the attached processor system (APS) message acknowledgement.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

The APS printouts should be examined for possible reports indicating the reason for the unsuccessful message status received by SADK. To determine whether the system is running on the update file, check the master control complex (MCC) "UPDATE IN PROGRESS" lamp. This lamp is on when the system is in the update state and/or when a generic utility program (GULP) overwrite is in the copy state. In addition, the 1A status file on the APS may be dumped to check file status.

5. REFERENCES

PIDENT
SADK

Practice 231-300-012, *File Store to Attached Processor System Conversion*
Practice 231-368-011, *System Operations and Recovery*
Practice 234-160-xxx, *TOPS Document For Retrofits*
Practice 254-280-270, *System Update Program Description*

Input Message
UPD:COMMIT

Output Message
REPT:SYST-RUN

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:CHAN-EST
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:CHAN LINK a TELEMETRY ESTABLISHED CLIENT=b [,NSC=c]

2. REASON FOR OUTPUT

This message reports that an input/output (I/O) signaling system signaling link has established a communication path with its far-end device. The link reported in this message is available for ASIO data transport for the given client.

3. VARIABLE FIELD DEFINITIONS

- a Link number (0 - 7).
- b Client assigned to this link.
ASTN — Alternate signaling transit network.
- c If present, this shows the NSN of the far-end switch.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
IOCPIOH4

Input Message
OP: CHAN

SEE PROPRIETARY NOTICE ON COVER PAGE

WARNING
INAPPROPRIATE USE OF THIS
MESSAGE MAY INTERRUPT OR
DEGRADE SERVICE. READ PURPOSE
CAREFULLY.

ID REPT:SCHAN-FAIL
WORK CENTER.. MOC
GENERIC 4E19 Rel. 3 and later
APPLICATION .. 4E
TYPE Output

WARNING
The failure reported by this condition is potentially service affecting.

1. FORMAT

REPT:SCHAN LINK a b TELEMETRY FAILED CLIENT=c

2. REASON FOR OUTPUT

This message reports that an input/output (I/O) system signaling link has lost its communication path to its far-end device. The link reported in this message is no longer available for data transport for the given client.

3. VARIABLE FIELD DEFINITIONS

- a Link number (0 - 7).
- b Reason for telemetry failure:
- | | |
|--------------------|---|
| DIAGNOSTIC FAILURE | — The link has experienced a hardware diagnostic failure. |
| DISCONNECT | — The channel has lost communication with the far end of the link. This may be caused by transmission problems or by far-end hardware failures. |
| MANUAL REMOVE | — The link has been removed with a tty input message. |
| REX IN PROGRESS | — The channel has been removed from service for routine exerciser (REX). |
- c Client assigned to this link:
- ASTN — Alternate signaling transport network.

4. ACTION TO BE TAKEN

If this is not an expected condition, then use the OP:SCHAN input message to do the following:

1. determine the channel assigned to the link, and
2. restore that channel back to service.

Program action will automatically attempt to reestablish telemetry once the channel is restored. A REPT:SCHAN-EST output message will report this fact when it occurs.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENT
IOCPIOH4

Input Message
OP: CHAN

Output Messages
OP: CHAN
REPT: CHAN-EST

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:SCS
WORK CENTER.. MOC
GENERIC 4E22 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] REPT: SCS a SCU b SCS TIMED AUDIT RESET SCU COPY IP BIT
COPY:SCS - FAILED - ACTIVITY TIMEOUT
- [2] REPT: SCS a SCU b SCS TIMED AUDIT RESET SCU INIT IP BIT
INIT:SCS (FORMAT) - FAILED - ACTIVITY TIMEOUT
- [3] REPT: SCS a SCU b SCS TIMED AUDIT RESET SCU REMOVE PENDING BIT
RMV:SCS - FAILED - ACTIVITY TIMEOUT
- [4] REPT: SCS a SCU b SCS TIMED AUDIT RESET SCU ANN UPD IP BIT
RST:SCS - FAILED - ACTIVITY TIMEOUT
- [5] REPT: SCS a SCS LAN PEST AUDIT PESTED AAP LAN
- [6] REPT: SCS a SCS LAN PEST AUDIT SET FRAME LVL LAN PEST BIT
- [7] REPT: SCS a SCS LAN PEST AUDIT UNPESTED AAP LAN
- [8] REPT: SCS a SCS LAN PEST AUDIT RESET FRAME LVL LAN PEST BIT

2. REASON FOR OUTPUT

Formats [1-3] print when the Service Circuit System (SCS) timed audit task which runs approximately every 15 minutes found status bits set with no corresponding activity having occurred during the last audit interval. Possible cause is an in-progress task was aborted by fault recovery action at interject or F-level.

Format [4] prints when the SCS timed audit task which runs approximately every 15 minutes found status bits set with no corresponding activity having occurred during the last audit interval. Possible cause is an Announcement Administration Processor (AAP) maintenance activity or an undetermined fault prevented any announcement updates from taking place during the last audit interval while an Service Circuit Unit (SCU) restore was in progress .

Formats [5-8] print when SCS Local Area Network (LAN) pest audit found inconsistencies in SCS LAN pest software status bits. Possible cause is LAN pest bit administration aborted by fault recovery action at interject or F-level.

NOTE: For Format [5] if the office parameters bit which indicates that an AAP is present in the office (OD4OFCPARM.OD4AAP) indicates no AAP is present the LAN will be pested by the audit.

SEE PROPRIETARY NOTICE ON COVER PAGE

3. VARIABLE FIELD DEFINITIONS

- a SCS member number.
- b SCU member number.

4. ACTION TO BE TAKEN

Format [1]: If an SCS COPY operation had been pending, retry the copy. If no SCS copy was in progress, ignore this message.

NOTE: If an inter-SCU copy was in progress, Format [1] will be printed for each affected SCU.

Format [2]: If an SCS INIT operation had been pending, retry the init. If no SCS init was in progress, ignore this message.

Format [3]: If an SCS RMV operation had been pending, and an OP:OOSUNITS:SCS input request indicates the subject SCU is not OOS, retry the remove. If no SCS remove was in progress, ignore this message.

Format [4]: If an SCS RST operation was in progress, and an OP:OOSUNITS:SCS input request indicates the subject SCU is Out Of Service (OOS), retry the restore. If no SCS restore was in progress, ignore this message.

Format [5]: If the LAN is pested unexpectedly by this audit, verify the correct state of the office parameters bit which indicates an AAP is present.

Format [6] & [8]: No action required

Format [7]: No action required.

NOTE: If LAN unpest action taken by the audit triggers SCU interject action due to AAP LAN wiring faults or unavailability of the AAP, Fault recovery actions will pest the LAN automatically.

5. REFERENCES

PIDENTs
SCSFSUBS

Input Messages
ALW:SCS
COPY:SCS
INH:SCS
INIT:SCS
OP:OOSUNITS
RMV:SCS
RST:SCS

Output Messages
COPY:SCS
INIT:SCS
OP:OOSUNITS
RMV:SCS
RST:SCS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:SDC
WORK CENTER.. MOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:SDC:a,{TAN b|OTAN c|CIN d|TSN e}|TCA f|ALL}
TTYCHAN=g

2. REASON FOR OUTPUT

Prints in response to a SET:TRKSTAT input message request to remove large groups of active trunks.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | System response to SET:TRKSTAT input message:
32 TRKS RMVL LMT EXCEEDED
128 TRKS RMVL LMT EXCEEDED
ALL TRKS TO BE OOS
ALL TRKS RMVL DENIED
TCA f BEING REMOVED |
| b | Trunk Appearance Number (TAN). |
| c | Octal Trunk Appearance Number (OTAN). |
| d | Circuit Identification Number (CIN). |
| e | Trunk Scanner Number (TSN). |
| f | Trunk Control Area (TCA) number (0-9). |
| g | Input channel of originating SET:TRKSTAT input message. |

4. ACTION TO BE TAKEN

None. Message is for information only.

5. REFERENCES

PIDENT
TMAD0006

Input Message
SET:TRKSTAT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:SDU
WORK CENTER.. MOC, TEC, TOC
GENERIC 4E22 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:SDU a b [c] [d] e

2. REASON FOR OUTPUT

To report on each service affecting unit/subunit when it is either removed from service or restored to service. Also gives a brief description stating the reason for removal or restoral.

NOTE: Fields for subunit type, and subunit type member number fields may or may not be present in the message. If the fields for the subunit type, and subunit type member number fields are present, the message is reporting the removal or restoral of a service-affecting subunit.

When the subunit type, and subunit type member number fields are missing, the message is reporting the removal or restoral of a service-affecting unit.

3. VARIABLE FIELD DEFINITIONS

- a Unit type:
- DT — Digroup Terminal.
 - DIF — Digital Interface Frame.
 - EST — Echo Suppressor Terminal.
 - SCS — Service Circuit System.
 - SP — Signaling Processor.
 - TGR — CCIS Terminal Grouping Frame.
 - TSI — Time Slot Interchange.
 - VIF — Voiceband Interface Frame.
 - XTSI — Expanded Time Slot Interchange.
- b Unit type member number.
- c Subunit type (the associated unit will also be given with the subunit):
- DTU — Digroup Terminal Unit.
 - DIU — Digital Interface Unit.
 - D3U — Digital Signal Level 3 (DS3) Protection Switch Client unit.
 - ESU — Echo Suppressor Unit.

SEE PROPRIETARY NOTICE ON COVER PAGE

	SCS — Service Circuit System.
	SCU — Service Circuit Unit.
	SPU — Signal Processing Unit.
	SIGLK — Signaling Link.
	TER — Terminal.
	VIU — Voiceband Interface Unit.
d	Subunit type member number.
e	Reason for removal or restoral of unit/subunit as follows:
	DUPLEX FAIL — Controller's duplex failed (removed) (DIF, DT, EST, SCS, SP, TGR, TSI, VIF, XTSI).
	OOS AND NPSW — Subunit out-of-service (removed) and not protection switched (D3U, DIU, DTU, D3U, ESU, SCS, SCU, VIU).
	RESTORED — Unit or subunit restored to service.

4. ACTION TO BE TAKEN

Optional according to local office administrative practices.

5. REFERENCES

PIDENT
SDGREPT
TMADTOCA

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:SINGLE-DIP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:SINGLE DIP a

2. REASON FOR OUTPUT

The activation status of the Reduction of Double Dip feature has been changed, or the cache table associated with the feature has been flushed.

3. VARIABLE FIELD DEFINITIONS

a FUNCTION HAS BEEN ACTIVATED — Indicates Reduction of
800 Double Dip feature has been activated or flushed.

FUNCTION HAS BEEN DEACTIVATED — Indicates Reduction of
800 Double Dip feature has been deactivated.

FUNCTION NOT AVAILABLE — Indicates that the feature has not been
enabled at the switch.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
CCSDSDIW

Input Message
SET:SDSTAT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:SLC
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:SLC aaa OFF NORMAL

2. REASON FOR OUTPUT

To report periodically when the signaling link complement changes from a normal state to an off-normal state.

3. VARIABLE FIELD DEFINITIONS

a Complement number.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
CCISCONT
CCISIOPR

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:SLC-INSEC
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:SLC a INSECURE

2. REASON FOR OUTPUT

To respond to a signaling link complement changing from a secure state to an insecure state.

3. VARIABLE FIELD DEFINITIONS

a Complement number.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
CCISIOPR

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:SLCSTAT
WORK CENTER.. MOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:SLCSTAT;SLC aaa

SLC	TYPE	STAT	PSLK	STAT	SSLK	STAT
a	b	c	d	ef	g	hi

2. REASON FOR OUTPUT

To print a response to a change in the signaling complement status and to report on the status of the primary and secondary signaling links.

3. VARIABLE FIELD DEFINITIONS

- a Signaling link complement number (0-255).
- b Compliment type:
 CCIS LOAD SHARED
 CCITT6 LOAD SHARED
 CCITT6 SIMPLEX
 CCITT6 SYNC RESERVED
- c Compliment status:
 ER — Emergency restart.
 ER SDC — Service degrading condition.
 LOADED
- d Terminal number of primary link.
- e Status of primary link:
 INS — In service.
 OOS — Out of service.
- f Supplementary link status:
 CON — Call processing congestion controls are in effect for the link.
 RFE — Remove far end.
 RNF — Remove near end.
- g Terminal number of secondary link.

SEE PROPRIETARY NOTICE ON COVER PAGE

h Status of secondary link:

INS — In service.

OOS — Out of service.

i Supplementary secondary link status:

CON — Call processing congestion controls are in effect for the link.

RFE — Remove far end.

RNF — Remove near end.

4. ACTION TO BE TAKEN

Check that complement is always loaded and all links are in-service, except for routine maintenance.

5. REFERENCES

PIDENT
CCISIOPR

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:SLKSTAT
WORK CENTER.. MOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:SLKSTAT; aabb;c!

SLK	STAT	LS	SLC	TGR	TER	STAT	DSM	DDS	VFL	STAT
aabb	ddd eee	ff	ggg	aa	bb	hhh	ii	jj	k	l...l mmm[nnn]
.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.
oopp	qqq rrr	ss	ttt	oo	pp	uuu	vv	ww	k	l...l mmm[nnn]
								x		y...y zzz[a ¹ a ¹ a ¹]

2. REASON FOR OUTPUT

To print in response to a change of state of a signal link (SLK) and to give a status report of a signal link, its mate, and voice frequency links (VFLs).

NOTE 1: Variables a through g repeat as required for additional signaling links (SLKs) and voice frequency links (VFLs).

NOTE 2: For every domestic link, two VFLs exist; for every international link, one VFL exists.

3. VARIABLE FIELD DEFINITIONS

- a Common channel interoffice signaling (CCIS) terminal grouping (TGR) frame number (00-15).
- b CCIS terminal number (00-15) within the terminal grouping frame a.
- c Reason for status change:
 - 2ELTTO — Timeout waiting for second emergency load transfer message.
 - BUFOVF — Terminal buffer overflow.
 - BUFULL — Terminal buffer full.
 - CFGFE — Manual VFL transfer far-end.
 - CFGNE — Configure standby VFL near-end.
 - COVTO — Changeover timeout.
 - ELTGTO — Emergency load transfer (ELT) guard timeout.
 - ELT — Emergency load transfer.
 - ELTXTO — Awaiting emergency load transfer timeout.

SEE PROPRIETARY NOTICE ON COVER PAGE

EPRVTO — Emergency restart prove-in timeout.
ESUTO — Awaiting end of service update.
ESU — End of status update message.
EXERR — Faulty link (excessive error rate).
LICR — Link integrity check request.
LICXTO — Awaiting link integrity check timeout.
LIC — Link integrity check.
LONGST — Long synchronization started.
LONGTO — Awaiting long synchronization timeout.
LTRXTO — Awaiting load transfer request timeout.
LTR — Load transfer requested.
MCA1TO — First timeout awaiting manual changeover acknowledgment.
MCA2TO — Second timeout awaiting manual changeover acknowledgment.
MCA — Manual changeover acknowledgment.
MCO — Manual changeover.
PROFE — Processor outage far-end.
PRONE — Processor outage near-end.
PROTO — Awaiting far-end processor outage recovery timeout.
PSC — Processor signaling congestion.
RAB — Request all-band status update.
RMVAUT — Terminal removed for maintenance.
RMVNE — Near-end manual removal.
RSTAUT — Terminal restored in-service.
RSTNE — Near-end manual restoral.
SBA — Standby ready acknowledgment.
SBRXTO — Awaiting standby ready timeout.
SBR — Standby ready.
SPRUTO — Standard prove-in timeout.
SUXFTO — Awaiting signal unit transfer timeout.
SYNCTO — Waiting synchronization timeout.
SYNC — Synchronization achieved.

SEE PROPRIETARY NOTICE ON COVER PAGE

SYPRTO — Awaiting synchronization and prove-in timeout.
TSVFE — Test standby VFL far-end.
TSVNE — Test standby VFL near-end.
VLF — VFL failed test message.
VLPFTO — Awaiting VFL passed message timeout.
VLP — VFL passed test message.
XFERSU — Transfer signal units.

d

Link status:

INS — In service, able to carry traffic.
OOS — Out of service, unable to carry traffic.

e

Supplementary link status:

CON — Call processing congestion controls are in effect for the link.
RFE — Removed far end.
RNE — Removed near end.

f

State of the link:

- 1 — Removed near end.
- 2 — Removed far end.
- 3 — Awaiting changeover.
- 4 — Awaiting signaling unit transfer.
- 5 — Awaiting synchronization.
- 6 — Awaiting long synchronization.
- 7 — Awaiting emergency restart prove-in.
- 8 — Awaiting standard prove-in.
- 9 — Awaiting link integrity check request exchange.
- 10 — Awaiting emergency load transfer, load transfer acknowledgment exchange.
- 11 — Awaiting load transfer request, load transfer acknowledgment exchange.
- 12 — Awaiting standby ready, standby ready acknowledgment exchange.
- 13 — Awaiting far-end processor outage recovery.
- 14 — Awaiting band status update.
- 15 — Loaded normal state.

SEE PROPRIETARY NOTICE ON COVER PAGE

- 16 — Loaded, awaiting manual changeover acknowledgment.
- 17 — Loaded testing standby VFL.
- 18 — Loaded transferring to standby VFL.
- 19 — Loaded updating band status.
- 20 — Loaded monitoring for emergency load transfers.
- 21 — Synchronized reserved.
- g Signaling link complement number.
- h Terminal status:
 - INS — In service.
 - OOS — Out of service.
- i CCIS data set frame member number (frame that contains the 2048A data set). For 4800 bits per second (bps) links only.
- j CCIS data set submember number that identifies the 2048A data set within a frame. For 4800 bps links only.
- k Traffic number of first VFL.
- l Circuit identification number (CIN) of first VFL, or that the link is self-looped.
- m Status of first VFL:
 - ACT — Carrying traffic.
 - LOOP — Standby VFL test is in progress.
 - OOS — Out of service.
 - STBY — Could be made ACT if required.
 - UAV — Prevented from being used by system. Refer to the TEST:SIGLK and CFR:SIGLK input messages.
- n LK0 — Lockout. This optional printout indicates that the VFL is in a maintenance state that will allow the VFL to be taken by link security, if needed.
- o CCIS TGR frame number of mate signal link (00-15).
- p CCIS terminal number (00-15) within TGR frame of mate signal link.
- q Link status of mate signaling link:
 - INS — In service.
 - OOS — Out of service.

SEE PROPRIETARY NOTICE ON COVER PAGE

r	Supplementary link status of mate signaling link: CON — Call processing congestion controls are in effect for the link. RFE — Removed far end. RNE — Removed near end.
s	State of the mate signaling link. See f information.
t	Mate signaling link complement number.
u	Terminal status of mate signaling link: INS — In service. OOS — Out of service.
v	CCIS data set frame member number of mate signaling link (frame that contains the 2048A data set). For 4800 bits per second (bps) links only.
w	CCIS data set submember number of mate signaling link that identifies the 2048A data set within a frame. For 4800 bps links only.
x	Traffic number of second VFL.
y	CIN of second VFL, or that the link is self-looped.
z	Status of second VFL: ACT — Carrying traffic. LOOP — Standby VFL test is in progress. OOS — Out of service. STBY — Could be made ACT if required. UAV — Prevented from being used by system. Refer to the TEST:SIGLK and CFR:SIGLK input messages.
a ¹	LKO — Lockout for second VFL. This optional printout indicates that the VFL is in a maintenance state that will allow the VFL to be taken by link security, if needed.

4. ACTION TO BE TAKEN

Maintain signaling links in service or active at all times, except for routine maintenance. Do not allow VFLs to be locked out. To remove a LKO from a VFL, refer to the TEST:SIGLK input message. LKO is removed if the VFL passes the test.

5. REFERENCES

PIDENTs
CCISIOPR
CCISMNAC
CCISSLCN
ISCLSSUB

SEE PROPRIETARY NOTICE ON COVER PAGE

4ESS
OM-4B000-01

REPT:SLKSTAT

Input Messages

CFR:SIGLK

OP:SLKSTAT

TEST:SIGLK

Output Message

OP:SLKSTAT-2

SEE PROPRIETARY NOTICE ON COVER PAGE

REPT:SLKSTAT-6

Issue 1.8
September 2001

ID REPT:SOAK
WORK CENTER.. MOC
GENERIC 4E20 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:SOAK a b c

2. REASON FOR OUTPUT

To report the status of a soak test.

3. VARIABLE FIELD DEFINITIONS

- a Unit type:
- CC — Central controller.
- CS — Call store.
- MUP — Master control complex and utility processor.
- b Member number.
- c Soak information:
- SOAK COMPLETED — The soak has successfully completed.
- SOAKING UNIT ACTIVE — The routine exercise has left the soaking unit active because of a failure in diagnostic or in the modified interrupt address (MOIA) switch.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
CCFRTEST
CSFRBSLV
MCFRBASE

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:STRMEX-INVAL
WORK CENTER.. MOC
GENERIC 4E19 only
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:STRMEX PROGRAM FOUND INVALID DATA IN MESSAGE

a	a	a	a	a	a
a	a	a	a	a	a
a	a	a	a	a	a
BUFFER HEADER DATA					
b	c	d	e	f	g
h	i	j	k	l	m

2. REASON FOR OUTPUT

To report the invalid data that was found in a message returned from the attached processor system (APS) during stream exerciser testing.

3. VARIABLE FIELD DEFINITIONS

a Eighteen words of the incoming test traffic buffer (TB) beginning at the point where the invalid data was found.

Items b through m consist of data in the buffer header in low call store.

b	Send TB self pointer.
c	Send TB buffer address.
d	Send TB end pointer.
e	Send TB load pointer.
f	Send TB unload pointer.
g	Send TB spare word.
h	Receive TB self pointer.
i	Receive TB buffer address.
j	Receive TB end pointer.
k	Receive TB load pointer.
l	Receive TB unload pointer.
m	Receive TB spare word.

4. ACTION TO BE TAKEN

Refer to Task Oriented Practices (TOP) 234-355-015 for more information.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
APMHCNI
FNCTSUBS

Practice 234-355-015, *1B Processor Standard - Alone Acceptance and Limited Access Tests*

Input Messages
ALW:STRMEX
INH:STRMEX
SET:STRMEX

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:STRMEX-LOAD
WORK CENTER.. MOC
GENERIC 4E19 only
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:STRMEX MESSAGE LOAD FAIL CODE
a

2. REASON FOR OUTPUT

To report an attempt to load a message in the test buffer failed.

3. VARIABLE FIELD DEFINITIONS

a Fail code indicating either the test stream is down or buffer overflow.

00000001	— Test stream is down.
00000002	— Outgoing buffer is full.

4. ACTION TO BE TAKEN

Refer to Task Oriented Practices (TOP) 234-355-015 for more information.

5. REFERENCES

PIDENTs
APMHCNI
FNCTSUBS

Practice 234-355-015, *1B Processor Standard - Alone Acceptance and Limited Access Tests*

Input Messages
ALW:STRMEX
INH:STRMEX
SET:STRMEX

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:STRMEX-LOST
WORK CENTER.. MOC
GENERIC 4E19 only
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:STRMEX LOST MSG

EXPECTED SEQUENCE NUMBER: a

INCOMING SEQUENCE NUMBER: b

BUFFER HEADER DATA

c	d	e	f	g	h
i	j	k	l	m	n

2. REASON FOR OUTPUT

To report that a message was lost during stream exerciser testing. The message returned from the attached processor system (APS) was not the message expected by the 1B processor.

3. VARIABLE FIELD DEFINITIONS

- a Message sequence number the 1B processor expected to be returned from the APS.
- b Message sequence number actually returned from the APS to the 1B processor.

Items c through n consist of data in the buffer header in low call store.

- c Send test traffic buffer (TB) self pointer.
- d Send TB buffer address.
- e Send TB end pointer.
- f Send TB load pointer.
- g Send TB unload pointer.
- h Send TB spare word.
- i Receive TB self pointer.
- j Receive TB buffer address.
- k Receive TB end pointer.
- l Receive TB load pointer.
- m Receive TB unload pointer.
- n Receive TB spare word.

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

Refer to Task Oriented Practices (TOP) 234-355-015 for more information.

5. REFERENCES

PIDENTs
APMHCNI
FNCTSUBS

Practice 234-355-015, *1B Processor Standard - Alone Acceptance and Limited Access Tests*

Input Messages
ALW:STRMEX
INH:STRMEX
SET:STRMEX

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:STRMEX-STAT
WORK CENTER.. MOC
GENERIC 4E19 only
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:STRMEX	STATUS	REPORT	
MPE	WPS	ITC	OTC
a	b	c	d

2. REASON FOR OUTPUT

Status report that prints at the end of the stream exerciser test.

3. VARIABLE FIELD DEFINITIONS

- a Messages per entry (MPE). The octal number of messages sent from the 1B processor to the attached processor system (APS) on each maintenance control program (MACP) entry. This will be the same as the parameter entered in the SET:STRMEX input message.
- b The average octal number of words per second (WPS) being generated by the stream exerciser program averaged over a two minute period of the testing interval. In case of system problems, if the program is aborted this number will not be accurate.
- c The contents of the incoming traffic counter (ITC). This is the octal number of messages returned from the APS to the 1B processor during a two minute period of the testing interval.
- d The contents of the outgoing traffic counter (OTC). This is the octal number of messages sent from the 1B processor to the APS during a two minute period of the testing interval.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
APMHONI
FNCTSUBS

Input Messages
ALW:STRMEX
INH:STRMEX
SET:STRMEX

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:SVCSTAT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:SVCSTAT	MB THRESHOLD EXCEEDED			
ALARM	TSG	MB	NUM	NUM
STAT	NUM	THLD	MB	ACT
aa	bbbbbbbbbbbbbbbbbb	cccc	dddd	eeee

2. REASON FOR OUTPUT

To print when the system determines that one of the supported service circuit types (SVCT) has either exceeded its maintenance busy threshold (major alarm) or has all of its circuits maintenance busy (critical alarm). The message and alarm will result each time any one of the service circuit types escalates to one of these conditions.

3. VARIABLE FIELD DEFINITIONS

- a CR — Critical alarm.
MJ — Major alarm.
- b Circuit identification name code (CINC) SVCT trunk subgroup (TSG).
NOTE: See the OP:SVCSTAT output message for a list of valid TSGs.
- c Maintenance busy threshold number.
- d Number of service circuits in trunk subgroup (TSG) that are maintenance busy (MB).
- e Number of service circuits in TSG that are active (equipped, not MB).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
SVCTSTAT

Output Message
OP:SVCSTAT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:SYST-PDT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT: SYSTEM PERFORMANCE DISPLAY TROUBLE
4A TIMER SIGNALS NOT RECEIVED BY MCC

2. REASON FOR OUTPUT

To report a failure to detect 10,080 six-second 4A timer signals in the last 24 hours. 4A timer may not be available to alarm severe office outage.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

Maintenance on the 4A timer may be required.

5. REFERENCES

PIDENT
SIMRMNTR

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:SYST-RUN
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT:SYSTEM RUNNING ON UPDATE FILE

2. REASON FOR OUTPUT

To report that the hourly system audit disk (SADK) check of update state status found that the system is running on the update file.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

When the system is on the update file, any pump state configuration will result in a pump of the normal file unless the update file key on the master control complex (MCC) is selected. If the system is running on the update file due to a recent system update, the task oriented practices (TOP) document for that retrofit should be consulted for appropriate action. If the system is in the update state for any other reason, such as forcing a pump with the update key selected, consult the TOPs document for system recovery. The UPD:COMMIT input message may be used to commit the system to the update file.

5. REFERENCES

PIDENTs

SADK

SUAP

SUFA

Practice 234-160-xxx, *TOPs Document For Retrofits*

Practice 254-280-270, *System Update Program Description*

Input Message

UPD:COMMIT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:SYSTEM
WORK CENTER.. MAC, MOC, NMOC, TEC,
 TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:SYSTEM TROUBLE: AUDIT a UNABLE TO CORRECT TROUBLE
FAILURE ADR=b
c
•
•
•
c

2. REASON FOR OUTPUT

To report system trouble that normally cannot be corrected without manual intervention.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | The decimal number of the audit (if any) that cannot correct the trouble. |
| b | The octal address of the program failure point. |
| c | The raw data indicating the problem and the action to be taken. |

4. ACTION TO BE TAKEN

Some manual intervention will always be necessary to correct the trouble reported. The course of action should be implied from the textual information given by c. For example, if TOD INVALID or DATE INVALID is printed, the appropriate input message must be typed to correct it. The FAILURE ADR can be used to index into a program listing to determine action.

5. REFERENCES

PIDENT
AUDSDPCM

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:SYSTEM-TR
WORK CENTER.. MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT: SYSTEM TROUBLE: AUDIT UNABLE TO CORRECT TROUBLE
SYSTEM PERFORMANCE DISPLAY TIMEOUT

2. REASON FOR OUTPUT

To report that the system performance display bar graph on the master control complex (MCC) has not been updated in a 12-second period.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

If the system performance display has been updated since the time-out (base cycle time-bar has some green diodes lit), release the performance display time-out key lamp.

If the system performance display has not been updated (base cycle time-bar has no green diodes lit), either normal tasks are not all cycling properly or the MCC hardware is in error. Determine if the office is processing calls; systems generated test calls are not adequate for this. If the office is processing calls, request the generic and nongeneric hash check audits (see the AUD:NUM input message) and continue frequent verification of call processing ability until the problem is located or the system performance display is updated properly for 2 or 3 minutes. Verify that the MCC hardware is sane.

If the office is not processing calls, request a Phase 3. Note that for the message to be given, the office must be at least partially sane.

5. REFERENCES

PIDENT
SIMRMCCD

Practice 234-180-210, *Software Integrity - Monitor and Control Programs - Description*

Input Message
AUD:NUM

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:TAS
WORK CENTER.. MOC
GENERIC 4E19 through 4E21
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT: TAS TAPE OPERATION FAILED
FUNCTION: a
UNIT: b
OPERATION: c
FAILURE CODE: d

2. REASON FOR OUTPUT

To print when an Input/Output (I/O) operation started by the Tape Administration System (TAS) fails.

3. VARIABLE FIELD DEFINITIONS

- a Function identification:
- CIN Circuit identification number.
- ICD International call data.
- TRF Traffic.
- b The number of the failed device.
- c Operation:
- CLOSE
- CLOSE-STBY
- CLOSEI
- FUNCTION-OFF
- LOPEN
- OPEN
- READ
- RELEASE
- SECURE
- SWITCH
- WRITE

SEE PROPRIETARY NOTICE ON COVER PAGE

d

Failure code:

0 — No Tape Unit Controller (TUC).

1 — TUC failed, no standby.

2 — TUC timed out.

3 — Audit.

4 — TUC failed, recovery on standby attempted.

5 — End of tape.

6 — End of file.

7 — No standby for manual switch.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
TASPPMDM

SEE PROPRIETARY NOTICE ON COVER PAGE

Issue 1.8
September 2001

- 7 — 4HW_AC_CLIENT_REQUEST_TO_ABORT
- 8 — 4HW_AC_INVALID_INPUT_PARAMETERS
- 9 — 4HW_AC_UNEXPECTED_RETURN_FROM_SECURE
- 10 — 4HW_AC_UNEXPECTED_RETURN_FROM_OPEN_OFILE
- 11 — 4HW_AC_UNEXPECTED_RETURN_FROM_WRITE
- 12 — 4HW_AC_UNEXPECTED_RETURN_FROM_LOC_OPEN
- 13 — 4HW_AC_UNEXPECTED_RETURN_FROM_READ
- 14 — 4HW_AC_UNEXPECTED_RETURN_FROM_CLOSE_IFILE
- 15 — 4HW_AC_UNEXPECTED_RETURN_FROM_CLOSE_OFILE
- 16 — 4HW_AC_UNEXPECTED_RETURN_FROM_
FUNCTION_OFF
- 17 — 4HW_AC_UNEXPECTED_RETURN_FROM_SWITCH
- 18 — 4HW_AC_UNEXPECTED_RETURN_FROM_CLOSE_
OFILE_STBY
- 19 — 4HW_AC_UNEXPECTED_RETURN_FROM_RELEASE_STBY
- 20 — 4HW_AC_UNEXPECTED_RETURN_FROM_OVERFLOW
- 21 — 4HW_AC_QUEUE_UNDERFLOW

d TAS procedure (in one of following PIDENTS:TASPMAN,
TASPDAPA, TASPUSER, TASPPMDM).

4. ACTION TO BE TAKEN

If aborted, restart the TAS client.

5. REFERENCES

PIDENT
TASPPMDM

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:TASI-E-DL
WORK CENTER.. MOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:TASI-E DLC ALARM MSN aa b cc dd

2. REASON FOR OUTPUT

To report that time assigned speech interpolation (TASI)-E dynamic load control (DLC) has been active on this miscellaneous scanner number (MSN) for ten continuous minutes.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | Signaling processor (SP) in which scan point is located, in decimal (0-31). |
| b | Man machine language (MML), referring to one side of the SP:
0 — Left side.
1 — Right side. |
| c | Row in the matrix, in decimal (0-64). |
| d | COL, a particular point or range of points in a row on an SP, in decimal (0-15). |

4. ACTION TO BE TAKEN

If message is output on maintenance operations center (MOC), take no action.

If message is output on TOC, verify that the 4ESSTM switch is not causing the problem. The connecting unit (TASI-E, DCMS, ASSET III) is outside the 4ESSTM switch maintenance boundary.

5. REFERENCES

PIDENT
NMGTTASI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:TASI-E-DY
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:TASI-E DYNAMIC LOAD CONTROL REPORT (DLC)

FRAME	CLQ0	CLQ1	CLQ2	CLQ3	CLQ4
aaa	bb	bb	bb	bb	bb

2. REASON FOR OUTPUT

To print each frame and clique that has had dynamic load control (DLC) activated during the past 15-minute period, along with the associated count. If DLC has been activated more than 15 times during this period, only 15 counts will be shown on the report.

The ASSET III unit uses only cliques 0 and 1 for DLC counts.

3. VARIABLE FIELD DEFINITIONS

a	Frame on which DLC has been activated.
b	Count associated with this frame and clique combination.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
NMGTTASI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:TBL-FLN
WORK CENTER.. NMOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:TBL a b FLN c

2. REASON FOR OUTPUT

To report that failure of central-access interface unit has occurred in either the telemetry link or the call assembly index (CAI) receiver.

3. VARIABLE FIELD DEFINITIONS

a Unit type and member number.
b E2A TELEMETRY FAILURE.
c Frame location number.

4. ACTION TO BE TAKEN

Isolate and repair the trouble.

5. REFERENCES

PIDENT
MCFWIOCP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:TBL-NMFR
WORK CENTER.. NMOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:TBL NMFR 0 a FLN b

2. REASON FOR OUTPUT

To report that network management receiver signaling unit integrity failure has occurred in either the network management control frame or the receiver frame.

3. VARIABLE FIELD DEFINITIONS

- a Text phrase:
- CONTROL FRAME SUI FAILURE — Signaling unit integrity (SUI).
 RCVR FRAME SUI FAILURE.
- b Frame location number.

4. ACTION TO BE TAKEN

Isolate and repair the trouble.

5. REFERENCES

PIDENT
MCFWIOCP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:TELEVOTE
WORK CENTER.. MOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] REPT:TELEVOTE; DIAL-UP CONNECTION TO {UNKNOWN|a}
FAILED AFTER ESTABLISHMENT
- [2] REPT:TELEVOTE; CCIS DIRECT SIGNALING MESSAGE RETURNED
DSFUN=a MAPN=a SAPN={a|UNKNOWN}
b
[LINE NUMBER COUNT]
d e
- [3] REPT:TELEVOTE; CONTROLS PREVENT SENDING COUNTS TO MASTER,
MAPN=a
- LINE NUMBER COUNT
d e
- [4] REPT:TELEVOTE; MANUAL REQUEST RECEIVED
{INIT|RMV} MAPN=a
[ZEROCNT][UCL]

2. REASON FOR OUTPUT

To report manual input affecting telephone voting services and troubles affecting telephone voting services after their initialization. For the master, the trouble is the failure of the dial-up connection to the sponsor; for the slave the trouble is a problem in the common channel interoffice signaling (CCIS) network which prevents proper updating of the master counts.

Format [1] prints to report the failure of a dial-up connection after establishment:

Format [2] prints to report that a common channel interoffice signaling (CCIS) direct signaling message has returned:

Format [3] prints to report that counts cannot be updated:

Format [4] prints to report that the manual request was received:

3. VARIABLE FIELD DEFINITIONS

a Appropriate identification (ID) number.

SEE PROPRIETARY NOTICE ON COVER PAGE

- b NETWORK BLOCKAGE
 NETWORK OVERLOAD
 NO ROUTING DATA FOR DESTINATION
 SERVICE NOT ACTIVE
 UNIDENTIFIED REASON
- d An 8-digit line number.
- e Number of votes recorded for the associated line number.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
TVTECTRL

Translation Guide, 4ESSTM, TG-4, Division 3, Section 10

Translation Guide, 4ESSTM, TG-4, Division 10

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:TERMINAL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:TERMINAL aabb BUFFER OVERFLOW

2. REASON FOR OUTPUT

To report that the terminal identifies that the input or output buffers are overflowing.
(Applies to international terminals only.)

3. VARIABLE FIELD DEFINITIONS

a A terminal grouping (TGR) frame number (00-15).
b A terminal subunit number within the frame (00-15).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
CCISIOPR

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:THRESH-TR
WORK CENTER.. NMOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:THRESHOLD EXCEEDED: TRUNK SUBGROUP DATA
TSG = aaaa aaaa aa aa aaa aaa b STUDY CLASS c
OVF=d ACH=e CCH=f NSD=g COS=h
.
.
.
TSG = aaaa aa aa aaa aaabcdef
OVF=d ACH=e CCH=f NSD=g OOS=h

2. REASON FOR OUTPUT

To report an overflow of trunk subgroup data. To accompany the 5-minute update of the network management exception panel. Whenever any trunk subgroup's measurement of overflow, attempts per circuit per hour, connections per circuit per hour, no sender ahead, or out-of-service exceed assigned thresholds, the data will be buffered. The message will be requested internally when the buffer is full or when the routine is completed.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | Base traffic number and circuit identification number (CIN) of the trunk subgroup whose data follows. |
| b | Directionality of the trunk subgroup: 2-way, one-way in, or one-way out. |
| c | Study class to which the subgroup is assigned. |
| d | Percentage of calls that overflowed this trunk subgroup, if present. |
| e | Ratio of attempts for trunks in the subgroup to the number of trunks available for service. |
| f | Ratio of seizures of trunks in the subgroup to the number of trunks available for service. |
| g | Ratio of timeouts to outgoing seizures. |
| h | Ratio of maintenance busy trunks to the number of trunks in the subgroup. |

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENT
NMGTANAL

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:THRESHOLD
WORK CENTER.. NMOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:THRESHOLD EXCEEDED. a HTR CONTROL LIST HAS b CODES.

2. REASON FOR OUTPUT

Printed when the total number of codes on either the domestic or international hard to reach (HTR) control list (manual and automatic) exceeds a threshold set by the network manager.

3. VARIABLE FIELD DEFINITIONS

a	DOMESTIC	Domestic.
	INTL	International.
b	The number of codes on the HTR list which exceeded the threshold.	

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
NMGTANAL

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:TIMEOUT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT:TIMEOUT FILE STORE a

2. REASON FOR OUTPUT

To indicate that the disk audit has determined that a disk request has timed out and will not complete properly.

3. VARIABLE FIELD DEFINITIONS

a Type of disk request which timed out.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
SADK

Practice 254-280-270, *System Update Program Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:TRAFIC-PT
WORK CENTER.. MAC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] REPT:TRAFFIC/PLANT MEASUREMENTS SYSTEM TROUBLE
MEASREPT OUTPUT ABORTED
- [2] REPT:TRAFFIC/PLANT MEASUREMENTS SYSTEM TROUBLE
TDAS DATA OUTPUT ABORTED

2. REASON FOR OUTPUT

To report a problem with the traffic/plant measurements system. Format [1] is output if insufficient time remains in the quarter hour to output all of the measurement reports scheduled for the quarter hour. Format [2] is output if a problem is encountered while attempting to output the traffic data administration system (TDAS) type (schedule 0). For example, the system has waited 10 minutes or more and the TDAS tape has not been mounted.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

Determine the cause of the problem and eliminate it. For example:

- (1) Eliminate some of the schedules to be output at a quarter hour.
- (2) Mount the TDAS tape.

5. REFERENCES

PIDENT
TRAFPOUT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:TROUB
WORK CENTER.. MAC, MOC, NMOC, TEC,
TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:TROUBLE - EMERGENCY MODE ENTERED: a PROCESSOR CONFIG b

2. REASON FOR OUTPUT

To report that the emergency mode has been successfully entered, whether by request or because of an SR failure to find sufficient equipment.

3. VARIABLE FIELD DEFINITIONS

- a Describes the type of processor configuration:
- FULL — 4ESSTM Processor available.
- MIN — Only the 1A Processor is available.
- b Tape pager must be loaded, if the nonpaged file store diagnostic was requested and has been loaded.

4. ACTION TO BE TAKEN

For requested entry, proceed to find and repair faults. For failure entry, determine probable cause of failure and proceed to find and repair faults. Load tape pager from generic tape via library program load procedure if required.

5. REFERENCES

PIDENT
EPECEXEC

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:TROUBLE
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:TROUBLE a b c FLN ddddddd

2. REASON FOR OUTPUT

To report a trouble for the recorded announcement or multi-frequency (MF) signaling frame.

3. VARIABLE FIELD DEFINITIONS

a Unit type:

MFS — MF signaling frame.

RA — Recorded announcement machine.

RT — Ringing and tone plant.

b Member number:

MFS — MF signaling frame number (0-31).

RA — Recorded announcement machine number (0-5).

RT — Ringing and tone plant number (0).

c Description of the trouble (see [1]-[4]).

(1) RACHAN a b c

This indicates a trouble associated with a particular announcement channel.

a — Announcement channel number.

b, c — Indication of the trouble (VOICE ALARM, HEAD SWITCHING FAILURE).

(2) a b

This indicates a trouble associated with an entire announcement machine.

a — Indication of trouble (CLOCK FAILURE), i.e., 4-second clock scan point stuck at zero or one or not operating properly.

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(3) a

This indicates a trouble associated with a common tone supply in the MF signaling frame.

a — The common tone supply (CTSA, CTSB).

(4) a b c [d]

This indicates a trouble associated with the ringing and tone (RT) plant.

a — PLANT.

b — Indicates which plant (0-1).

c — The tone monitor indicating the trouble:

20HZ — 20 HZ ringing current generator monitor

AR — Audible ringing tone generator monitor

AR RTN — Audible ringing tone monitor on return path of nailed-up connection

BT — Busy tone generator monitor

BT60 RTN — Busy tone at 60 IPM monitor on return path of nailed-up connection

BT120 RTN — Reorder tone at 120 IPM monitor on return path of nailed-up connection

HT — High tone generator monitor

TPT — Test progress tone generator monitor

TPT RTN — Test progress tone monitor on return path of nailed-up connection

d — DPLX FLR — if both tones in the RT have failed.

d Frame location number.

4. ACTION TO BE TAKEN

Find and repair the problem and restore the unit.

5. REFERENCES

PIDENTs
SVCTMFS
SVCTRAMP
SVCTRTPP

SEE PROPRIETARY NOTICE ON COVER PAGE

Practice 201-520-101, *Common Systems Recorded Announcement Frame (CSRAF) - Description*
Practice 201-520-301, *Common Systems Recorded Announcement Frame (CSRAF) - Operating Procedures*
Practice 201-520-501, *Common Systems Recorded Announcement Frame (CSRAF) - Tests and Trouble Analysis*
Practice 201-520-701, *Common Systems Recorded Announcement Frame (CSRAF) - Requirements and Adjusting Procedures*
Practice 234-110-090, *Recorded Announcement Frame - Description*
Practice 234-110-091, *Recorded Announcement Frame - Theory*
Practice 234-110-101, *Multifrequency Signaling Frame - Theory*
Practice 234-180-242, *Service Circuit Test Program (SVCT) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:TSIBP
WORK CENTER.. MOC
GENERIC 4E22 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

- [1] REPT:TSIBP XTSI a MRAM b {FAST|NORM|CUST} HADR c L d
- [2] REPT:TSIBP XTSI a D3U e MRAM f {FAST|NORM|CUST} HADR g L d
- [3] REPT:TSIBP XTSI a SPU h MRAM f {FAST|NORM|CUST} HADR g L d
- [4] REPT:TSIBP XTSI a MRAM b {FAST|NORM|CUST}
SAVE AREA FULL - BP STOPS FIRING
- [5] REPT:TSIBP XTSI a D3U e MRAM f {FAST|NORM|CUST} CLEARED
- [6] REPT:TSIBP XTSI a SPU h MRAM f {FAST|NORM|CUST} CLEARED

2. REASON FOR OUTPUT

This autonomous message prints whenever a breakpoint fires in a Expanded Time Slot Interchange (XTSI) frame. The REPT:TSIBP messages will not necessarily be printed in the order that the breakpoints fired.

Format [1] is used for a breakpoint report from the controller.

Format [2] is used for a breakpoint report from a Digital Signal Level 3 Unit (D3U).

Format [3] is used for a breakpoint report from a Signal Processing Unit (SPU).

Formats [4-6] print whenever a breakpoint fires, and since there is not enough space to store all the required data in the breakpoint save area. In Format [4]'s case, the breakpoint will continue to trigger, but will not save any more data in the save area and no further REPT:TSIBP messages will be printed. A CLR:TSIBP input message must be entered to clear the breakpoint or to enter any subsequent SET:TSIBP input messages. In Format [5-6]'s case, the breakpoint is automatically cleared.

3. VARIABLE FIELD DEFINITIONS

- a XTSI member number in decimal.
- b XTSI controller Micro-Store Instruction Random Access Memory (MRAM) address in hexadecimal at which the breakpoint has fired (0 - FFFF).
- c For controller, Global Random Access Memory (GRAM) address of breakpoint save area. Use the DUMP:TSIMEM input message to read breakpoint data.

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d	Length of breakpoint's saved data.
e	D3U number in decimal.
f	D3U micro-store instruction Random Access Memory (RAM) address in hexadecimal at which the breakpoint has fired (100000 - 17FFFF).
g	For D3U, address in shared memory of breakpoint save area. Use the DUMP:TSIMEM input message with the D3U option to read breakpoint data.
h	SPU number in decimal.

4. ACTION TO BE TAKEN

Read the breakpoint data stored from the controller or from the D3U as directed by the Technical Assistance Center. Remove any unneeded breakpoints using the CLR:TSIBP input command.

5. REFERENCES

PIDENT
XTSIBKPT

Input Message
CLR:TSIBP
DUMP:TSIMEM
OP:TSIBP
SET:TSIBP

Output Message
CLR:TSIBP
DUMP:TSIMEM
OP:TSIBP
SET:TSIBP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:TSN
WORK CENTER.. MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:TSN a;b;STAT d[:e] f

2. REASON FOR OUTPUT

To print instead of REPT:CIN or REPT:OTAN output messages if the trunk scanner number (TSN) of the trunk cannot be corrected to a circuit identification number (CIN) or trunk appearance number (TAN). Thus this message should occur under office data (ODA) or software error conditions only. REPT:OTAN messages which would normally be routed to circuit maintenance system (CMS), but fail the TSN to TAN conversion, are output on an ESSTM teletypewriter (TTY) ' in manual format, i.e., in REPT:CIN format.

3. VARIABLE FIELD DEFINITIONS

- | | |
|------|--|
| a | Decimal format TSN. |
| b | Reason for, or source of, the state change. For group state changes, the size of the group is also indicated. |
| d, e | For a report only case, i.e., the error rate is not high enough to automatically remove the trunk from service, then variable d will be ACT, and variable e will be null. For removal from service cases, d will be MTC and e will be null if the trunk was actually removed from service, or d will be ACT and e will indicate either a magic number control (MNC), or trunk subgroup error analysis control (EAC) prevented the trunk from being removed from service. |
| f | Always contains data about the type and number of failures observed. For further information on individual trunk or group trunk reasons, see the REPT:CIN output message. |

4. ACTION TO BE TAKEN

Determine what is invalid about the TSN and take corrective action.

5. REFERENCES

PIDENT
TMAD0001

Output Messages
REPT:CIN
REPT:OTAN

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:TVMINIT
WORK CENTER.. MOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT: TVMINIT, MAPN a b
c

2. REASON FOR OUTPUT

To initiate the initialization report for the telephone voting service with master application number (MAPN) a. The report indicates either successful service initialization or failure to establish a required dial-up connection to the sponsor. If necessary, master counters will have been zeroed before the report is issued.

3. VARIABLE FIELD DEFINITIONS

- a Master application number (0-63).
- b FAILURE
 SUCCESS
- c One of the following phrases:
 DIAL-UP CONNECTION NOT REQUIRED
 DIAL-UP CONNECTION TO n ESTABLISHED
 n — Sponsor direct distance dialing (DDD) number.
 DIAL-UP CONNECTION TO n NOT ESTABLISHED
 n — Sponsor direct distance dialing (DDD) number.

4. ACTION TO BE TAKEN

If message indicates FAILURE and more attempts to establish connection are desired. Use the INIT:TVMASTR input message to initialize the master service. ZEROCNT need not be specified on that message, since counts have already been zeroed.

5. REFERENCES

PIDENT
TVTECTRL

Translation Guide, 4ESSTM, TG-4, Division 3, Section 10
Translation Guide, 4ESSTM, TG-4, Division 10

SEE PROPRIETARY NOTICE ON COVER PAGE

4ESS
OM-4B000-01

REPT:TVMINIT

Input Message
INIT:TVMASR

SEE PROPRIETARY NOTICE ON COVER PAGE

REPT:TVMINIT-2

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ID REPT:UNABLE
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT: UNABLE TO RECORD AMA DATA

2. REASON FOR OUTPUT

To notify the user that automatic message accounting (AMA) data is not being recorded on tape.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

Assign a tape unit to the AMA function, and notify the regional accounting office of possible billing error(s).

5. REFERENCES

PIDENT
AMDX

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:UNEXPECTED
WORK CENTER.. NMOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT: UNEXPECTED CCIS DOC REFUSAL MSG RECEIVED
aaaa aa aa aaa aaa

2. REASON FOR OUTPUT

To report that an unexpected common channel interoffice signaling (CCIS) dynamic overload control (DOC) refusal message has been received by the system. Unexpected refusals are because of one of the following conditions:

- (a) A DOC controlled office received a DOC1 or DOC2 message, but was unable to install the DOC control because it had no DOC response category assigned. Thus, it returned a DOC refusal message to the DOC source office.
- (b) A DOC controlled office, having a local manual override of DOC in effect, received a DOC1, DOC2, or DOC3 message. The control was installed, but since the override is in effect, it returned a DOC refusal message to the DOC source office.

3. VARIABLE FIELD DEFINITIONS

- a Circuit identification number (CIN) of the trunk subgroup.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
NMGTRMFD

SEE PROPRIETARY NOTICE ON COVER PAGE

WARNING
INAPPROPRIATE USE OF THIS
MESSAGE MAY INTERRUPT OR
DEGRADE SERVICE. READ PURPOSE
CAREFULLY.

ID REPT:UPAD
WORK CENTER.. MOC
GENERIC 4E19 only
APPLICATION .. 4E,1B
TYPE Output

WARNING
Functionality is degraded because disk-writes to the utility system
complex are prohibited.

UPAD Inhibits: error analysis program (ERAP), system audit of writable
stores (SAWS) and all automatically scheduled administrative and
maintenance class jobs.

1. FORMAT

REPT:UPAD a[= b]
[c[= d]]

2. REASON FOR OUTPUT

To report the status of the utility paging administration (UPAD).

3. VARIABLE FIELD DEFINITIONS

a ADVANCE

ACTIVE — Utility paging administration under activation.

DATA CORRUPTED - CANCELLING ALL ACTIVE JOBS —
 Garbaged data passed to UPAD. Recovery impossible,
 cancel all outstanding UPAD requests.

ERROR, CODE

FLUSH COMMAND ACKNOWLEDGMENT RETURNED NG — A flush
 instruction sent to the master control complex (MCC) and
 utility processor (MUP) was ignored because the either
 the job was lost or the job step to flush has already been
 completed.

ILLEGAL REQUEST BUFFER ADDRESS — A pointer to one of the
 control blocks used to coordinate input/output (I/O)
 activities has been corrupted.

INITIALIZING ENTIRE LBKC MEMORY (CS 35)

JOB TASK TIMEOUT — A utility paging request timed out because
 the MUP could not service the request in the time allotted.

MUP NOT SERVICING A PENDING JOB TASK

MUP REQUEST FAILED

SEE PROPRIETARY NOTICE ON COVER PAGE

NO ACTIVE MUP — Utility paging administration could detect the presence of an active MUP. Most likely a problem with the interface bus (IFB).

REQUEST BUFFER INTERNAL AUDIT FAILURE

TERMINATED, CODE — Utility paging administration has been concluded.

- b 000 — Activity concluded normally.
 100 — Library KCODE (CS35) memory corrupted.
 101 — Aborting all pending disk requests.
 102 — Unable to cancel a specific disk request.
 103 — Abort routine returned failure (multiple job task).
 105 — Abort routine returned failure (single job task).
 107 — Subroutine ABORT_1B_CLIENT returned failure.
 124 — Maintenance control program (MACP) abort address triggered.
- c ADDRESS
 ANY PREVIOUS UPAD DATA HAS BEEN REINITIALIZED
 CLIENT COMPLETION RETURN ADDRESS
 JOB TASK ID
 REQUEST BUFFER ADDRESS
- d Memory address.

4. ACTION TO BE TAKEN

Determine the source of the error and correct it if possible. To re-initialize the Utility Paging Administration

- First, make sure that the current UPAD session has concluded. This is accomplished by the INH:UPAD input message.
- Second, restart the UPAD by typing the ALW:UPAD input command.

5. REFERENCES

PIDENTs
DKADI
TPAD
UPAD

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:UTIL
WORK CENTER.. MOC
GENERIC 4E21 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

- [1] REPT:UTIL ABORTED CODE a
- [2] REPT:UTIL GULP/UAS COMMUNICATION ERROR NUMBER b
- [3] REPT:UTIL GULP/UAS SOFTWARE ERROR - CLEAR UTILITIES
- [4] REPT:UTIL GULP/UAS SOFTWARE ERROR - MATCHER(S) CLEARED
- [5] REPT:UTIL {INDIR|XSINDIR} {ADR|XADR} NG, CODE c FOR (corresponding utility function)
d
e
e
e
•
•
•
f
- [6] REPT:UTIL {INDIR|XSINDIR} {ADR|XADR} OK, CODE 0 FOR DUMP: (rest of message)
g g g g g g g g
•
•
•
g g g g g g g g
- [7] REPT:UTIL {INDIR|XSINDIR} {ADR|XADR} OK, CODE 0 FOR (corresponding utility function)
h
i
i
i
•
•
•
j
- [8] REPT:UTIL MATCHER(S) UNAVAILABLE ON MUP RESTORAL UTIL INH - CLEARED k
- [9] REPT:UTIL PRT BUF OVRFL UTIL INH
- [10] REPT:UTIL REAL TIME THLD EXCEEDED.UTIL INH

SEE PROPRIETARY NOTICE ON COVER PAGE

- [11] REPT:UTIL UAS TIME OUT - COULD NOT ENABLE MATCHER - ERROR NUMBER l
- [12] REPT:UTIL UNABLE TO CLEAR MATCHER ERROR NUMBER m
- [13] REPT:UTIL UNABLE TO RESTORE GULP MATCHER(S) UTIL INH - CLEARED k
- [14] REPT:UTIL UNEXP ACT GLEV.UTIL INH
- [15] REPT:UTIL WHEN:ADR n;{R/W|EXC} ENCOUNTERED. CAR = o
- [16] REPT:UTIL WHEN:XADR p;{R/W|EXC} ENCOUNTERED. CAR = o
- [17] REPT:UTIL UNEXPECTED DATA IN MEMORY

2. REASON FOR OUTPUT

To report information concerning the state of the last utility request.

Format [1] indicates that the current utility function has been aborted.

Format [2] indicates that the master control complex and utility processor (MUP) detected an error or the MUP did not respond to a generic utility program (GULP) matcher request.

Format [3] indicates that GULP's software status does not agree with the MUP utility system's software status. However, GULP was unable to clear the matchers; therefore, enter the "CLR:UTIL" poke (poke 81) on the master control complex's (MCC) emergency action interface (EAI) page, and request a soft "a" (poke 02).

Format [4] indicates that GULP's software status does not agree with the MUP utility system's software status. All GULP matchers are cleared.

Format [5] indicates that the address calculation and range checking routine encountered an error. The message is indicated, followed by a list of addresses.

Format [6] prints results of dump on interrupt request. This message will follow an interrupt printout.

Format [7] indicates successful address calculation and range checking. The function is indicated, followed by a list of addresses.

Format [8] indicates that when GULP attempted to restore its matchers during a central control (CC) switch, or MUP restoral, one or both of the matchers could not be restored due to the utility system's use of the matchers. Any GULP matcher which could not be restored is cleared.

Format [9] indicates that the utility print buffer is full. The G-level pest is set (which inhibits further message collection), and a request is made to print all messages contained in the buffer. Utilities will remain inhibited until an ALW:UTIL is input.

Format [10] indicates that the time allowed for G-level activity has been exceeded. The G-level pest is set preventing further interrupt utility activity. Utilities remain inhibited until an ALW:UTIL is input.

SEE PROPRIETARY NOTICE ON COVER PAGE

Format [11] indicates that when enabling matchers (ALW:UTIL), GULP timed out waiting for the utility active system (UAS) to respond to the enable request.

Format [12] indicates that a request to clear GULP matchers was aborted.

Format [13] indicates that when GULP attempted to restore its matchers during a CC switch or MUP restoral, a failure occurred and the GULP matchers were cleared. Possible causes are: Interface bus (IFB) error; time out waiting for UAS; or MUP error.

Format [14] indicates that the active CC has taken a G-level interrupt due to matchers for which no flag could be located in the linkage table. Further interrupts have been inhibited.

Format [15] and [16] indicates that a utility flag has been triggered. The flag address, the flag type (read [R]/write [W] for data flags using utility matchers, execute [EXC] for instruction flags using utility execute instructions), and the address where program execution will continue are printed.

Format [17] indicates the GULP print buffer has been built improperly. Contact 4ESS® customer support.

3. VARIABLE FIELD DEFINITIONS

- a Failure code:
- 51 — File system operation failure.
 - 53 — Maintenance control program (MACP) holding time exceeded. (MACP allows a maximum of 3 minutes for a file system operation and 10 minutes for a tape operation).
 - 54 — Paging supervisor abort.
 - 56 — Interrupt while GULP was in progress.
 - 57 — Terminated by manual request.
- b Error number:
- 1 — When performing ALW:UTIL, matcher 1 was not activated; matcher 2 (if set up) was activated
 - 2 — When performing ALW:UTIL, was unable to activate any matchers
 - 3 — Was unable to send retire instruction to the MUP/UAS.
- c Error codes:
- 007 — Internal error. Size of data block is larger than size of buffer. Indicates software bug or program mutilation. Run system audit of writable stores (SAWS) in hash/match mode. If error free, run system audit of stores from tape system audit of stores using tape (SAST) using latest generic tape.
 - 014 — Store specified to be frozen is not duplicated. Reenter message with (MCODE) of duplicated store (can be verified on MCC store status display).
 - 031 — Utility memory (UMEM) number is invalid. Reenter message with UMEM 0, 1, 2, 3, 4, 5, 6, or 7 specified.

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- 114 — Invalid identification (ID) tag mnemonic. Mnemonic does not match a valid ID tag which may be overwritten. Check message and reenter.
 - 115 — Incorrect ID tag specified for a file system only overwrite. Check address to be sure it falls in specified ID tag and ID mnemonic.
 - 119 — Keyword **INDIR** is invalid for accessing extended store.
 - 125 — ID tag input and offset are invalid for the memory accessed. [As it pertains to the extended nonsecure call store indirectness (XSINDIR) and ID tag options.]
 - 127 — Input address is invalid for address type specified, or address is not defined.
 - 128 — It is invalid to **COPY/LOAD** to **BUFFER BUS**, **BOOTROM**, or **IFB** memory.
 - 129 — Attempt to access an extended non-secure call store (XS) window address at **G-LEVEL** interrupt, but window was not enabled.
 - 146 — Interrupt occurred while dumping memory.
 - 188 — Address specified is not equipped.
- d The start address.
- e The intermediate are the results after each level of indirect addressing.
- f The final address is the result of the addition of the address increment. The last address shown is the failing address.
- g Indicates the data to be dumped.
- h The start address.
- i The intermediate are the results after each level of indirectness.
- j The final address is the result after addition of the address increment.
- k Cleared matcher code:
 - 2 — Both **GULP** matchers cleared
- l Error number:
 - 1 — Matcher 0 enabled (if set-up),
Matcher 1 not enabled
 - 2 — Unable to enable any **GULP** matchers
- m Error number:
 - 1 — A **MUP** (**MCC**) must be active.
 - 2 — Unable to communicate with **MUP**.
 - 3 — Time out waiting for **UAS**.
 - 4 — **MUP** communication **UAS** software error. Enter the "CLR:UTIL" poke (poke 81) on the **MCC**'s **EAI** page.
 - 32 — It is invalid to clear matchers on **G-Level** execution because too much time is required.
- n The requested eight digit octal flag address.

SEE PROPRIETARY NOTICE ON COVER PAGE

- o The address at which processing will continue.
- p The requested ten digit octal flag address.

NOTE: Printing of the WHEN:ADR n;{R/W|EXC} ENCOUNTERED. CAR = o or WHEN:XADR p;{R/W|EXC} ENCOUNTERED. CAR = o REPT:UTIL output message is controlled by the ALW:UTILMSG and INH:UTILMSG input messages.

4. ACTION TO BE TAKEN

If ABORTED CODE a, then re-enter input message.

If GULP/UAS COMMUNICATION ERROR NUMBER b, then ensure that IFB and MUP are in good working order, then repeat the request (i.e., ALW:UTIL, "CLR:UTIL" poke [poke 81], etc.)

If GULP/UAS SOFTWARE ERROR - CLEAR UTILITIES, then enter the "CLR:UTIL" poke (poke 81) on the MCC's EAI page. If desired, re-enter match conditions using a WHEN:ADR or WHEN:XADR input message.

If GULP/UAS SOFTWARE ERROR - MATCHER(S) CLEARED, then ensure that IFB and MUP are in good working order, then re-enter match conditions using a WHEN:ADR or WHEN:XADR input message.

If {INDIR|XSINDIR} {ADR|XADR} NG, CODE c FOR (corresponding utility function), then correct the input message and reenter.

If MATCHER(S) UNAVAILABLE ON MUP RESTORAL UTIL INH - CLEARED k, then check the utility system and GULP matcher usage using the "CLR:UTIL" poke (poke 81) on the MCC's utility page and reset up the matcher. If the problem reoccurs seek technical assistance.

If PRT BUF OVRFL UTIL INH, then utilities may be restarted with the ALW:UTIL input message.

If REAL TIME THLD EXCEEDED.UTIL INH, then flag sequence should be examined and corrected to prevent excessive time requirements.

If UAS TIME OUT - COULD NOT ENABLE MATCHER - ERROR NUMBER l, then ensure that IFB and MUP are in good working order, then re-enter the ALW:UTIL input message.

If UNABLE TO CLEAR MATCHER ERROR NUMBER m, then enter the "CLR:UTIL" poke (poke 81) on the MCC's EAI page and do a soft "a" poke (poke 02).

If UNABLE TO RESTORE GULP MATCHER(S) UTIL INH - CLEARED k, then ensure that IFB and MUP are in good working order, then re-enter match conditions using a WHEN:ADR or WHEN:XADR input message.

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If UNEXP ACT GLEV.UTIL INH, then possible matcher hardware problem enter the "CLR:UTIL" poke (poke 81) on the MCC's EAI page and do a soft "a" poke (poke 02).

No action needs to be taken for all other REPT:UTIL formats which are not previously specified.

5. REFERENCES

PIDENTs

GULPIMDT
GULPUTPP
GULPUTXP
GULRUTCR

Input Messages

ALW:UTIL
ALW:UTILMSG
CLR:UTIL
INH:UTILMSG
WHEN:ADR
WHEN:XADR

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:UTILITY
WORK CENTER.. MOC
GENERIC 4E25 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

- [1] REPT:UTILITY SYSTEM - DISABLE ALL UTILITIES - 610
- [2] REPT:UTILITY SYSTEM - NORMAL UTILITIES - 611
- [3] REPT:UTILITY SYSTEM - ACCESS ALLOWED NONINTERFERING - 612
- [4] REPT:UTILITY SYSTEM - ACCESS ALLOWED INTERFERING - 613

2. REASON FOR OUTPUT

To report poke 610, 611, 612 or 613 on Master Control Complex (MCC) has been entered, indicating a change in the utility system and reflected on page 106.

A message is printed whenever one of the following conditions occurs:

- A change in utility system status occurs, i.e. 612 to 613.
- Reset of the MCC Utility Processor (MUP).
- Phase 3 or 4 - current status.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
MCCMEPS1

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:UTILITY-ISS
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT:UTILITY INTERFERING SWITCH STATUS
CC 0 =INTF HW a=
CC 1 =INTF HW a=

2. REASON FOR OUTPUT

To report that the hardware switch has been manually operated, allowing or disallowing utility system interfering functions which could be disruptive to central control (CC) operations.

3. VARIABLE FIELD DEFINITIONS

a State of the CC interfering request:

ENABLED	— The CC(s) has interfering actions enabled from the utility system.
NOT ENABLED	— The CC(s) is now operating without interference from the utility system.
UNKNOWN	— The CC is not active and state of the switch cannot be determined.

4. ACTION TO BE TAKEN

Confirm that interfering functions are needed and authorized in the office.

5. REFERENCES

PIDENT
MCCMEPS1

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:VCFR
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:VCFR a b,c
d

2. REASON FOR OUTPUT

To report that the voiceband interface fault recovery (VCFR) removes voiceband interface units (VIUs) other than the one reported in the F-level report message.

3. VARIABLE FIELD DEFINITIONS

a	Removed.
b	Unit type (voiceband interface frame [VIF]) and member number action taken on.
c	Submember (voiceband interface unit [VIU]) action taken on.
d	The F-level maintenance file number (MFNUM) this action is associated with.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
VCFR

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:VCNT-EXCD
WORK CENTER.. MAC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:VCNT, a
TG: b, CALLING ABC: c, TRANSLATABLE DIGITS: d
THRESHOLD 'e' EXCEEDED 'f' TIME(S)
LAST OCCURRENCE DIGITS: g

2. REASON FOR OUTPUT

To print the vacant code analysis exception report, every time a print threshold is exceeded within the long-term file on a particular failure.

3. VARIABLE FIELD DEFINITIONS

a Vacant code class:

CALL DENIAL SCREENING - CALLSCRN
DNHR TTS FAILURE - DNHRTTS*
DNHR VTS FAILURE - DNHRVTS*
FRAUD PREVENTION - FRAUDPRE
INCORRECT NO. OF DIGITS - DIGCOUNT
INWATS BAND EXCEEDED - INWTSCRN
MISCELLANEOUS FAILURE - MISCFAIL
MISDIRECTED CAMA - MISCAMA
NCAT ANOMALY FAILURE - NCATANOM
NUMBER SUBSTITUTION FAILURE - NUMSUB
ORIGINATING INWATS NOT ALLOWED - ORIGINWT
SSP FAILURE - SSPFAIL
SUBSEQUENCE OFFICE FAILURE - CCISOUT
TRANSIT NETWORK SELECTION FAILURE - TNSFAIL
UNAUTHORIZED CAMA - UNAUCAMA
VACANT CODE - VCNTCODE
WATS FAILURE - WATSFAIL

NOTE *: This failure class also includes real time network routing (RTNR) failures.

b Trunk group.
c First three calling party digits (Centralized automatic message accounting [CAMA] only).
d Digits that 4ESSTM switch used to determine the treatment for the call.

SEE PROPRIETARY NOTICE ON COVER PAGE

- e Threshold:
HIGH
LOW
- f Number of times threshold is exceeded.
- g All the digits (called) on the last call for this failure.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
VCNTANAL

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1. FORMAT

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- b Number of high-threshold long-term file entries (with the same pattern) required to cause an exception report printout.
- c Number of low-threshold reports in the threshold file required to cause an entry in the long-term file.
- d Number of low-threshold long-term file entries (with the same pattern) required to cause an exception report printout.
- e Number of vacant code occurrences lost due to an overflow in the initial vacant code analysis processing buffer.
- f Number of vacant code occurrences inhibited as a result of a INH:VCNT input teletypewriter (TTY) message.
- g Total number of vacant code occurrences in the high-threshold category.
- h Number of high-threshold occurrences overwritten and lost in the threshold (first-stage file) file.
- i Number of high-threshold occurrences that exceeded the threshold count and therefore were promoted to the long-term file for further analysis.
- j Number of high-threshold occurrences overwritten and lost in the long-term file.
- k Number of high-threshold exception reports printed.
- l Total number of vacant code occurrences in the low-threshold category.
- m Number of low-threshold occurrences overwritten and lost in the threshold (first-stage file) file.
- n Number of low-threshold occurrences that exceeded the threshold count and therefore were promoted to the long-term file for further analysis.
- o Number of low-threshold occurrences overwritten and lost in the long-term file.
- p Number of low-threshold exception reports printed.
- q Inhibits, currently in effect, can be by vacant code class, trunk group, ABCDEF digits, or any combination of these. There can be up to 16 inhibits in effect at any time.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
VCNTANAL

SEE PROPRIETARY NOTICE ON COVER PAGE

4ESS
OM-4B000-01

REPT:VCNT

Input Message
INH:VCNT

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REPT:VCNT-THRE-3

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ID REPT:VCNT-WORS
WORK CENTER.. MAC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:VCNT, DAILY REPORT - TEN

WORST VACANT CODE OCCURRENCES

2. REASON FOR OUTPUT

To issue first of two parts of the vacant code analysis daily report, which is printed at 1:10 a.m. every day. It consists of the ten worst vacant code occurrences.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
VCNTANAL

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:VIF
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT: VIF a, VIU b TROUBLE: PROT SWITCH FAILURE ON VIU c;
REG 11 = ddd

2. REASON FOR OUTPUT

To report that after an attempted protection switch of a voiceband interface unit (VIU), some or all of the associated relays have failed to activate or release.

3. VARIABLE FIELD DEFINITIONS

- a Member number of the voiceband interface frame (VIF) (1-127).
- b VIU number (0-7).
- c Action attempted:
 - RMV — Remove.
 - RST — Restore.
- d Register 11 contents (relay closures):
 - Bit 0 — Unit select relay.
 - Bit 1 — Ground relay.
 - Bit 2 — Pulse code modulation (PCM) relay.

4. ACTION TO BE TAKEN

Determine the cause of the failure and repair it. Voiceband interface controller (VIC) phase 22 may be helpful.

5. REFERENCES

PIDENT
VCFR00

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ID REPT:VSSID
WORK CENTER.. TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:VSSID {a|UNASSIGNED}, SID {b|UNASSIGNED} [:VER c]
REASON d, DATA e

2. REASON FOR OUTPUT

To report the occurrence of a significant event on an announcement during processing.
This report can also be generated in response to an announcement-handling, manual-support input message.

3. VARIABLE FIELD DEFINITIONS

a	Voice storage system (VSS) identification (VSSID).
UNASSIGNED	Announcement is not assigned.
b	Service identification (SID).
c	Version number for VSS-type announcements.
d	Text phrase. Refer to Table 1 for variables.
e	Supplemental data field. Refer to Table 1 for variables.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
ANNHREPT

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TABLE 1

TEXT PHRASE/DATA FIELD VARIABLES AND DEFINITIONS

Text Phrase	Data Field	Definition
ACT AUD DLT	None	Active audio has been deleted.
ACT AUD LOST	None	Active audio lost.
ADD INVAL FD	None	Additional invalid fields included in VSS nonaudio or audio update.
ALLOW SBY	None	Standby activation has been activated.
ALLOW XUPD	None	External updates are allowed.
ANN LOCKOUT	None	Announcement handling locked out.
ANN REINIT	None	Announcement has been initialized.
BTH AUD LOST	None	Both active and standby audio lost.
DP CB FAIL	None	Direct producer callback failure.
DP CB REJ	None	Direct producer callback rejection.
DPCBF BDPN	None	Bad direct producer number.
DUP NA VERNUM	None	Nonaudio or audio update received for same version as previous nonaudio update in progress.
EXTUPD INHIB	None	Manual control exists to inhibit external updates.
INHIBIT SBY	None	Standby activation has been inhibited.
INHIBIT XUPD	None	External updates are inhibited.
INS DISK SEC	None	Insufficient Mass announcement system (MAS) disk sectors.
INVAL ALENGH	Actual length	Actual length greater than defined length in translations or less than 5 seconds.
INVAL CTNUM	Cut-through number received.	Invalid cut-through number fails translations.
INVAL STARTT	None	Invalid ORNO start time.
INVAL STOPT	None	Stop time equals start time.
INVAL VERNUM	None	Version number received; same as existing active.
MANR FOR BIN	None	Manual recording requested for barge-in announcement.
NO CTNUM REC	None	No cut-through number received.
NO DP CBN	None	Direct producer callback number not in translations.
NO MORE MARS	None	No MAS announcement registers available.

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Text Phrase	Data Field	Definition
NO MSTAT ASG	None	Mass announcement system status table (MSTAT) memory not allocated for this MAS member number.
NO STOP TIME	None	No stop time in VSS nonaudio update.
NO VSS CBN	None	No VSS callback number.
NON DP UPD	None	Not updatable by direct producer.
NON VSS UPD	None	Not updatable by VSS.
PREV ACT DEA	None	Deactivation in progress on previous active direct producer callback failure.
PREV RECD IP	None	Previous recording call in progress.
PREV SBY EST	None	Previous standby exists.
PREV SBY MON	None	Previous standby is being monitored.
RETRY RECVD	None	Retry received.
SBY AUD DLT	None	Standby audio has been deleted.
SBY AUD LOST	None	Standby audio lost.
TRANS PROBS	None	Transmission problems.
UNASIG VSSID	EAID	Unassigned VSSID.
UNASIGN EAID	EAID	Unassigned EAID.
UNASIGN IAID	Internal announcement identity (IAID)	Unassigned IAID.
UNASOC CTNUM	Cut-through number received	Cut-through number received but not associated with this announcement.
UPDATE RECVD	None	Update received.
VERNUM MATCH	None	Version in VSS nonaudio update matches standby which is pre-verified.
VSS CB FAIL	None	VSS callback failure.
VSS CB REJ	None	VSS callback rejection.

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ID REPT:XALM
WORK CENTER.. TOC
GENERIC 4E21 Rel. 4 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:XALM [OVERFLOW OF a;] b; c

XTSI D3U DS1 EVENT

d	e	f	g
.	.	.	.
.	.	.	.
.	.	.	.

2. REASON FOR OUTPUT

This message will be printed to the 1B Maintenance Channel after any Expanded Time Slot Interchange (XTSI) Digital Signal Level 1 (DS1) has experienced a Facility/Transmission Alarm or Alarm Abatement at the DS1 Level and has not been inhibited via a Teletypewriter (TTY) command.. Only the highest level alarm will be printed (RED|YELLOW|BLUE).

Up to twenty alarms/abatements will be printed per segment of this message. The maximum number of segments which can be printed per 5 minute interval is 4.

3. VARIABLE FIELD DEFINITIONS

OVERFLOW	More than 64 requests received in a 5 minute period. Only 64 will be queued.
a	Number of DS1 occurrences which exceeded the maximum printing buffer size.
b	Segment status: COMPLETED — Last message segment. IP — Intermediate message segments. MANUALLY STOPPED — Terminated due to a TTY input. (STOP:REPT;XALM command.) STARTED — Indicates the first segment. TERMINATED — Aborted. Either printing not completed before beginning of next print interval or machine in overload.
c	Message segment number (1-13).
d	XTSI member number.

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- e Digital Signal Level 3 Interface Unit (D3U) unit number (0-5).
- f DS1 number (1-28).
- g Event:
- ASA — Alarm Indication Signal (AIS) DS1 alarm (BLUE).
- ASC — AIS DS1 alarm abatement (BLUE).
- LAC — Local DS1 alarm abatement (RED).
- LCA — Local DS1 alarm (RED).
- RAC — Remote DS1 alarm abatement (YELLOW).
- RMA — Remote DS1 alarm (YELLOW).

4. ACTION TO BE TAKEN

Facilitate the retirement of any alarms as reported.

5. REFERENCES

PIDENT
TMTCTXMM
TMTCTXSI

Input Messages

ALW:XALM
INH:XALM
OP:DGSTAT
OP:XALM
STOP:REPT-XALM

Output Messages

OP:DGSTAT
OP:XALM

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:XALM-REPORT
WORK CENTER.. TOC
GENERIC 4E21 Rel. 4 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:XALM REPORTING INHIBITED

2. REASON FOR OUTPUT

This message is printed to the 1B Maintenance once per 15 minute period, if any Expanded Time Slot Interchange (XTSI) Facility Alarm message printing has been inhibited via the INH:XALM input command. This message is not alarmed.

3. VARIABLE FIELD DEFINITIONS

See Purpose.

4. ACTION TO BE TAKEN

Request the OP:XALM command.

5. REFERENCES

PIDENT
TMTCTXMM
TMTCTXSI

Input Messages
ALW:XALM
INH:XALM
OP:XALM

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:XPWR
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

REPT:XPWR (MISCELLANEOUS POWER UNIT) SYSTEM TROUBLE
XPWR 0: a b
FAULT STATUS:
c
XPWR 1: a d
FAULT STATUS:
c

2. REASON FOR OUTPUT

To report the status of both miscellaneous power (XPWR) units whenever a new fault is detected or periodically when the system is not normal. As the status prints out, a major alarm automatically rings.

3. VARIABLE FIELD DEFINITIONS

- a Possible states and their definitions are as follows:
- ACT — Supplying power without any faulty components. Unable to pull out the pack.
- DGR — Supplying power with some faulty component(s). Unable to pull out the pack; need special checks/ actions prior to a removal.
- OOS — Able to pull out the pack. (Note that the pack will supply power unless the pack is physically removed.)
- b The following text phrase will be printed only if scan and signal distributor (SSD) 0 is out-of-service (OOS):
SSD 0: OOS
- c One or more of the following faulty sources will be printed. (Note that if there is no fault, then only the key word NONE will be printed.)
- 24 V CONV — 24 V Converter is faulty.
- 5 V CONV FOR CSB 0 — 5 V converter for call store bus (CSB) 0 is faulty.
- 5 V CONV FOR CSB 1 — 5 V converter for CSB 1 is faulty.
- 5 V CONV FOR IFB 0 — 5 V converter for interface bus (IFB) 0 is faulty.
- 5 V CONV FOR IFB 1 — 5 V converter for IFB 1 is faulty.

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5 V CONV FOR PSB 0 — 5 V converter for program store bus (PSB) 0 is faulty.

5 V CONV FOR PSB 1 — 5 V converter for PSB 1 is faulty.

NONE — No faulty sources.

TERM VOLT OF CSB 0 — CSB 0 terminating voltage is abnormal.

TERM VOLT OF CSB 1 — CSB 1 terminating voltage is abnormal.

TERM VOLT OF IFB 0 — IFB 0 terminating voltage is abnormal.

TERM VOLT OF IFB 1 — IFB 1 terminating voltage is abnormal.

TERM VOLT OF PSB 0 — PSB 0 terminating voltage is abnormal.

TERM VOLT OF PSB 1 — PSB 1 terminating voltage is abnormal.

d The following text phrase will be printed only if SSD 1 is OOS:
SSD 1: OOS

NOTE: If the SSD board is out-of-service (OOS), then the status list kept by the software right before the SSD went into OOS will be printed, because the current XPWR status cannot be determined without the SSD board. Therefore, the output list is for reference purpose only.

4. ACTION TO BE TAKEN

If SSD OOS then repair SSD first.

5. REFERENCES

Input Messages
DGN:XPWR
EX:XPWR
OP:XPWRSTAT
RMV:XPWR
RST:XPWR

SEE PROPRIETARY NOTICE ON COVER PAGE

ID REPT:XTSI
WORK CENTER.. TOC
GENERIC 4E21 Rel. 4 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

REPT:XTSI a,D3U b; DS3 c

2. REASON FOR OUTPUT

This message will be printed to the 1B Maintenance Channel whenever any Expanded Time Slot Interchange (XTSI) Digital Signal Level 3 Interface Unit (D3U) is experiencing a Facility/Transmission Alarm or Alarm Abatement at the D3U Level and the printing has not been inhibited via a Teletypewriter (TTY) command. When an alarm condition is reported, a spurt minor alarm will accompany the message.

3. VARIABLE FIELD DEFINITIONS

a XTSI member number.

b D3U unit number (0-5).

c Event:

 A3A — Alarm Indication Signal (AIS) Digital Signal Level 3 (DS3) alarm (BLUE).

 A3C — AIS DS3 alarm abatement (BLUE).

 L3A — Local DS3 alarm (RED).

 L3C — Local DS3 alarm abatement (RED).

 R3A — Remote DS3 alarm (YELLOW).

 R3C — Remote DS3 alarm abatement (YELLOW).

4. ACTION TO BE TAKEN

Facilitate the retirement of any alarms as reported.

5. REFERENCES

PIDENT
TMTCXTMM
TMTCXTSI

Input Messages
ALW:XALM
INH:XALM
OP:DGSTAT
OP:XALM

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Output Messages
OP:DGSTAT
OP:XALM

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4ESS™ 1B Processor Input/Output Message Error Reporting Form

Use this form to report errors and make suggestions for improving the contents of the manual or quarterly release. If an error relates to a specific message, please write your comments on a TTY output or a photocopy of the message documentation and attach it to this form.

Manual: Input ☐ Output ☐

Generic: _____ Issue: _____

Quarterly Release (If applicable) : _____

Message ID(s): _____

Comments: _____

Return to:

Lucent Technologies
Lucent Learning
IH 4F-326
P.O. Box 3033
Naperville, Illinois 60566-7033

Submitted by:

Name: _____

Company: _____

Address: _____

City: _____

State: _____ Zip Code: _____

Phone: () _____

Date: _____

4ESS™ 1B Processor Input/Output Message Document User Feedback Form

Lucent Technologies values your opinion. We would like to know how well this document meets your needs. Please check the appropriate column to indicate your opinion of the document for the categories listed on the right, and answer the questions following the table. Your comments will help us improve future issues. Thank you in advance for taking the time to fill out this form.

Generic: 4E27

Issue: 1.8.1

	Excellent	Good	Fair	Poor
Ease of Use				
Accuracy				
Completeness				
Organization				
Appearance				
Writing				
Clarity				
Front Matter				

1. How did you use this document? (Circle one.)
To learn procedures, To get background information, As a quick reference,
Other (specify): _____
2. Could information be organized differently to help you on the job? YES NO
If YES how? _____
3. Anything missing that should be added? YES NO
Describe: _____
4. Overall how would you rate this document as an aid in doing your job?
EXCELLENT VERY GOOD GOOD FAIR POOR
5. Any additional comments (packaging, format) ? _____

Return to:

Lucent Technologies
Lucent Learning
IH 4F-326
P.O. Box 3033
Naperville, Illinois 60566-7033

Submitted by:

Name: _____

Company: _____

Address: _____

City: _____

State: _____ Zip Code: _____

Phone: () _____

Date: _____

Lucent Technologies
Bell Labs Innovations



4ESSTM Switch
1B Processor
Output Messages
Volume 5
RMV - WTSG

OM-4B000-01
Issue 1.8.1
July 2002

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RMV:CC	RMV:CC	4E19	1
RMV:CEB	RMV:CEB	4E19	1
RMV:CS	RMV:CS	4E20	1.1
RMV:CSB	RMV:CSB	4E20	1.1
RMV:DIF	RMV:DIF	4E19	1
RMV:DT	RMV:DT	4E19	1
RMV:IFB	RMV:IFB	4E19	1
RMV:IOUS	RMV:IOUS	4E19	1.1
RMV:a, MCODE	RMV:MCODE	4E19	1
RMV:MFS	RMV:MFS	4E19	1
RMV:MUP	RMV:MUP	4E19	1
RMV:NCLK	RMV:NCLK	4E19	1
RMV:PCD	RMV:PCD	4E19	1
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RMV:SSD	RMV:SSD	4E19	1
RMV:TGR	RMV:TGR	4E19	1
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RST:IFB	RST:IFB	4E20	1.4
RST:IOUS	RST:IOUS	4E19	1
RST:MFS	RST:MFS	4E19	1
RST:MUP	RST:MUP	4E19	1
RST:NCLK	RST:NCLK	4E19	1
RST:PCD	RST:PCD	4E19	1
RST:PS	RST:PS	4E20	1.1
RST:PSB	RST:PSB	4E20	1.1
RST:PUB	RST:PUB	4E19	1
RST:RA	RST:RA	4E19	1
RST:SCLK	RST:SCLK	4E19	1
RST:SCS	RST:SCS	4E20	1.2
RST:SIGLK	RST:SIGLK	4E19	1
RST:SP	RST:SP	4E19	1
RST:SSD	RST:SSD	4E19	1
RST:TGR	RST:TGR	4E19	1
RST:TMSP	RST:TMSP	4E19	1
RST:TONE	RST:TONE	4E19	1
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RST:XPWR	RST:XPWR	4E19	1
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RTE:TP	RTE:TP	4E19	1
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SCHED:MEASREPT	SCHED:MEASREPT	4E19	1
SCHED:TDASMC	SCHED:TDASMC	4E19	1
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SET:BP	SET:BP-SCS	4E19	1
SET:CAMATRFS	SET:CAMATRFS	4E19	1
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STOP:CFR;ALMGRP	STOP:CFR-ALMGR	4E19	1
STOP:COPY	STOP:COPY	4E19	1
STOP:INIT	STOP:INIT	4E19	1
STOP:LIBSYS	STOP:LIBSYS	4E19	1
STOP:MON;DGSTAT	STOP:MON-DGSTT	4E19	1
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STOP:OVRWRT	STOP:OVRWRT	4E19	1.1
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SW:PUB	SW:PUB	4E19	1
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SW:SCLK	SW:SCLK	4E19	1
SW:SCS	SW:SCS	4E19	1
SW:TGR	SW:TGR	4E19	1
SW:VIF	SW:VIF	4E19	1
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TEST:SIGLK	TEST:SIGLK	4E19	1
TEST:SSD	TEST:SSD	4E21	1.2
TEST:TCAPAIN	TEST:TCAPAIN	4E24	1.5
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UPD:COMMIT	UPD:COMMIT	4E19	1
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VER:CODEGRP;OPT(DIG12)	VER:CODEGRP-12	4E23R3	1.6

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VER:CODEGRP;OPT(CCDADC)	VER:CODEGRP-CCDA	4E19	1.6
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VER:EA;OPT(FUNC,OLI)	VER:EA-FUNC-OLI	4E23	1.6
VER:EA;OPT(IPPD)	VER:EA-IPPD	4E24R3	1.6
VER:EA;OPT(NX)	VER:EA-NX	4E19	1.6
VER:EA;OPT(OPPD)	VER:EA-OPPD	4E24R3	1.6
VER:EA;OPT(SII)	VER:EA-SII	4E19	1.6
VER:EA;OPT(ZZ)	VER:EA-ZZ	4E19	1.6
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VER:FEN	VER:FEN	4E19	1.6
VER:GETS;OPT(ANN)	VER:GETS-ANN	4E21R3	1.6
VER:GETS;OPT(SAT)	VER:GETS-SAT	4E19	1.1
VER:GT;OPT(UGTT)	VER:GT-UGTT	4E19	1
VER:IDAM	VER:IDAM	4E19	1
VER:IDAMLIST	VER:IDAMLIST	4E19	1
VER:INSPLIST	VER:INSPLIST	4E19	1
VER:LATASTAT;OPT(AREAS)	VER:LATASTAT-ARE	4E19 thru 4E21	1.6
VER:LATASTAT;OPT(MATRIX)	VER:LATASTAT-MAT	4E19 thru 4E21	1.6
VER:MEASREPT	VER:MEASREPT	4E19	1
VER:MEMORY	VER:MEMORY	4E19	1
VER:MEMORY;OPT(EM)	VER:MEMORY-EM	4E24	1.5
VER:MISC;OPT(AINITM)	VER:MISC-AINITM	4E23R3	1.6
VER:MISC:FHT AINTRIG	VER:MISC-AINTRIG	4E19	1.3
VER:MISC;OPT(AMA)	VER:MISC-AMA	4E19	1.6
VER:MISC;OPT(ANN)	VER:MISC-ANN	4E19	1.6
VER:MISC;OPT(CHGSDX,UNA)	VER:MISC-CHGSDX	4E23R4	1.4
VER:MISC;OPT(CHGTSG,UNA)	VER:MISC-CHGTSG	4E23R4	1.4
VER:MISC:FHT RCECO4CVU	VER:MISC-FHT-RC	4E21	1.3
VER:MISC:FHT USDSPCSSN	VER:MISC-FHT-USD	4E21	1.6
VER:MISC:FHT EASYREACH	VER:MISC-FHTEASY	4E20	1.6
VER:MISC:FHT IBNSROUTE	VER:MISC-FHTIBNS	4E20	1.2
VER:MISC;OPT(OCTCP)	VER:MISC-OCTCP	4E24	1.5

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MESSAGE NAME	MESSAGE ID	START GENERIC ISSUE	
VER:MISC;OPT(ONOFF)	VER:MISC-ONOFF	4E21	1.3
VER:MISC;OPT(SUXTSI)	VER:MISC-SUXTSI	4E24	1.6
VER:MISC;OPT(TOS)	VER:MISC-TOS	4E19	1.6
VER:MISC;OPT(TRGASN)	VER:MISC-TRGASN	4E23R3	1.4
VER:MISC;OPT(XTSID3U)	VER:MISC-XTSID3U	4E24	1.5
VER:MSN	VER:MSN	4E19	1.6
VER:NAILUP	VER:NAILUP	4E19	1.6
VER:NDB;OPT(NDBI)	VER:NDB-NDBI	4E19	1.6
VER:NDB;OPT(NDBLIST)	VER:NDB-NDBLIST	4E19	1.6
VER:NPADPC;OPT(NPA)	VER:NPADPC	4E19	1.6
VER:OFFICE	VER:OFFICE	4E19	1
VER:PASANN;OPT(LIST)	VER:PASANN	4E19	1.6
VER:PASANN;OPT(ANN)	VER:PASANN-ANN	4E19	1.6
VER:PASCTHRU	VER:PASCTHRU	4E19	1.6
VER:PASTVOTE;OPT(MASTER)	VER:PASTVOTE-M	4E19	1.6
VER:PASTVOTE;OPT(SLAVE)	VER:PASTVOTE-S	4E19	1.6
VER:PCP	VER:PCP	4E20 - 4E25R4	1.7
VER:PCP;OPT(NPASPLIT)	VER:PCP-NPASPLIT	4E19	1.6
VER:PCP;OPT(RSII)	VER:PCP-RSII	4E19	1
VER:PCP;OPT(SCT)	VER:PCP-SCT	4E19	1.6
VER:RCFORM	VER:RCFORM	4E24	1.5
VER:RDB;OPT(INCHAIN)	VER:RDB-INCHAIN	4E19	1.6
VER:RDB;OPT(INTL)	VER:RDB-INTL	4E19	1.6
VER:RDB;OPT(LIST)	VER:RDB-LISTTH	4E19	1.6
VER:RDB;OPT(LIST)	VER:RDB-LISTTW	4E19	1.6
VER:RDB;OPT(RDBIGRP)	VER:RDB-RDBIGR	4E19	1.6
VER:RDB;OPT(UNA)	VER:RDB-UNA	4E19	1.6
VER:RDBLIST;OPT(ABC)	VER:RDBLIST-ABC	4E21R3	1.6
VER:RDBLIST;OPT(FHT)	VER:RDBLIST-FHT	4E21R3	1.6
VER:RDBLIST;OPT(TTSI)	VER:RDBLIST-TTSI	4E19	1.3
VER:RTGLIST	VER:RTGLIST	4E23	1.4
VER:RTNR;OPT(ISW)	VER:RTNR-ISW	4E19	1.6
VER:RTNR;OPT(MSI)	VER:RTNR-MSI	4E19	1
VER:RTNR;OPT(NSN)	VER:RTNR-NSN	4E19	1.6
VER:RTNR;OPT(RN)	VER:RTNR-RN	4E19	1.6
VER:RTNR;OPT(RPI)	VER:RTNR-RPI	4E19	1.6
VER:RTNR;OPT(SII)	VER:RTNR-SII	4E22	1.6
VER:RTNR;OPT(TSDT)	VER:RTNR-TSDT	4E19	1.6
VER:RTNR;OPT(TSGUSE)	VER:RTNR-TSGUSE	4E19R3	1.6
VER:SCRN	VER:SCRN	4E19	1

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MESSAGE NAME	MESSAGE ID	START GENERIC ISSUE	
VER:SCS	VER:SCS-FHT	4E19	1.6
VER:SERVICE;OPT(SRVC)	VER:SERVICE	4E22	1.6
VER:SPARE	VER:SPARE	4E21	1.2
VER:SPMTXPK	VER:SPMTXPK	4E19	1
VER:SSN;NSN	VER:SSN-NSN	4E19 thru 4E23	1.5
VER:STATICAB;OPT(XTSIAB)	VER:STAT-XTSIAB	4E22 thru 4E23	1.5
VER:SUBUTP;OPT(XTSIIBU)	VER:SUBUTP-XTSII	4E24	1.5
VER:TASI	VER:TASI	4E19	1
VER:TERMLIST	VER:TERMLIST	4E19	1
VER:TRK	VER:TRK	4E19	1.6
VER:TRK;OPT(CCITT5 / MISC)	VER:TRK-C5MISC	4E19	1.6
VER:TRK;OPT(CCITT5)	VER:TRK-CCITT5	4E19	1.6
VER:TRK;OPT(CCIS / CCITT6, MISC)	VER:TRK-CCMISC	4E19	1.6
VER:TRK;OPT(CCS)	VER:TRK-CCS	4E19	1.6
VER:TRK;OPT(CCS7)	VER:TRK-CCS7	4E19	1.6
VER:TRK;OPT(CUS_OOB)	VER:TRK-COOB	4E19	1.6
VER:TRK;OPT(D1 / D2)	VER:TRK-D1D2	4E19	1.6
VER:TRK;OPT(D_CHANNEL)	VER:TRK-DCHAN	4E19	1.6
VER:TRK;OPT(INTL.TSN)	VER:TRK-INTTSN	4E19	1.6
VER:TRK;OPT(ISDN)	VER:TRK-ISDN	4E19	1.6
VER:TRK;OPT(ISTP)	VER:TRK-ISTP	4E19	1
VER:TRK;OPT(MISC)	VER:TRK-MISC	4E19	1.6
VER:TRK;OPT(MISC)	VER:TRK-MISCES	4E19	1.6
VER:TRK;OPT(SCGA)	VER:TRK-SCGA	4E19	1.6
VER:TRK;OPT(TSN)	VER:TRK-TSN	4E19	1.6
VER:TRKNAME	VER:TRKNAME	4E22	1.3
VER:TSG;OPT(CICS)	VER:TSG-CICS	4E22	1.4
VER:TSG;OPT(IN1WAY)	VER:TSG-IN1WAY	4E26	1.8
VER:TSG;OPT(LIST)	VER:TSG-LIST	4E20R2	1.8
VER:TSG;OPT(NONMSG)	VER:TSG-NONMSG	4E19	1.6
VER:TSG;OPT(OUT1WAY)	VER:TSG-OUT1WAY	4E26	1.8
VER:TSG;OPT(RDBLIST)	VER:TSG-RDBLIST	4E19	1
VER:TSG;OPT(TRUNKS)	VER:TSG-TRUNKS	4E19	1.6
VER:TSG;OPT(TWOWAY)	VER:TSG-TWOWAY	4E26	1.7
VER:TSG;OPT(VFL)	VER:TSG-VFL	4E19	1.6
VER:TSI;OPT(WIDEBAND)	VER:TSI-WIDEBAND	4E19	1
VER:TTS	VER:TTS	4E19	1
VER:TTS;OPT(TTSI)	VER:TTS-TTSI	4E19	1
VER:TTS;OPT(TTSNAME)	VER:TTS-TTSNAME	4E19	1

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MESSAGE NAME	MESSAGE ID	START GENERIC ISSUE	
VER:TTSLIST;OPT(RDB)	VER:TTSLIST-RDB	4E19	1
VER:UTMN	VER:UTMN	4E21	1.4
VER:UTMN,OPT(ME)	VER:UTMN-ME	4E21	1.4
VER:UTMN;OPT(MISC)	VER:UTMN-MISC	4E21	1.4
VER:UTMN, OPT(SME)	VER:UTMN-SME	4E21	1.4
VER:UTYPE;OPT(SCSDATA)	VER:UTYPE-SCSDAT	4E22R4	1.6
VER:VFUNC;OPT(XTSISPU)	VER:VFUNC-XTSISP	4E22	1.3
WTSG FOR	WTSG:FOR	4E19	1

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ID RMV:API
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

RMV:API a b

2. REASON FOR OUTPUT

To report the results of a RMV:API input message request to remove a specified attached processor interface (API) from service.

3. VARIABLE FIELD DEFINITIONS

- a Member number of the API (0-15).
- b Disposition of the request:
- ABORTED — The request was aborted because of a maintenance interrupt or interject.
- AU BUS OOS — The auxiliary unit bus (AUB) to which the requested API is out of service (OOS). This also means that the API requested is OOS.
- COMPLETED — The request was successfully completed.
- NOT STARTED FAC BUSY RETRY LATER — The frame request was not started because the scan point acknowledgement table was full.
- STOPPED 3B FAILURE — Stopped due to a 3B computer failure.
- STOPPED, 3B MESSAGE FAILURE
- MSG STATUS WORK - cd-----eeeeeeffffff-ghijk
- MSG INDENT SENT - l
- MSG IDENT REC - m
- MSG DATA WORD 1 - n
- MSG DATA WORD 2 - o

where:

- c = Member number (MEMN) 1 for this attached processor system (APS) failed to configure on the 3B side.
- d = MEMN 0 for this APS failed to configure on the 3B side.
- e = Number of messages received from the 3B computer.
- f = Number of messages sent to the 3B computer.

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- g = A message number mismatch has been detected.
- h = API-START field in message header shows a failure.
- i = An identification mismatch has been detected.
- j = An acknowledgment message has been received from the 3B computer.
- k = The acknowledgment message checks out OK.
- l = The message identification (ID) sent to the 3B computer.
- m = The message ID received from the 3B computer.
- n = Data word 1 from the message body.
- o = Data word 2 from the message body.

STOPPED ACTIVE MAIN — The specified unit is serving the system as active and a substitute is not available.

STOPPED AU BUS OOS — The auxiliary unit bus (AUB) to which the requested API is out-of-service. This also means that the API requested is out-of-service.

STOPPED, ERROR CODE p — Stopped due to error code p, where p is:

- 104 — Failed, unit active main.
- 105 — Failed, bus OOS.
- 107 — UTP to KCODE conversion failed.
- 120 — Incorrect final status detected.
- 122 — The command system has failed.
- 127 — Message handler failed to send message.
- 130 — Time-out waiting for message acknowledgement.
- 131 — Acknowledge message from 3B computer was no good.
- 205 — API is powered down.
- 206 — API is already OOS.

4. ACTION TO BE TAKEN

If disposition of the request is:

- ABORTED — try again.
- AU BUS OOS — restore the auxiliary unit bus to which the unit is assigned.
- COMPLETED — take no action.
- NOT STARTED FAC BUSY RETRY LATER — try again later.

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STOPPED, 3B MESSAGE FAILURE — check operational status of the 3B computer and take appropriate actions according to 3B procedure.

STOPPED ACTIVE MAIN — repair mate unit.

STOPPED AU BUS OOS — restore the auxiliary unit bus to which the unit is assigned.

STOPPED, ERROR CODE p — retry later.

5. REFERENCES

PIDENTs
APFRBASE
DCONMAIN
MIRA

Practice 254-280-210, *Maintenance Control Program*

Input Message
RMV:API

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ID RMV:AUB
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

RMV:AUB a b c d

2. REASON FOR OUTPUT

To report the final disposition of a request to remove from service the specified auxiliary unit bus (AUB).

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | Auxiliary unit bus number (0 or 1). |
| b | Disposition of the request: |
| | ABORTED —The request was aborted because of a maintenance interrupt or interject. |
| | COMPLETED —The request was completed successfully. |
| | STOPPED ACTIVE MAIN —The request cannot be honored because the specified unit is serving the system. The substitute which is unavailable is identified if it is not the AUB. |
| c | API/DUS - Unit type which is unavailable for removal. |
| d | Member number which is unavailable for removal. |

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
AUFRDFOR
APFRICON

Input Message
RMV:AUB

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ID RMV:AUI
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

RMV: AUI a b

2. REASON FOR OUTPUT

To report the final disposition of the RMV:AUI request to remove from service the specified auxiliary unit interface (AUI).

3. VARIABLE FIELD DEFINITIONS

- a AUI number (0 or 1).
- b Disposition of the remove request:
- ABORTED — The request was aborted because of a maintenance interrupt.
- COMPLETED — The remove request completed successfully.
- STOPPED ACTIVE MAIN — The removal was for an AUI that is currently active and cannot be removed.
- STOPPED IFB 00S — The request was denied because the AUI related interface bus (IFB) is out-of-service (OOS).
- STOPPED UNEQ UNIT — The request was denied because the requested AUI is unequipped.

4. ACTION TO BE TAKEN

If the disposition of the remove request is:

- COMPLETED — No action is needed.
- STOPPED ACTIVE MAIN — Repair the mate unit.
- STOPPED IFB 00S — No action required since AUI is already OOS.

5. REFERENCES

PIDENT
AUFRBASE

Input Message
RMV:AUI

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ID RMV:CC
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

RMV: CC a b

2. REASON FOR OUTPUT

To report the results of a manual request to remove a central control (CC) from service.

3. VARIABLE FIELD DEFINITIONS

- a Member number of CC (0 or 1).
- b Disposition of the request:
- COMPLETED — The request was successfully completed.
- NOT STARTED FAC BUSY RETRY LATER — The frame request was not started because the scan point acknowledgement table was full.
- STOPPED ACTIVE MAIN — The request cannot be honored because the specified unit is active.

4. ACTION TO BE TAKEN

If the frame request was not started because the scan point acknowledgement table was full, retry the request later.

If the active CC is the unit to be removed from service, first switch the CCs (active becomes standby, standby becomes active) via the SW:CC input message. Then issue the RMV:CC input message (specifying the standby member number).

5. REFERENCES

PIDENTs
CCFRMAIN
CCFRTEST
DCONMAIN
MIRA

Practice 254-280-210, *Maintenance Control Program*

Input Messages
RMV:CC
SW:CC

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ID RMV:CEB
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

RMV:CEB [a] b

2. REASON FOR OUTPUT

To report the results of request to remove the coded enable peripheral unit (PU) bus access to the master control complex (MCC) and input/output (I/O) frame.

3. VARIABLE FIELD DEFINITIONS

- a If present, the member number of the coded enable PU bus (CEB)
- b Disposition of the request:
- COMPLETED — Requested action completed.
- STOPPED REMOVE DENIED — Removal of bus access denied because of inability to configure the MCC or I/O frame to the other bus or because the other bus is out of service.

4. ACTION TO BE TAKEN

If removal is denied, either restore the other bus to service or correct the problem preventing the removal of the bus.

5. REFERENCES

PIDENT
HARVRECV

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ID RMV:CS
WORK CENTER.. MOC
GENERIC 4E20 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

RMV:CS a b

2. REASON FOR OUTPUT

There are two possible reasons for the output of this message:

To report the final disposition of a request to remove a call store (CS) from service.

To report acceptance or denial of a master control complex (MCC) request to remove a CS from service. A message reporting the final disposition of the removal request will print later.

3. VARIABLE FIELD DEFINITIONS

- a Call store member number (MEMN) (0-39).
- b Disposition of the request:
- ABORTED — The request was aborted because of a maintenance interrupt or interject.
- COMPLETED — The request was successfully completed.
- NOT STARTED FAC BUSY RETRY LATER — The frame request was not started because the scan point acknowledgement table was full.
- REQUEST ACCEPTED — The MCC request has been accepted and the maintenance job has been scheduled.
- REQUEST DENIED - FAC BUSY RETRY LATER — The MCC request has been denied because the job queue was full.
- REQUEST DENIED - INVALID MEMBER NUMBER — The MCC request has been denied because the member number (MEMN) was invalid.
- REQUEST DENIED - UNEQ UNIT — The MCC request has been denied because the member number was unequipped.
- STOPPED ACTIVE MAIN — The request cannot be honored because the specified unit is serving the system as active and a substitute is not available.

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STOPPED FORCED OOS — The request was for a store forced out during repeated processor configuration (PC), and the request will not be allowed until possible faults are cleared.

4. ACTION TO BE TAKEN

If the disposition of the remove request is:

ABORTED — then try again.

COMPLETED — then no action to be taken.

NOT STARTED FAC BUSY RETRY LATER — then try again later.

REQUEST ACCEPTED — then wait for final disposition message.

REQUEST DENIED - FAC BUSY RETRY LATER — then try again later.

REQUEST DENIED - INVALID MEMBER NUMBER — then verify the member number (MEMN) and try again.

REQUEST DENIED - UNEQ UNIT — then verify the member number (MEMN) and try again.

STOPPED ACTIVE MAIN — then restore one of the already out-of-service call stores to service before processing.

STOPPED FORCED OOS — then a remove is only permitted by a frame request. The unit is already out of service (OOS). If recovery actions occur due to a frame request, immediately power down the store.

5. REFERENCES

PIDENTs
CSFRBSLV
CSFRILEV
MIRA

Practice 254-280-210, *Maintenance Control Program*

Input Message
RMV:CS

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ID RMV:CSB
WORK CENTER.. MOC
GENERIC 4E20 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

RMV: CSB a b

2. REASON FOR OUTPUT

There are two possible reasons for the output of this message:

To report the final disposition of a request to remove a call store bus (CSB) from service.

To report acceptance or denial of a master control complex (MCC) request to remove a CS from service. A message reporting the final disposition of the removal request will print later.

3. VARIABLE FIELD DEFINITIONS

- a Call store bus member number (0 or 1).
- b Disposition of the request:
- ABORTED —The request was aborted because of a maintenance interrupt or interject.
- COMPLETED —The request was successfully completed.
- REQUEST ACCEPTED —The MCC request has been accepted and the maintenance job has been scheduled.
- REQUEST DENIED - FAC BUSY RETRY LATER —The MCC request has been denied because the job queue was full.
- REQUEST DENIED - INVALID MEMBER NUMBER —The MCC request has been denied because the member number (MEMN) was invalid.
- REQUEST DENIED - UNEQ UNIT —The MCC request has been denied because the member number was unequipped.
- STOPPED ACTIVE MAIN —The request cannot be honored because the specified unit is serving the system as active and a substitute is not available.

4. ACTION TO BE TAKEN

If the disposition of the remove request is:

ABORTED —then try again.

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COMPLETED — then no action to be taken.

REQUEST ACCEPTED — then wait for final disposition message.

REQUEST DENIED - FAC BUSY RETRY LATER — then try again later.

REQUEST DENIED - INVALID MEMBER NUMBER — then verify the member number (MEMN) and try again.

REQUEST DENIED - UNEQ UNIT — then verify the member number (MEMN) and try again.

STOPPED ACTIVE MAIN — then restore other bus and try again.

5. REFERENCES

PIDENTs
CSFRBSLV
CSFRPS0
MIRA

Practice 254-280-210, *Maintenance Control Program*

Input Message
RMV:CSB

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ID RMV:DIF
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RMV:DIF a b c

2. REASON FOR OUTPUT

To respond to a power control switch request, a Teletypewriter (TTY) remove message, or a TTY restore message for a Digital Interface Frame (DIF) subunit that requests diagnostics be run.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | DIF member number (0-31). |
| b | Subunit type and submember number (CONTR 0 or 1, DIU 0 through 33, or IPUB 0 or 1). |
| c | Disposition of request:

ABORTED PROTECTION SWITCH MACRO FAILURE

COMPL

NOT STARTED FAC BUSY RETRY LATER

STOPPED ACT MAIN: MATE OOS

STOPPED CONTR DUPLEX FAILED

STOPPED INVALID UNIT OR SUBUNIT

STOPPED IPUBS SIMPLEX

STOPPED PUB SIMPLEX

STOPPED SERVICE CIRCUIT THRESHOLD EXCEEDED

STOPPED SPARE NOT AVAILABLE |

4. ACTION TO BE TAKEN

If disposition of the request is:

NOT STARTED FAC BUSY RETRY LATER, the scan point acknowledgement table was full. Try the request later.

Otherwise, no action is required.

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5. REFERENCES

PIDENTs
DIFRMISC
DZFRSUBS
TOPIC000

Input Message
RMV:DIF

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ID RMV:DT
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RMV:DT a b c

2. REASON FOR OUTPUT

To report the completion status of either a teletypewriter (TTY) remove message or a TTY restore message.

3. VARIABLE FIELD DEFINITIONS

- a Digroup terminal (DT) member number.
- b Subunit type and submember number:
CONTR — Controller (0 - 1).
DTU — Digroup terminal unit (0 - 8).
- c Disposition of request and, if request was unsuccessful, an explanation of why unit could not be removed to diagnose.
COMPL — Completed.
NOT STARTED FAC BUSY RETRY LATER — The frame request was not started because the scan point acknowledgement table was full.
STOPPED ACT MAIN: MATE OOS — Other subunit out-of-service.
STOPPED CONFG DENIED - SIMPLEX CONTROLLER — Controllers must be duplex to perform protection switch.
STOPPED INVALID UNIT OR SUBUNIT — In growth or unequipped.
STOPPED NO REDUND — Spare subunit not available.
STOPPED TSI CONTR OS — Time slot interchange controller out-of-service.

4. ACTION TO BE TAKEN

If disposition of the request is:

NOT STARTED FAC BUSY RETRY LATER , try the request later.

Otherwise, no action is required.

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5. REFERENCES

PIDENTs
MCFWDT
MIRA

Input Message
RMV:DT

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ID RMV:IFB
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

RMV:IFB a b

2. REASON FOR OUTPUT

To report the final disposition of a request to remove from service the specified interface bus (IFB).

3. VARIABLE FIELD DEFINITIONS

a Interface bus number (0 or 1).
b Disposition of the request:

ABORTED —The request was aborted because of a maintenance interrupt or interject.

COMPLETED —The request was completed successfully.

STOPPED ACTIVE MAIN —The request cannot be honored because the specified unit is serving the system.

STOPPED ESSENTIAL MAIN —The request cannot be honored because the specified unit is standby in the system.

STOPPED ESSENTIAL STANDBY —The request cannot be honored because the specified unit is serving the system.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
FSFRDGN
IFFRBASE

Input Message
RMV:IFB

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ID RMV:IOUS
WORK CENTER.. MOC
GENERIC 4E19 Rel. 3 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

RMV:IOUS a [b] c

2. REASON FOR OUTPUT

To report the results of request to remove an input/output (I/O) unit selector (IOUS), IOUS bus access, or an input/output unit controller (IOUC) on an IOUS.

3. VARIABLE FIELD DEFINITIONS

- a Member number of the IOUS (0-7).
- b If present, the subunit type and submember number.
- IOMP — I/O microprocessor (0 - 1).
- IOUC — I/O unit controller (0 - 15).
- IPUB — Interface peripheral unit bus (0 - 1).
- c Disposition of the request:
- COMPLETED — Requested action completed.
- NOT STARTED FAC BUSY RETRY LATER — The frame request was not started because the scan point acknowledgement table was full.
- STOPPED ACT MAIN: MATE OOS — Removal of unit or subunit denied since backup is out-of-service (OOS).
- STOPPED COULD NOT CONFIGURE MATE IOUS TO OTHER BUS — Could not remove IPUB because other IOUS in frame could not be configured to opposite peripheral unit bus (PUB).
- STOPPED COULD NOT CONFIGURE UNIT TO OTHER BUS — Could not remove interface peripheral unit bus (IPUB) because unit could not be configured to other bus.
- STOPPED DENIED BY ASTN — This unit is or contains an alternate signaling transport network (ASTN) channel. ASTN has denied a routine exerciser (REX) request to diagnose the unit.
- STOPPED GROWTH UNIT — Unit and/or subunit specified is in growth state.
- STOPPED INVALID UNIT OR SUBUNIT — Member number, subunit type, or submember number invalid.

SEE PROPRIETARY NOTICE ON COVER PAGE

STOPPED MATE IOUS ACCESS TO OTHER BUS OUT OF
SERVICE — Could not remove IPUB because other
IOUS in frame has bus access to opposite peripheral
unit bus (PUB) removed.

STOPPED REMOVE DENIED — Removal of bus access denied because
of inability to configure IOUS to other bus.

4. ACTION TO BE TAKEN

If removal is denied, either restore backup to service or correct problem preventing IOUS
access to other bus.

5. REFERENCES

PIDENTs
DCONMAIN
IOCPIOH4
MIRA
PFLRDGNH

Input Message
RMV: IOUS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RMV:MCODE
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

RMV:a, MCODE b; FREEZE c d

2. REASON FOR OUTPUT

To report the status of the request that the store specified (by store type and store MCODE) be placed out-of-service (OOS) and in the maintenance mode.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | Store type. Either call store (CS) or program store (PS). |
| b | Octal number. MCODE of the store. |
| c | Status:

COMPLETED

STOPPED |
| d | Additional information used to describe the failures. Used only if status is STOPPED. It will have form CODE 14 meaning store is not duplicated. |

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
GULPUTPP
GULPUTXP
GULRUTCR

PA-4A002-01, 4ESSTM User's Manual

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RMV:MFS
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RMV:MFS a b COMPL MATE c

2. REASON FOR OUTPUT

To indicate that a common tone supply (CTS) has been removed from service. This message will be preceded by a REPT:TROUBLE output message on the multi-frequency (MF) frame.

3. VARIABLE FIELD DEFINITIONS

- a Multi-frequency (MF) frame member number.
- b Tone supply identification:
- CTS A — Common tone supply A in the MF frame.
- CTS B — Common tone supply B in the MF frame.
- c State of the mate:
- ACT — Active.
- OOS — Out-of-service.

4. ACTION TO BE TAKEN

Repair the problem and restore the common tone supply.

5. REFERENCES

PIDENT
SVCTMFS

Practice 234-110-101, *Multi-frequency Signaling Frame - Theory*

Output Message
REPT:TROUBLE

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RMV:MUP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

RMV:MUP a b

2. REASON FOR OUTPUT

To report the final disposition of the RMV:MUP request to remove from service the specified master control complex (MCC) and utility processor (MUP).

3. VARIABLE FIELD DEFINITIONS

a MUP number (0 or 1).
b Disposition of the request:
 ABORTED — The request was aborted because of a maintenance
 interrupt.
 COMPLETED — The remove request was completed successfully.
 STOPPED ACTIVE MAIN — The MUP specified is currently active
 and cannot be removed.

4. ACTION TO BE TAKEN

If the disposition of the request is:

COMPLETED — then no action is needed.

STOPPED ACTIVE MAIN — then switch the MUPS, and then remove this
MUP.

5. REFERENCES

PIDENT
MCFRBASE

Input Message
RMV:MUP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RMV:NCLK
WORK CENTER.. MAC, MOC, NMOC, TEC,
 TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RMV:NCLK 0 {CHAIN a|OSC b}c

2. REASON FOR OUTPUT

To respond to a remove stimulus that can be from an automatic, manual, or teletypewriter (TTY) stimulus.

3. VARIABLE FIELD DEFINITIONS

a Chain (0 - 3).
b Oscillator (0-3).
c Disposition of input stimulus:

 COMPL

 NOT STARTED FAC BUSY RETRY LATER

 STOPPED ACT MAIN: DO NOT RMV PWR

 STOPPED ACT MAIN: MATE OOS

 STOPPED INVALID UNIT OR SUBUNIT

4. ACTION TO BE TAKEN

If the disposition of the request is:

NOT STARTED FAC BUSY RETRY LATER, the scan point acknowledgement table was full. Try the request later.

Otherwise, take corrective action, if necessary, according to text phrases.

5. REFERENCES

PIDENT
FRDIMREQ

Input Message
RMV:NCLK

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RMV:PCD
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

RMV:PCD a b c

2. REASON FOR OUTPUT

To report the results of a request to remove a power control distribution (PCD) from service.

3. VARIABLE FIELD DEFINITIONS

- a Member number of the PCD (0 or 1).
- b Distribution circuit - converter member number.
- c Disposition of the request:
- COMPLETED — Removal completed successfully.
- NOT STARTED FAC BUSY RETRY LATER — The frame request was not started because the scan point acknowledgement table was full.
- STOPPED ACTIVE MAIN — Unit is active; do not remove.
- STOPPED INVALID — Invalid converter specified with remove request.

4. ACTION TO BE TAKEN

If disposition of the request is:

NOT STARTED FAC BUSY RETRY LATER, try the request later.

STOPPED INVALID, reenter the request.

Otherwise no action is required.

5. REFERENCES

PIDENTs
DCONMAIN
MIRA
PDFR

Input Message
RMV:PCD

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RMV:PS
WORK CENTER.. MOC
GENERIC 4E20 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

RMV: PS a b

2. REASON FOR OUTPUT

There are two possible reasons for the output of this message:

To report the final disposition of a request to remove a program store (PS) from service.

To report acceptance or denial of a master control complex (MCC) request to remove a PS from service. A message reporting the final disposition of the removal request will print later.

3. VARIABLE FIELD DEFINITIONS

- a PS member number (0-13).
- b Disposition of the request:
- ABORTED —The request was aborted because of a maintenance interrupt or interject.
- COMPLETED —The request was successfully completed.
- NOT STARTED FAC BUSY RETRY LATER —The frame request was not started because the scan point acknowledgement table was full.
- REQUEST ACCEPTED —The MCC request has been accepted and the maintenance job has been scheduled.
- REQUEST DENIED - FAC BUSY RETRY LATER —The MCC request has been denied because the job queue was full.
- REQUEST DENIED - INVALID MEMBER NUMBER —The MCC request has been denied because the member number (MEMN) was invalid.
- REQUEST DENIED - UNEQ UNIT —The MCC request has been denied because the member number was unequipped.
- STOPPED ACTIVE MAIN —The request cannot be honored because the specified unit is serving the system as active and a substitute is not available.

SEE PROPRIETARY NOTICE ON COVER PAGE

STOPPED FORCED 00S — The request for a store was forced out during repeated processor configuration (PC), and the request will not be allowed until possible faults are cleared.

4. ACTION TO BE TAKEN

If the disposition of the remove request is:

ABORTED — then try again.

COMPLETED — then no action to be taken.

NOT STARTED FAC BUSY RETRY LATER — then try again later.

REQUEST ACCEPTED — then wait for final disposition message.

REQUEST DENIED - FAC BUSY RETRY LATER — then try again later.

REQUEST DENIED - INVALID MEMBER NUMBER — then verify the member number (MEMN) and try again.

REQUEST DENIED - UNEQ UNIT — then verify the member number (MEMN) and try again.

STOPPED ACTIVE MAIN — then restore one of the out-of-service program stores to service before proceeding.

STOPPED FORCED 00S — then a remove is only permitted by a frame request. The unit is already out of service (00S). If recovery actions occur due to a frame request, immediately power down the store.

5. REFERENCES

PIDENTs
MIRA
PSFRBSLV
PSFRCSPG

Practice 254-280-210, *Maintenance Control Program*

Input Message
RMV:PS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RMV:PSB
WORK CENTER.. MOC
GENERIC 4E20 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

RMV:PSB a b

2. REASON FOR OUTPUT

There are two possible reasons for the output of this message:

To report the final disposition of a request to remove a program store bus (PSB) from service.

To report acceptance or denial of a master control complex (MCC) request to remove a PSB from service. A message reporting the final disposition of the removal request will print later.

3. VARIABLE FIELD DEFINITIONS

- a Program store bus member number (0,1).
- b Disposition of the request:
- ABORTED —The request was aborted due to a maintenance interrupt or interject.
- COMPLETED —The request was successfully completed.
- REQUEST ACCEPTED —The MCC request has been accepted and the maintenance job has been scheduled.
- REQUEST DENIED - FAC BUSY RETRY LATER —The MCC request has been denied because the job queue was full.
- REQUEST DENIED - INVALID MEMBER NUMBER —The MCC request has been denied because the member number (MEMN) was invalid.
- REQUEST DENIED - UNEQ UNIT —The MCC request has been denied because the member number was unequipped.
- STOPPED ACTIVE MAIN —The request cannot be honored because the specified unit is serving the system as active and a substitute is not available.

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

If the disposition of the remove request is:

ABORTED — then try again.

COMPLETED — then no action to be taken.

REQUEST ACCEPTED — then wait for final disposition message.

REQUEST DENIED - FAC BUSY RETRY LATER — then try again later.

REQUEST DENIED - INVALID MEMBER NUMBER — then verify the member number (MEMN) and try again.

REQUEST DENIED - UNEQ UNIT — then verify the member number (MEMN) and try again.

STOPPED ACTIVE MAIN — then restore other bus and try again.

5. REFERENCES

PIDENTs
MIRA
PSFRBSLV
PSFRCSPG

Practice 254-280-210, *Maintenance Control Program*

Input Message
RMV:PSB

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RMV:PUB
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RMV:PUB a b c

2. REASON FOR OUTPUT

To respond to a power control switch request and/or teletypewriter (TTY) remove request.

3. VARIABLE FIELD DEFINITIONS

- a Peripheral unit bus (PUB) member number (0 - 1).
- b Optional subunit, submember:
 PUBB — Peripheral unit bus branching frame (0).
 PUBR — Public message detail recording (MDR) record (0 - 3).
- c Disposition of request:
 COMPL — Completed.
 NOT STARTED FAC BUSY RETRY LATER — The frame request was
 not started because the scan point acknowledgement table
 was full.
 STOPPED ACTIVE MAIN: DO NOT REMOVE POWER — Power
 switch request other PUB out-of-service (OS).
 STOPPED ACTIVE MAIN: MATE OS — Other PUB out of service.
 STOPPED INVALID UNIT OR SUBUNIT — In growth or
 unequipped.
 STOPPED UNIT TBL ON MATE BUS — Active units cannot run on
 other bus.

4. ACTION TO BE TAKEN

If the disposition of the request is:

NOT STARTED FAC BUSY RETRY LATER , try the request later.

Otherwise, no action is required.

5. REFERENCES

PIDENT
MCFWPOMO

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Message
RMV : PUB

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RMV:RA
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] RMV:RA a ALL COMPL
- [2] RMV:RA a RACHAN b COMPL MATE c

2. REASON FOR OUTPUT

To report the removal of a recorded announcement (RA) channel or an entire recorded announcement machine. This message may be in response to an RMV:RA input message.

Format [1] is used to report the removal of the entire announcement machine.

Format [2] is used to indicate that a channel has been removed from service and to give the state of the mate if a mate is assigned in translations. Format [2] also indicates whether the removal of the channel has prevented customers from receiving the announcement.

3. VARIABLE FIELD DEFINITIONS

- a Recorded announcement machine number (0 or 1).
- b Recorded announcement channel number (0-23, depending upon how many channels are assigned on the machine).
- c State of the mate announcement channel:
- ACT — Active.
 - GTH — Growth.
 - OOS — Out-of-service.
 - UNAS — Unassigned (not equipped).

4. ACTION TO BE TAKEN

If this message is preceded by a REPT:TROUBLE output message associated with the RA machine, repair the channel and restore it to service.

Otherwise no action is required.

5. REFERENCES

PIDENT
SVCTRAMP

Practice 201-520-101, *Common Systems Recorded Announcement Frame (CSRAF) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

Practice 201-520-301, *Common Systems Recorded Announcement Frame (CSRAF) - Operating Procedures*

Practice 201-520-501, *Common Systems Recorded Announcement Frame (CSRAF) - Tests and Trouble Analysis*

Practice 201-520-701, *Common Systems Recorded Announcement Frame (CSRAF) - Requirements and Adjusting Procedures*

Practice 234-110-090, *Recorded Announcement Frame - Description*

Practice 234-110-091, *Recorded Announcement Frame - Theory*

Practice 234-180-242, *Service Circuit Test Program (SVCT) - Description*

Input Message

RMV:RA

Output Message

REPT:TROUBLE

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RMV:SCLK
WORK CENTER.. MAC, MOC, NMOC, TEC,
 TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RMV:SCLK 0 a b

2. REASON FOR OUTPUT

To respond to a system clock (SCLK) remove stimulus that can be from an automatic, manual, or teletypewriter (TTY) stimulus.

3. VARIABLE FIELD DEFINITIONS

a Subunit type and submember number:

 CONTR — Controller (0 - 1).

 IPUB — Interface peripheral unit bus (0 - 1).

 NCSU — Network clock synchronization unit (0).

 REF — (0 or 1).

b Disposition of input stimulus:

 COMPL

 NOT STARTED FAC BUSY RETRY LATER

 STOPPED ACT MAIN: DO NOT RMV PWR

 STOPPED ACT MAIN: MATE OOS

 STOPPED INVALID UNIT OR SUBUNIT

4. ACTION TO BE TAKEN

If the disposition of the request is:

 NOT STARTED FAC BUSY RETRY LATER, the scan point acknowledgement
 table was full. Try the request later.

Otherwise, take corrective action, if required, according to text phrases.

5. REFERENCES

PIDENTs
FRDIMREQ
MIRA

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Message
RMV:SCLK

SEE PROPRIETARY NOTICE ON COVER PAGE

1. FORMAT

2. REASON FOR OUTPUT

3. VARIABLE FIELD DEFINITIONS

- SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

If the disposition of the request is:

NOT STARTED FAC BUSY RETRY LATER, the scan point acknowledgement table was full. Try the request later.

STOPPED ATP MONITOR CALLS IN PROGRESS , try the request later when AT&T Trigger Platform (ATP) calls are complete.

STOPPED SCU DISK IN USE, a COPY: or INIT: operation is in progress. Try the request when the operation has completed or STOP: the operation and retry the request.

5. REFERENCES

PIDENTs
FRDIPRNT
MAINIPUB
SCSTOPEX
SCSTOPOP
SCUTOPEX
SCUTOPOP
TOPIC000

Input Messages
RMV:SCS
SET:TRKSTAT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RMV:SIGLK
WORK CENTER.. MOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RMV: SIGLK aabb c

2. REASON FOR OUTPUT

To respond to a RMV:SIGLK input request and report the disposition of the request when preceded by the manual request.

3. VARIABLE FIELD DEFINITIONS

- a A terminal grouping frame (TGR) number (00-15).
- b A terminal subunit number (00-15) within the terminal grouping frame.
- c Disposition of the request:
 - COMPLETED — The signaling link is removed from service.
 - COMPLETED — The signaling link is removed from the system (MAN OOS), or signaling has been removed from one of a pair of links.
 - COMPLETED MATE FAILED — An emergency restart condition has been encountered.
 - NG — No good.
 - STOPPED — Removal of the link will cause a loss of signaling capability, or mate link has failed and this link is needed by the system for signaling.
 - STOPPED FE REFUSAL — The far end will not allow removal of the link.
 - STOPPED MATE FAILED — The mate link has failed, and this link is needed by the system for signaling.
 - STOPPED, RETRY LATER — The link is in a transient state. Remove request cannot be handled at this time. Retry after one minute.

4. ACTION TO BE TAKEN

When received as a response to RMV:SIGLK input message, maintenance of the terminal may be performed if the remove is completed.

Any other reply indicates no action can be taken.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
CCISIOPR
CCISLSIO
CCISMNAC
CCISSLCN

Input Message
RMV:SIGLK

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RMV:SP
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RMV: SP a b c

2. REASON FOR OUTPUT

To report the results of a teletypewriter (TTY) remove or a power control switch (PCS) request to the signaling processor (SP).

3. VARIABLE FIELD DEFINITIONS

- a SP member number.
- b Subunit type and submember number:
 CONTR — Controller (0 - 1).
 IPUB — Interface peripheral unit bus (0 - 1).
 PPL — Pulse point left (0).
 PPR — Pulse point right (0).
- c Disposition of request.
 COMPL — Completed.
 NOT STARTED FAC BUSY RETRY LATER — The frame request was
 not started because the scan point acknowledgement table
 was full.
 STOPPED ACT MAIN: DO NOT RMV PWR — Other controller is
 out-of-service in response to power switch request.
 STOPPED ACT MAIN: MATE OOS — Other controller is
 out-of-service.
 STOPPED INVALID UNIT OR SUBUNIT — In growth or
 unequipped.

4. ACTION TO BE TAKEN

If the disposition of the request is:

NOT STARTED FAC BUSY RETRY LATER , try the request later.

Otherwise, no action is required.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENT
MCFWPEMO

Input Message
RMV:SP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RMV:SSD
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

RMV:SSD a b

2. REASON FOR OUTPUT

To report the results of a request to remove a scan and signal distributor (SSD) from service.

3. VARIABLE FIELD DEFINITIONS

a Member number of the SSD removed (0 or 1).
b Disposition of the request:
 ABORTED — The request was aborted due to a maintenance
 interrupt or interject.
 COMPLETED — The request was completed successfully.

4. ACTION TO BE TAKEN

If the disposition of the request is:

 ABORTED — Try again.
 COMPLETED — None.

5. REFERENCES

PIDENT
SSFRBASE

Input Message
RMV:SSD

SEE PROPRIETARY NOTICE ON COVER PAGE

1. FORMAT

2. REASON FOR OUTPUT

3. VARIABLE FIELD DEFINITIONS

4. ACTION TO BE TAKEN

Otherwise, take corrective action, if required, according to disposition of message.

RMV:TGR-1

5. REFERENCES

PIDENT
MCFWPEMO

Input Message
RMV:TGR

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RMV:TMSP
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RMV:TMS a b c

2. REASON FOR OUTPUT

To report the results of a teletypewriter (TTY) remove or a power control switch request to the time multiplexed switch (TMS).

3. VARIABLE FIELD DEFINITIONS

- a TMS member number (0-3).
- b Subunit type and submember number:
 CONTR — Controller (0 - 1).
 C0IPUB — (0 - 1).
 C1IPUB — (0 - 1).
- c Disposition of request:
 COMPL — Completed.
 NOT STARTED FAC BUSY RETRY LATER — The frame request was
 not started because the scan point acknowledgement table
 was full.
 STOPPED ACTIVE MAIN: DO NOT REMOVE POWER — Other
 controller is OOS response to power switch request.
 STOPPED ACTIVE MAIN: MATE OOS — Other controller is OOS.
 STOPPED ALR UNAVAIL FORCED — Other A link bus powered
 down.
 STOPPED INVALID UNIT OR SUBUNIT — In growth or
 unequipped.
 STOPPED OTHER TMSP CONTR OOS — Other half of time
 multiplexed switch pair (TMSP) network has out-of-service
 (OOS) member.

4. ACTION TO BE TAKEN

If the disposition of the request is:

NOT STARTED FAC BUSY RETRY LATER , try the request later.

Otherwise, no action is required.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENT
MCFWPEMO

Input Message
RMV:TMSP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RMV:TONE
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RMV:TONE a b CIN cdddd dd dd ddd ddd e MATE f

2. REASON FOR OUTPUT

To indicate when one of a duplicated pair of tone trunks from the ringing and tone (RT) plant or milliwatt supply has been removed from service.

3. VARIABLE FIELD DEFINITIONS

- a The type of tone trunk removed:
- | | |
|-------|--|
| AR | — Audible ringing tone. |
| BT60 | — Busy tone at 60 IPM (impulses per minute). |
| BT120 | — Reorder tone at 120 IPM. |
| MW | — Milliwatt tone. |
| TPT | — Test progress tone. |
- b The trunk of the duplicated pair (0 or 1).
- c, d Circuit identification name (CIN) of the tone trunk.
- e Disposition of the remove request:
- | | |
|-------------|--|
| COMPL | — Function has been completed. |
| NOT STARTED | — Function will not be performed. If the mate trunk is out of service, this message will not be honored. |
- f The state of the mate tone trunk:
- | | |
|-----|-------------------|
| ACT | — Active. |
| OOS | — Out-of-service. |

4. ACTION TO BE TAKEN

If the mate trunk is out-of-service, restore it by using the RST:TONE-MWF input message before removing the other trunk. This message may also be preceded by a REPT:TROUBLE output message on the RT, in which case the trouble must be repaired and the trunk restored.

5. REFERENCES

PIDENT
SVCTRTPP

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Message
RST:TONE-MWF

Output Message
REPT:TROUBLE

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RMV:TSI
WORK CENTER.. MAC, MOC, NMOC, TEC,
 TOC
GENERIC 4E21 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RMV: TSI a b c

2. REASON FOR OUTPUT

To report the results of a Teletypewriter (TTY) remove message, a TTY diagnostic message, or a power control switch request to the Time Slot Interchange (TSI).

3. VARIABLE FIELD DEFINITIONS

- a Time Slot Interchange Frame (TSIF) member number (0-63). Even numbers only.
- b Subunit type and submember number:
- ALC — (0-1).
- CONTR — Controller (0-1).
- IPUB — Interface peripheral unit bus (0-1).
- c Disposition of request:
- COMPL — Completed.
- NOT STARTED FAC BUSY RETRY LATER — The frame request was not started because the scan point acknowledgement table was full.
- STOPPED ACTIVE MAIN: DO NOT REMOVE POWER — Other controller is Out-Of-Service (OOS); response to power switch request.
- STOPPED ACTIVE MAIN: MATE OOS — Other controller is OOS.
- STOPPED DT CONTR OOS — A Digroup Terminal (DT) controller attached to mate is OOS.
- STOPPED INVALID UNIT OR SUBUNIT — In growth or unequipped.
- STOPPED VIF CONTR OOS — A Voiceband Interface Frame (VIF) controller attached to mate is OOS.

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

If the disposition of the request is:

NOT STARTED FAC BUSY RETRY LATER , try the request later.

Otherwise, no action is required.

5. REFERENCES

PIDENTs
MCFWPEMO
MIRA
PUCN01

Input Messages
RMV:TSI
RST:TSI

Output Message
RST:TSI

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1. FORMAT

2. REASON FOR OUTPUT

3. VARIABLE FIELD DEFINITIONS

4. ACTION TO BE TAKEN

Otherwise, no action is required.

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5. REFERENCES

PIDENT
MCFWPEMO

Input Message
RMV:VIF

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ID RMV:VSSID
WORK CENTER.. TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RMV:VSSID a, SID b; {SBY|ACT}
FAILURE REASON c

2. REASON FOR OUTPUT

To respond to the input message RMV:VSSID and explain why it was not acted upon.

3. VARIABLE FIELD DEFINITIONS

a	5-digit voice storage system (VSS) identification (VSSID).
b	7-digit service identification (SID).
SBY	Standby version of announcement.
ACT	Active version of announcement.
c	Reason for failure: ANN LOCKOUT — Announcement handling locked out. INVALID STE — Announcement state is not standby full. MISC ERROR — Audit problem, etc. NO ACT AUDIO — Audio does not exist for active version. NO SBY AUDIO — Audio does not exist for standby version.

4. ACTION TO BE TAKEN

Correct error before retrying the input message.

5. REFERENCES

PIDENTs
ANNHTTYM
TMAD0005

Input Message
RMV:VSSID

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RMV:XPWR
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

RMV:XPWR a b

2. REASON FOR OUTPUT

To report the results of a request to remove a miscellaneous power (XPWR) unit from service.

3. VARIABLE FIELD DEFINITIONS

- a Member number of the XPWR (0 or 1).
- b Disposition of the request:
- ABORTED — The request was aborted due to maintenance interrupt or interject.
- COMPLETED — The request was completed successfully
- STOPPED ACTIVE MAIN — The request was denied because the unit is providing essential service.
- STOPPED SSD OOS — The request was denied because either or both scan and signal distributors (SSDs) are out-of-service (OOS).

4. ACTION TO BE TAKEN

If the disposition of the remove request is:

STOPPED ACTIVE MAIN — Check the status of both units (see output message OP:XPWRSTAT) to determine further actions.

5. REFERENCES

Input Messages
DGN:XPWR
EX:XPWR
OP:XPWRSTAT
RMV:XPWR
RST:XPWR

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RMV:XTSI
WORK CENTER.. MAC, MOC, NMOC, TEC,
 TOC
GENERIC 4E24 Rel. 2 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RMV: XTSI a b c

2. REASON FOR OUTPUT

To report the results of a Teletypewriter (TTY) remove message, a TTY diagnostic message, or a power control switch request to the Expanded Time Slot Interchange (XTSI).

3. VARIABLE FIELD DEFINITIONS

- a XTSI frame member number (0-63). Even numbers only.
- b Subunit type and submember number:
- ALC — A-Link Controller (ALC) (0-1).
- CONTR — Controller (0-1).
- D3U — Digital Signal Level 3 Unit (D3U) subunit (0-7).
- IBU — In-Band Unit (IBU) subunit (0).
- IPUB — Interface Peripheral Unit Bus (IPUB) (0-1).
- SPU — Signal Processing Unit (SPU) subunit (0-11).
- c Disposition of request:
- COMPL — Completed.
- NOT STARTED FAC BUSY RETRY LATER — The frame request was not started because the scan point acknowledgement table was full.
- STOPPED ACTIVE MAIN: DO NOT REMOVE POWER — Other controller is Out-Of-Service (OOS); response to power switch request.
- STOPPED ACTIVE MAIN: MATE OOS — Other controller is OOS.
- STOPPED CHECK FAILURE — Defensive check failure. The system has detected a problem. This is not an office problem.
- STOPPED CONTR DUPLEX FAILED — Remove of D3U, SPU or IBU fails when frame is duplex failed.
- STOPPED DENIED ON SPARE — Spare D3U or SPU cannot be removed since it is protection switching an out-of-service D3U or SPU.

SEE PROPRIETARY NOTICE ON COVER PAGE

STOPPED INVALID UNIT OR SUBUNIT — In growth or
unequipped.

STOPPED IPUBS SIMPLEX — Mate IPUB is OOS.

STOPPED PUB SIMPLEX

STOPPED SERVICE CIRCUIT THRESHOLD EXCEEDED — IBU
cannot be removed from service since the 4ESSTM office service
circuit threshold is exceeded.

STOPPED SPARE NOT AVAILABLE — Non-spare D3U or SPU cannot
be removed from service since the spare is not available to
protection switch it.

STOPPED UNEQUIPPED — D3U, SPU or IBU is unequipped.

4. ACTION TO BE TAKEN

If the disposition of the request is:

NOT STARTED FAC BUSY RETRY LATER, try the request later.

STOPPED CHECK FAILURE, contact local technical support.

Otherwise, no action is required.

5. REFERENCES

PIDENTs
MAINIPUB
MCFWPEMO
MIRA
PSCTOPEX
PSCTOPMS
PSCTOPOP
PUCN01
TOPIC000
XTSTOPEX
XTSTOPMS
XTSTOPOP

Input Messages
RMV:XTSI
RST:XTSI

Output Message
RST:XTSI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RPT:DIF
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RPT:DIF a DIU b DG c DATA LINK [NO] RESPONSE

2. REASON FOR OUTPUT

To report a change in status of a facility data link via a Base Level Maintenance (BLM) report (octal 12).

NOTE: This BLM report is valid only for SM10 Digital Interface Units (DIUs).

3. VARIABLE FIELD DEFINITIONS

- a Digital Interface Frame (DIF) member number in decimal.
- b Digital Interface Unit (DIU) member number in decimal.
- c Digroup (DG) number in decimal.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
MEDICDIF

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RPT:XTSI-D3U
WORK CENTER.. MOC
GENERIC 4E21 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RPT:XTSI a D3U b DG c DATA LINK [N0] RESPONSE

2. REASON FOR OUTPUT

To report a change in status of a facility data link via a Maintenance Buffer (MB) report (octal 12).

3. VARIABLE FIELD DEFINITIONS

- a Expanded Time Slot Interchange (XTSI) member number in decimal.
- b Digital Signal Level 3 Unit (D3U) member number in decimal.
- c Digroup (DG) number in decimal.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
MEDICXTS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RST:API
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

RST:API a b

2. REASON FOR OUTPUT

To report the final disposition of the RST:API input request to restore to service the specified attached processor interface (API).

3. VARIABLE FIELD DEFINITIONS

a API member number (0-15).

b Disposition of the request:

COMPLETED — The request was successfully completed.

NOT STARTED FAC BUSY RETRY LATER — The frame request was not started because the scan point acknowledgement table was full.

STOPPED, 3B MESSAGE FAILURE— where:

MSG STATUS WORD - ab----ccccccddddd-efghi
MSG IDENT SENT - j
MSG IDENT REC - k
MSG DATA WORD 1 - l
MSG DATA WORD 2 - m

a — Member number is for this attached processor system (APS) failed to configure on the 3B side.

b — Member number 0 for this APS failed to configure on the 3B side.

c — Number if message received from the 3B computer.

d — Number of the message sent to the 3B computer.

e — A message number mismatch has been detected.

f — API-START field in message header shows a failure.

g — An identification mismatch has been detected.

h — An acknowledgement message has been received from the 3B computer.

i — The acknowledgement message checks out OK.

SEE PROPRIETARY NOTICE ON COVER PAGE

- j — The message identification sent to the 3B computer.
- k — The message identification received from the 3B computer.
- l — Data word is from the message body.
- m — Data word 2 from the message body.

STOPPED ACTIVE MAIN — The restoral was for an API that is currently active and cannot be removed.

STOPPED AU BUS OOS — The auxiliary unit bus which this API is connected to is out-of-service.

STOPPED, COMMAND SYSTEM FAILURE— where:

CMD SYSTEM STATUS - fggggghhiii--jklm----nn
API CMD ERROR WORD - p
SEQ ERROR (CMD REG) - q
TIMEOUT (CMD REG) - r
RETRY CNT (DECIMAL) - s
IP DATA AND IP CMD - tttttttuuuuuuuu

- f — Final timeout.
- g — Synchronous (SYNC) acknowledgment timeout count.
- h — Command acknowledge timeout count.
- i — Command to API error count.
- j — 3B computer had an error while trying to process the interprocessor command.
- k — A timeout error has occurred.
- l — A sequence violation has occurred during the command system protocol.
- m — A command to the API has failed.
- n — Present state of the command system.
- p — Code indicating the type of failure in the command to API routine.
- q — Contents of the command register when the sequence violation was detected.
- r — Contents of the command register when the timeout occurred.
- s — Number of retries in decimal.
- t — The inter-processor data being sent to the 3B processor.

SEE PROPRIETARY NOTICE ON COVER PAGE

u — The inter-processor commands (octal) being sent to the 3B computer:

- 200 — Null command.
- 202 — Sync command.
- 203 — Sync acknowledgement command.
- 204 — IP_CMD command acknowledgement.
- 205 — Reinitialize all COM_BUF resources (including in-service APIs).
- 206 — Configure API as specified.

STOPPED DUPLEX FAILED — Diagnostics are not available from the disk system. The unit has been removed.

STOPPED ERROR CODE x, — where x is:

- 100 — Failed to get buffer information from message handler.
- 103 — Failed, forced by request out of service (ROS) key.
- 104 — Failed, unit active main.
- 105 — Failed, bus out of service (OOS).
- 106 — Failed unit not in operation state.
- 107 — Unused.
- 115 — Loop around message not in receive buffer.
- 120 — Incorrect final status detected.
- 121 — The test message has failed.
- 122 — The command system has failed.
- 124 — Message handler failed to initialize communication buffer.
- 125 — No active API found for this APS.
- 126 — Active member number for this APS is not operational.
- 127 — Message handler failed to send message.
- 130 — Timeout waiting for message acknowledgment.
- 131 — Acknowledge message from 3B computer was no good.
- 132 — No active API in service.
- 133 — Status shows active-active state.

STOPPED ERROR CODE fffggg — where:

- fff — 101 — API command failure.
- 113 — API command timeout.
- 114 — API command never started processing.
- 117 — Cannot access command register in the API.
- ggg — Command send to the API for processing.
- 001 — MTC_BUF size (send and receive).
- 002 — Lower 16 bits of 1A send MTC_BUF.

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- 003 — Upper 16 bits of 1A send MTC_BUF.
- 004 — Lower 16 bits of 1A receive MTC_BUF.
- 005 — Upper 16 bits of 1A receive MTC_BUF.
- 010 — Copy my send MTC_BUF to other receive MTC_BUF.
- 012 — Send interrupt to other side.
- 020 — Disable PIC loop-around mode.
- 021 — Enable PIC loop-around mode.
- 023 — Enable all error checks.
- 031 — Write 16-bit API state word.
- 036 — Send 16-bit data to other processor.
- 037 — Receive 16-bit data from other processor.

STOPPED OOS DIAGNOSE — The diagnosis passed with no restoral as a result of a DGN: input message.

STOPPED OOS FAULT — The diagnosis, the deferred-fault recognition test associated with a restoral request, an automatic diagnosis, or automatic deferred-fault recognition test did not terminate with all tests pass.

STOPPED OOS REMOVED — The diagnosis passed, but the API had been manually removed from service and the diagnostic request was not a restoral request. Or, a growth unit was diagnosed.

STOPPED UNAVAILABLE FORCED — The request out-of-service (ROS) power control switch is NOT NORMAL on frame control panel.

4. ACTION TO BE TAKEN

- If b — COMPLETED, no action is needed.
- If b — NOT STARTED FAC BUSY RETRY LATER, retry the request later.
- If b — STOPPED, 3B MESSAGE FAILURE, further 3B testing should be attempted.
- If b — STOPPED ACTIVE MAIN, switch APIs if appropriate (SW:APS input message); then retry request.
- If b — STOPPED AU BUS OOS, restore the associated auxiliary unit bus (RST:AUB input message).
- If b — STOPPED, COMMAND SYSTEM FAILURE, further API testing is required.
- If b — STOPPED ERROR CODE x, further API testing is required.
- If b — STOPPED ERROR CODE fffggg, further API testing is required.

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If b — STOPPED DUPLEX FAILED, use the teletypewriter (TTY) requests.

If b — STOPPED OOS DIAGNOSE, restore via the RST:API input message from the TTY.

If b — STOPPED OOS FAULT, repair the indicated unit.

If b — STOPPED OOS REMOVED, restore via the RST:API x;UCL input message from the TTY.

If b — STOPPED UNAVAILABLE FORCED, normalize the API frame ROS key.

5. REFERENCES

PIDENTs
APFRBASE
MIRA

Practice 254-280-210, *Maintenance Control Program*

Input Messages
RST:API
RST:AUB
SW:APS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RST:AUB
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

RST: AUB a b

2. REASON FOR OUTPUT

To report the final disposition of a request to restore to service a specified auxiliary unit bus (AUB).

3. VARIABLE FIELD DEFINITIONS

a Auxiliary unit bus number.

b Disposition of the request:

ABORTED — The request was aborted because of a maintenance interrupt or interject, or diagnostics returned no tests run (NTR).

COMPLETED — The request was completed successfully.

STOPPED NO ACT AUI — The request was denied because neither auxiliary unit interface (AUI) is active.

STOPPED OOS DIAGNOSE — The diagnosis passed with no restoral as a result of the DGN:AUB input message.

STOPPED OOS FAULT — The diagnosis or deferred fault recognition tests associated with a restoral request did not terminate with all tests pass, or an automatic diagnosis or automatic deferred fault recognition test did not terminate with all tests pass.

STOPPED OOS TROUBLE ANALYSIS — The restore request was denied because of an AUB excessive error rate.

STOPPED UNAVAILABLE FORCED — The auxiliary unit bus specified is forced out-of-service from the master control complex (MCC).

4. ACTION TO BE TAKEN

If the disposition was:

ABORTED — then try again.

COMPLETED — then no action to be taken.

STOPPED OOS DIAGNOSE— then no action to be taken.

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STOPPED 00S FAULT— then repair unit.

STOPPED 00S TROUBLE ANALYSIS — then use the unconditional (UCL)
option in the RST:AUB input message.

STOPPED UNAVAILABLE FORCED — then try again.

5. REFERENCES

PIDENT
AUFRDFOR

Input Messages
DGN:AUB
RST:AUB

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RST:AUI
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

RST: AUI a b

2. REASON FOR OUTPUT

To report the final disposition of the RST:AUI request to restore to service the specified auxiliary unit interface (AUI).

3. VARIABLE FIELD DEFINITIONS

a AUI number (0 or 1).

b Disposition of the restore request:

ABORTED — The request was aborted because of a maintenance interrupt or interject, or diagnostics returned no tests run (NTR).

COMPLETED — The restore request completed successfully.

STOPPED ACTIVE MAIN — The restoral was for an AUI that is currently active and cannot be removed.

STOPPED DUPLEX FAILED — Diagnostics are not available from the disk system. The unit has been removed.

STOPPED GROWTH UNIT — The AUI to be restored is in a growth state.

STOPPED IFB OOS — The interface bus (IFB) to which this AUI is assigned is out-of-service.

STOPPED OOS DIAGNOSE — The diagnostic passed with no restoral requested as a result of a DGN:AUI input message.

STOPPED OOS FAULT — One of the following did not terminate with all tests passed (ATP):

- the diagnosis
- the deferred fault recognition test associated with a restoral request
- an automatic diagnosis
- an automatic deferred fault recognition test

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STOPPED 00S REMOVED — The diagnosis passed, but either:

- the AUI had been manually removed from service and the diagnostic request was not a restoral request, or
- the do not restore bit is set.

STOPPED 00S TROUBLE ANALYSIS — The restore request was denied because of AUI excessive error rate. Use the unconditional restore request.

STOPPED 00S UNIT — The AUI is not restorable because of the program configuration state.

4. ACTION TO BE TAKEN

If the disposition of the restore request (variable b) is:

COMPLETED — no action is needed.

STOPPED ACTIVE MAIN — switch AUIs if appropriate, and retry the request.

STOPPED DUPLEX FAILED — Stopped Duplex failed. Use the teletypewriter (TTY) requests.

STOPPED IFB 00S — restore the associated IFB via the (RST:IFB) input message.

STOPPED 00S DIAGNOSE — restore via the RST:AUI x input message from the TTY.

STOPPED 00S FAULT — repair the unit.

STOPPED 00S REMOVED — restore via the RST:AUI x input message from the TTY.

STOPPED 00S TROUBLE ANALYSIS — restore via the RST:AUI x;UCL input message from the TTY.

STOPPED 00S UNIT — change program configuration.

5. REFERENCES

PIDENT
AUFRBASE

Input Messages
DGN:AUI
RST:AUI
RST:IFB

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RST:CC
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

RST: CC a b

2. REASON FOR OUTPUT

To report the results of a request to restore a central control (CC) to service.

3. VARIABLE FIELD DEFINITIONS

- a Member number of CC requested to be restored.
- b Disposition of the request:
- ABORTED — The request was terminated abnormally because of a maintenance interrupt, abnormal diagnostic termination, etc.
- COMPLETED — The request was successfully completed.
- NOT STARTED FAC BUSY RETRY LATER — The frame request was not started because the scan point acknowledgement table was full.
- STOPPED ACTIVE MAIN — The CC specified in the request was the active unit, and it was already in service.
- STOPPED CCS WILL NOT RUN IN STEP — The central control (CCS) standby was not capable of running in step with the active CC (could not access standby, standby could not read/write its internal memory, match errors occurred while running duplex, etc).
- STOPPED DUPLEX FAILED — Diagnostics are not available from the disk system. The unit has been removed.
- STOPPED MOIA CC SW FAILED — The restore request was denied because an attempt to do a modified interrupt address (MOIA) CC switch failed during the CC routine exercise.
- STOPPED OOS DIAGNOSE — A restore was not attempted because a diagnosis (DGN) was requested.
- STOPPED OOS FAULT — The CC diagnosis or a deferred CC fault recognition test failed on a conditional CC restore request.

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- STOPPED OOS REMOVED — A prior teletypewriter (TTY) remove input message has not been followed by a TTY restore input message.
- STOPPED OOS TROUBLE ANALYSIS — The restore request was denied because of a previous CC excessive error rate (the only way the CC may be restored when this condition exists is via an unconditional TTY restore request).
- STOPPED REX REQ OOS UNIT — The restore request was terminated because the standby CC was out-of-service when the CC routine exercise began (routine exercises are only run on in-service units).
- STOPPED SOAK MOIA SW FAILED — The restore request was denied because an attempt to do a second modified interrupt address (MOIA) CC switch failed during the CC routine exercise.
- STOPPED UNAVAILABLE FORCED — The request out-of-service (ROS) power control switch is off normal.

4. ACTION TO BE TAKEN

- ABORTED — Try again.
- COMPLETED — None.
- NOT STARTED FAC BUSY RETRY LATER — Try again later.
- STOPPED ACTIVE MAIN — None.
- STOPPED CCS WILL NOT RUN IN STEP — Use a diagnose to analyze the trouble.
- STOPPED DUPLEX FAILED — Use the TTY requests.
- STOPPED OOS DIAGNOSE — None.
- STOPPED OOS FAULT — Repair unit.
- STOPPED OOS REMOVED — Restore via TTY.
- STOPPED OOS TROUBLE ANALYSIS — Use the interrupt messages to analyze the trouble.
- STOPPED REX REQ OOS UNIT — Try again.
- STOPPED UNAVAILABLE FORCED — Check frame power switch.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
CCFRMAIN
CCFRTEST

Input Messages
RMV:CC
RST:CC

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RST:CS
WORK CENTER.. MOC
GENERIC 4E20 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

RST: CS a b

2. REASON FOR OUTPUT

There are two possible reasons for the output of this message:

To report the final disposition of a RST:CS input request to restore a call store (CS) to service.

To report acceptance or denial of a master control complex (MCC) request to restore a CS to service. A message reporting the final disposition of the restore will print later.

3. VARIABLE FIELD DEFINITIONS

- a Call store member number (0-39).
- b Disposition of the request:
- ABORTED — The request was terminated abnormally, probably because of an interrupt.
- COMPLETED REMOVE DENIED — The unit could not be removed from service to begin the restoral process, but it is now in service.
- MCODE c COMPLETED — The request was completed normally, where c = MCODE of the CS.
- NOT STARTED FAC BUSY RETRY LATER — The frame request was not started because the scan point acknowledgement table was full.
- REQUEST ACCEPTED — The MCC request has been accepted and the maintenance job has been scheduled.
- REQUEST DENIED - DISK ACCESS DUPLEX FAILED — The MCC request has been denied because diagnostic paging was not available.
- REQUEST DENIED - FAC BUSY RETRY LATER — The MCC request has been denied because the job queue was full.
- REQUEST DENIED - GROWTH UNIT — The MCC request has been denied because the member number was in the growth state.

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REQUEST DENIED - INVALID MEMBER NUMBER — The MCC request has been denied because the member number (MEMN) was invalid.

REQUEST DENIED - UNEQ UNIT — The MCC request has been denied because the member number was unequipped.

STOPPED ABORTED — The diagnostic was abnormally terminated.

STOPPED DGN REQ — Request was for a diagnostic without restoral.

STOPPED DUPLEX FAILED — Diagnostics are not available from the disk system. The unit has been removed.

STOPPED FORCED OOS — The request was for a store forced out during repeated processor configuration (PC), and the request will not be allowed until possible faults are cleared.

STOPPED FROZEN — A store is frozen.

STOPPED MCODE ALREADY DUPLICATED — An attempt has been made to restore a unit whose normal MCODE is already duplicated.

STOPPED OOS FAULT — The diagnosis failed.

STOPPED OOS REMOVED — A manual remove input message has not been followed by a manual restore input message.

STOPPED OOS TROUBLE ANALYSIS — The unit was diagnosed as the result of an interrupt. It is not being restored even though the diagnosis passed, because it has experienced an excessive interrupt rate.

STOPPED UNAVAILABLE FORCED — The request out-of-service (ROS) power control switch is off normal.

4. ACTION TO BE TAKEN

If the disposition of the request is:

ABORTED — then try again.

COMPLETED REMOVE DENIED — then reconfigure the system before trying again.

MCODE c COMPLETED — then take no action.

NOT STARTED FAC BUSY RETRY LATER — then try again later.

REQUEST ACCEPTED — then wait for final disposition message.

REQUEST DENIED - DISK ACCESS DUPLEX FAILED — then resolve the problem with diagnostic paging and try again.

REQUEST DENIED - FAC BUSY RETRY LATER — then try again later.

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REQUEST DENIED - GROWTH UNIT — then verify the member number (MEMN). If the member number was wrong, try again with the correct number. If the member number was correct, change the state of the store to operational and try again. (Units in the growth state cannot be restored.)

REQUEST DENIED - INVALID MEMBER NUMBER — then verify the member number (MEMN) and try again.

REQUEST DENIED - UNEQ UNIT — then verify the member number (MEMN) and try again.

STOPPED ABORTED — then try again.

STOPPED DGN REQ — and the unit passed the diagnostic, restore it. Otherwise locate and repair the problem.

STOPPED DUPLEX FAILED — then resolve the problem with diagnostic paging and try again.

STOPPED FORCED 00S — then a restore is only permitted by a frame request. If recovery actions occur due to a frame request, immediately power down the store. The store is suspected of babbling on both buses and may require the replacement of all memory packs.

STOPPED FROZEN — then conditionally restore the frozen store before requesting any other restore.

STOPPED INVALID — then use the SET:CS input message to normalize the MCODE assignment.

STOPPED MCODE ALREADY DUPLICATED — then use the SET:CS input message to normalize the MCODE assignment.

STOPPED 00S FAULT — then repair the unit.

STOPPED 00S REMOVED — then restore via manual input message.

STOPPED 00S TROUBLE ANALYSIS — then use the interrupt messages to analyze the trouble and/or use demand diagnostic phases to localize the trouble.

STOPPED UNAVAILABLE FORCED — then check frame power switch.

5. REFERENCES

PIDENTs
MIRA
CSFRBSLV
CSFRILEV
CSFRPS0

Practice 254-280-210, *Maintenance Control Program*

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Messages

RMV:CS

RST:CS

SET:CS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RST:CSB
WORK CENTER.. MOC
GENERIC 4E20 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

RST: CSB a b

2. REASON FOR OUTPUT

There are two possible reasons for the output of this message:

To report the final disposition of a RST:CSB input request to restore a call store bus (CSB) to service.

To report acceptance or denial of a master control complex (MCC) request to restore a CSB to service. A message reporting the final disposition of the restore will print later.

3. VARIABLE FIELD DEFINITIONS

- a Call store bus member number (0 or 1).
- b Disposition of the request:
- ABORTED — The request was terminated abnormally, probably because of an interrupt.
- COMPLETED — Call store bus is successfully restored to service.
- COMPLETED REMOVE DENIED — The unit could not be removed from service to begin the restoral process, but it is now in service.
- NOT STARTED FAC BUSY RETRY LATER — The frame request was not started because the scan point acknowledgement table was full.
- REQUEST ACCEPTED — The MCC request has been accepted and the maintenance job has been scheduled.
- REQUEST DENIED - DISK ACCESS DUPLEX FAILED — The MCC request has been denied because diagnostic paging was not available.
- REQUEST DENIED - FAC BUSY RETRY LATER — The MCC request has been denied because the job queue was full.
- REQUEST DENIED - GROWTH UNIT — The MCC request has been denied because the member number was in the growth state.

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REQUEST DENIED - INVALID MEMBER NUMBER — The MCC request has been denied because the member number (MEMN) was invalid.

REQUEST DENIED - UNEQ UNIT — The MCC request has been denied because the member number was unequipped.

STOPPED ABORTED — The diagnostic was abnormally terminated.

STOPPED DGN REQ — Request was for a diagnostic without restoral.

STOPPED DUPLEX FAILED — Diagnostics are not available from the disk system. The unit has been removed.

STOPPED FROZEN — The bus could not be removed because of a frozen store.

STOPPED OOS FAULT — The diagnosis failed.

STOPPED OOS REMOVED — A manual remove input message has not been followed by a manual restore input message.

STOPPED UNAVAILABLE FORCED — The request out-of-service (ROS) power control switch is off normal.

4. ACTION TO BE TAKEN

If the disposition of the request is:

ABORTED — then retry the request.

COMPLETED — then take no action.

COMPLETED REMOVE DENIED — then reconfigure the system before trying again.

NOT STARTED FAC BUSY RETRY LATER — then retry the request later.

REQUEST ACCEPTED — then wait for final disposition message.

REQUEST DENIED - DISK ACCESS DUPLEX FAILED — then resolve the problem with diagnostic paging and try again.

REQUEST DENIED - FAC BUSY RETRY LATER — then try again later.

REQUEST DENIED - GROWTH UNIT — then verify the member number (MEMN). If the member number was wrong, try again with the correct number. If the member number was correct, change the state of the store to operational and try again. (Units in the growth state cannot be restored.)

REQUEST DENIED - INVALID MEMBER NUMBER — then verify the member number (MEMN) and try again.

REQUEST DENIED - UNEQ UNIT — then verify the member number (MEMN) and try again.

STOPPED ABORTED — then retry the request.

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STOPPED DGN REQ — and the unit passed the diagnostic, restore it. Otherwise locate and repair the problem.

STOPPED DUPLEX FAILED — then resolve the problem with diagnostic paging and try again.

STOPPED FROZEN — then conditionally restore the frozen store before requesting any other restore.

STOPPED OOS FAULT — then repair the unit. See diagnostic results.

STOPPED OOS REMOVED — then restore via manual input message.

STOPPED UNAVAILABLE FORCED — then check the frame power switch.

5. REFERENCES

PIDENTs
MIRA
CSFRPS0
CSFRBSLV

Practice 254-280-210, *Maintenance Control Program*

Input Messages
RMV:CSB
RST:CSB

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RST:DIF
WORK CENTER.. MOC
GENERIC 4E19 Rel. 3 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RST:DIF a, b c d
[e f g
. . .
. . .
. . .]

2. REASON FOR OUTPUT

Results from a manual Teletypewriter (TTY) or power control switch restore or a DGN:DIF input message request.

3. VARIABLE FIELD DEFINITIONS

- a Digital Interface Frame (DIF) member number (0-31).
- b Subunit type:
CONTR — Controller (0 - 1).
DIU Digital interface unit (0 - 33).
IPUB — Interface peripheral unit bus (0 - 1).
- c Subunit member number.
- d Disposition of request:
ABORTED INITIALIZATION FAILURE
ABORTED PROTECTION SWITCH MACRO FAILURE
COMPL — Completed.
NOT STARTED FAC BUSY RETRY LATER
PUMPING OLD FIRMWARE VERSION (LATEST VERSION IS xxxxxxxxx)
SCHEDULE COMPLETE
SCHEDULE IN PROGRESS
STOPPED CONTR DUPLEX FAILED
STOPPED DUPLEX FAILED — Diagnostics are not available from the disk system. The unit has been removed.
STOPPED INVALID UNIT OR SUBUNIT
STOPPED OS DGN — TTY diagnose request.

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- STOPPED OS FAULT — Diagnostic Some Tests Failed (STF).
- STOPPED OS RMVD — Power Control Switch (PCS) only, TTY removed.
- STOPPED OS TBL ANAL — Error analysis.
- STOPPED SUBUNIT NOT SWITCHED
- STOPPED TSI DUPLEX FAILED — Digital Interface Unit (DIU) only.
- STOPPED IPUBS OS — Restore from duplex fail.
- STOPPED UNAVAIL FORCED
- STOPPED UNIT OR SUBUNIT IN GROWTH
- e Subunit type:
- CONTR — Controller (0 - 1).
- DIU Digital interface unit (0 - 33).
- IPUB — Interface peripheral unit bus (0 - 1).
- f Subunit member range.
- g Bit configuration showing the subunits that are restored (in octal).

4. ACTION TO BE TAKEN

If disposition of the request is:

NOT STARTED FAC BUSY RETRY LATER, the frame request was not started because the scan point acknowledgement table was full. Retry the request later.

PUMPING OLD FIRMWARE VERSION (LATEST VERSION IS xxxxxxxx), a discrepancy has been found in the latest firmware version table (located in PIDENT DIFTOPMS) and the present word 60 (octal) in the DIF translator. The word 60 (octal) firmware version is considered old and should match the latest version. Check with support organization for appropriate action.

STOPPED DUPLEX FAILED, use the TTY requests.

Otherwise, no action is required.

5. REFERENCES

PIDENTs
DIFRCNFG
DIFRUNFG
DIFTOPMS
DZFRSUBS

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Messages
DGN:DIF
RST:DIF

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

If disposition of the request is:

NOT STARTED FAC BUSY RETRY LATER, the frame request was not started because the scan point acknowledgement table was full. Retry the request later.

STOPPED DUPLEX FAILED, use the TTY requests.

Otherwise, no action is required.

5. REFERENCES

PIDENTs
MIRA
MCFWDT

Input Messages
DGN:DT
RST:DT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RST:IFB
WORK CENTER.. MOC
GENERIC 4E20 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

RST:IFB a b

2. REASON FOR OUTPUT

To report the results of a request to restore an Interface Bus (IFB) to service.

3. VARIABLE FIELD DEFINITIONS

a Member number of IFB requested to be restored.

b Disposition of the request:

COMPLETED — The request was successfully completed.

NOTE: When diagnostics on an active IFB fails, the IFB will be restored to active status. Refer to the output message DGN:IFB in the Action To Be Taken section, for additional information.

STOPPED ABORTED — The request was terminated abnormally because of a maintenance interrupt, diagnostics returned No Tests Run (NTR) or a STOP:MACLI input message.

STOPPED DUPLEX FAILED — Diagnostics are not available from the disk system. The unit has been removed.

STOPPED OOS DIAGNOSE — A restore was not attempted because a Diagnosis (DGN) was requested on an Out Of Service (OOS) IFB.

STOPPED OOS FAULT — The IFB diagnosis or a deferred IFB fault recognition test failed on a conditional IFB restore request.

STOPPED OOS REMOVED — A prior Teletypewriter (TTY) remove input message has not been followed by a TTY restore input message. The do not restore indicator was set.

STOPPED OOS TROUBLE ANALYSIS — The restore request was denied because of a previous IFB excessive error rate (the only way the IFB may be restored when this condition exists is via an unconditional TTY restore request).

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

If variable b is:

COMPLETED — None.

STOPPED ABORTED — Try again.

STOPPED DUPLEX FAILED — Use the TTY requests.

STOPPED 00S DIAGNOSE — None.

STOPPED 00S FAULT — Repair unit.

STOPPED 00S REMOVED — Restore via TTY.

STOPPED 00S TROUBLE ANALYSIS — Use the interrupt messages to analyze the trouble.

5. REFERENCES

PIDENTs
IFFRBASE
IFFRTEST

Input Messages
RMV:IFB
RST:IFB
STOP:MACLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RST:IOUS
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

RST: IOUS a [b] c

2. REASON FOR OUTPUT

To report the results of a request to restore a input/output unit selector (IOUS) to service.

3. VARIABLE FIELD DEFINITIONS

- a Member number of the IOUS (0-7).
- b If present, subunit type and submember number:
- IOMP — I/O microprocessor (0 - 1).
- IOUC — I/O unit controller (0 - 15).
- IPUB — Interface peripheral unit bus (0 - 1).
- c Disposition of restore:
- ABORTED — Restore aborted and unit left out-of-service (OOS) because of interrupt or manual action.
- COMPLETED — Unit restored to service.
- NOT STARTED FAC BUSY RETRY LATER — The frame request was not started because the scan point acknowledgement table was full.
- STOPPED DUPLEX FAILED — Diagnostics are not available from the disk system. The unit has been removed.
- STOPPED INVALID UNIT OR SUBUNIT — Member number, subunit type, or submember number invalid.
- STOPPED IOUS OOS SUBUNIT — cannot be restored if input/output unit selector (IOUS) is OOS.
- STOPPED OOS DIAGNOSE — Unit not restored because only diagnostic was requested.
- STOPPED OOS FAULT — Unit failed diagnosis.
- STOPPED OOS REMOVED — Unit cannot be restored from frame because it was removed from teletypewriter (TTY).
- STOPPED UNAVAILABLE FORCED — Unit frame control switch is off normal.

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

If restore is stopped, correct source of trouble and attempt to restore again.

5. REFERENCES

PIDENTs
DCONMAIN
MIRA
PFLROGNH
PFLRPUDC
PFLRPUSB
PFLRRRCR

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RST:MFS
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RST:MFS a b COMPL MATE c

2. REASON FOR OUTPUT

To indicate that common tone supply (CTS) has been restored to service.

3. VARIABLE FIELD DEFINITIONS

- a Multi-frequency (MF) frame member number (0-31).
- b Tone supply identification:
- CTS A — Common tone supply A in the MF frame.
- CTS B — Common tone supply B in the MF frame.
- c State of the mate:
- ACT — Active.
- OOS — Out-of-service.

4. ACTION TO BE TAKEN

If any MF transmitters were removed from service prior to this RST:MFS output message, guarantee that the transmitters will also be restored.

5. REFERENCES

PIDENT
SVCTMFS

Practice 234-110-101, *Multi-frequency Signaling Frame - Theory*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RST:MUP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

RST: MUP a b

2. REASON FOR OUTPUT

To report the final disposition of the RST:MUP request to restore to service the specified Master Control Complex (MCC) and Utility Processor (MUP).

3. VARIABLE FIELD DEFINITIONS

a MUP number (0-1).

b Disposition of the restore request:

ABORTED — The request was aborted because of a maintenance interject/interrupt, a STOP:MACLI input message or diagnostics returned No Tests Run (NTR).

COMPLETED — The restore request completed successfully.

STOPPED ACTIVE MAIN — The restoral was for a MUP that is currently active.

STOPPED DUPLEXED FAILED — Diagnostics are not available from the disk system. The unit has been removed.

STOPPED ERROR CODE n , where the value of n is:

1 — Automatic diagnostics stopped due to MUP active in hardware. Only manual diagnostics requests allowed on hardware active MUPs.

STOPPED FORCED OOS — The MUP processor has been forced inactive.

STOPPED IFB OOS — The Interface Bus (IFB) to which this MUP is assigned is out-of-service.

STOPPED OOS DIAGNOSE — The diagnostic passed with no restoral as a result of a DGN:MUP input message.

STOPPED OOS FAULT — One of the following did not terminate with All Tests Passed (ATP):

- the diagnosis
- the deferred fault recognition test associated with a restoral request

SEE PROPRIETARY NOTICE ON COVER PAGE

- an automatic diagnosis
- an automatic deferred fault recognition test

STOPPED OOS REMOVED — The diagnostic passed, but the MUP had been manually removed from service and the diagnostic request was not a Teletypewriter (TTY) restoral request.

STOPPED OOS TROUBLE ANALYSIS — The MUP was not restored because an error threshold was reached.

STOPPED RESTORE FAILED — The MUP encountered errors during the restoral process.

STOPPED UNAVAILABLE FORCED — The MUP cannot be restored due to the Request Out-Of-Service (ROS) switch.

4. ACTION TO BE TAKEN

If the disposition of the restore request is:

ABORTED — then try again.

COMPLETED — then no action is needed.

STOPPED ACTIVE MAIN — then switch MUPs if appropriate, and retry the request.

STOPPED DUPLEXED FAILED — Use Teletypewriter (TTY) requests to restore duplex failed unit, then restore MUP.

STOPPED FORCED OOS — then, if appropriate, take the force off and try again.

STOPPED IFB OOS — then restore the associated IFB (RST:IFB input message).

STOPPED OOS DIAGNOSE — then restore via RST:MUP input message.

STOPPED OOS FAULT — then repair the unit.

STOPPED OOS REMOVED — then restore via RST:MUP input message.

STOPPED OOS TROUBLE ANALYSIS — then repair the unit.

STOPPED RESTORE FAILED — then retry RST:MUP input message.

STOPPED UNAVAILABLE FORCED — then toggle the ROS switch and try again.

5. REFERENCES

PIDENT
MCFRBASE

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Messages

DGN:MUP
RMV:MUP
RST:IFB
RST:MUP
STOP:MACLI
TEST:MUP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RST:NCLK
WORK CENTER.. MAC, MOC, NMOC, TEC,
 TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RST:NCLK 0 CHAIN a b

2. REASON FOR OUTPUT

To respond to a network clock (NCLK) restore request from an automatic, manual, or teletypewriter (TTY) stimulus.

3. VARIABLE FIELD DEFINITIONS

a Chain (0-3).

b Disposition of input request:

 COMPL — Restore completed.

 NOT STARTED FAC BUSY RETRY LATER — The frame request was not started because the scan point acknowledgement table was full.

 STOPPED DUPLEX FAILED — Diagnostics are not available from the disk system. The unit has been removed.

 STOPPED OOS DGN — TTY diagnostic request.

 STOPPED OOS FAULT — Diagnostic some tests failed (STF).

 STOPPED OOS TBC ANAL — Error analysis.

 STOPPED UNAVAILABLE FORCED — The request out of service (ROS) (power control) switch is off normal. Check frame power switch.

 STOPPED UPDATE FAILURE — Restoral unsuccessful.

4. ACTION TO BE TAKEN

If disposition of the request is:

NOT STARTED FAC BUSY RETRY LATER , retry the request later.

STOPPED DUPLEX FAILED , use the TTY requests.

STOPPED UPDATE FAILURE , the chain being restored was found to contain one or more error indicators set. Run diagnostics to resolve the problem, or request a dump (DUMP:NCLK 0,CREG!). When the UPDATE FAILURE occurs, the hardware is left in the failed state. The dump can be used to analyze the failure. After the dump is taken, a remove of the failing chain should be requested.

SEE PROPRIETARY NOTICE ON COVER PAGE

Otherwise, take corrective action if required, according to text phrases.

5. REFERENCES

PIDENTs
FRDIMREQ
MIRA

Input Messages
DGN:NCLK
DUMP:NCLK
RST:NCLK

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RST:PCD
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

RST:PCD a b c

2. REASON FOR OUTPUT

To report the results of a request to restore a power control distribution (PCD) to service.

3. VARIABLE FIELD DEFINITIONS

- a Member number of the PCD (0 or 1).
- b Subunit:
CONV
DAMON
- c Disposition of the request:
COMPLETED — Unit was successfully restored.
NOT STARTED FAC BUSY RETRY LATER — The frame request was not started because the scan point acknowledgement table was full.
STOPPED DUPLEX FAILED — Diagnostics are not available from the disk system. The unit has been removed.
STOPPED INVALID — Invalid converter specified with restore request.
STOPPED OOS FAULT — The diagnosis was some tests failed (STF).
STOPPED UNAVAILABLE FORCED — The unit power control switch is not normal.

4. ACTION TO BE TAKEN

If the disposition of the request is:

- COMPLETED — None.
- NOT STARTED FAC BUSY RETRY LATER — Retry the request later.
- STOPPED DUPLEX FAILED — Use the teletypewriter (TTY) requests.
- STOPPED INVALID — Reenter request.
- STOPPED OOS FAULT — Determine the probable cause of failure and find and repair the faulty unit.

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STOPPED UNAVAILABLE FORCED — The unit power control switch request out-of-service (ROS) is off normal.

5. REFERENCES

PIDENTs
DCONMAIN
MIRA
PDFR

Practice 254-280-210, *Maintenance Control Program*

Input Messages
DGN:PCD
RST:PCD

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RST:PS
WORK CENTER.. MOC
GENERIC 4E20 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

RST:PS a b

2. REASON FOR OUTPUT

There are two possible reasons for the output of this message:

To report the final disposition of a RST:PS input request to restore a program store (PS) to service.

To report acceptance or denial of a master control complex (MCC) request to restore a PS to service. A message reporting the final disposition of the restore will print later.

3. VARIABLE FIELD DEFINITIONS

- a Program store member number (0-13).
- b Disposition of the request:
- ABORTED — The request was abnormally terminated, probably because of an interrupt.
- COMPLETED REMOVE DENIED — The unit could not be removed from service to begin the restoral process, but it is now in service.
- MCODE c COMPLETED — PS was successfully restored to service, where c is the MCODE of the PS.
- NOT STARTED FAC BUSY RETRY LATER — The frame request was not started because the scan point acknowledgement table was full.
- REQUEST ACCEPTED — The MCC request has been accepted and the maintenance job has been scheduled.
- REQUEST DENIED - DISK ACCESS DUPLEX FAILED — The MCC request has been denied because diagnostic paging was not available.
- REQUEST DENIED - FAC BUSY RETRY LATER — The MCC request has been denied because the job queue was full.
- REQUEST DENIED - GROWTH UNIT — The MCC request has been denied because the member number was in the growth state.

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REQUEST DENIED - INVALID MEMBER NUMBER — The MCC request has been denied because the member number (MEMN) was invalid.

REQUEST DENIED - UNEQ UNIT — The MCC request has been denied because the member number was unequipped.

STOPPED ABORTED — The diagnostic was abnormally terminated.

STOPPED DGN REQ — Request was for a diagnostic without restoral.

STOPPED DUPLEX FAILED — Diagnostics are not available from the disk system. The unit has been removed.

STOPPED FORCED OOS — The request was for a store forced out during repeated processor configuration (PC), and the request will not be allowed until possible faults are cleared.

STOPPED FROZEN — A store is frozen.

STOPPED MCODE ALREADY DUPLICATED — An attempt has been made to restore a unit whose normal MCODE is already duplicated.

STOPPED OOS FAULT — The diagnosis failed.

STOPPED OOS REMOVED — A manual remove input message has not been followed by a manual restore input message.

STOPPED OOS TROUBLE ANALYSIS — The unit was diagnosed as the result of an interrupt. It is not being restored even though the diagnosis passed because it has experienced an excessive interrupt rate.

STOPPED UNAVAILABLE FORCED — The request out-of-service (ROS) power control switch is off normal.

4. ACTION TO BE TAKEN

If the disposition of the request is:

ABORTED — then retry the request.

COMPLETED REMOVE DENIED — then reconfigure the system before trying again.

MCODE c COMPLETED — then take no action.

NOT STARTED FAC BUSY RETRY LATER — then retry the request later.

REQUEST ACCEPTED — then wait for final disposition message.

REQUEST DENIED - DISK ACCESS DUPLEX FAILED — then resolve the problem with diagnostic paging and try again.

REQUEST DENIED - FAC BUSY RETRY LATER — then try again later.

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REQUEST DENIED - GROWTH UNIT — then verify the member number (MEMN). If the member number was wrong, try again with the correct number. If the member number was correct, change the state of the store to operational and try again. (Units in the growth state cannot be restored.)

REQUEST DENIED - INVALID MEMBER NUMBER — then verify the member number (MEMN) and try again.

REQUEST DENIED - UNEQ UNIT — then verify the member number (MEMN) and try again.

STOPPED ABORTED — then retry the request.

STOPPED DGN REQ — and the unit passed the diagnostic, restore it. Otherwise locate and repair the problem.

STOPPED DUPLEX FAILED — then resolve the problem with diagnostic paging and try again.

STOPPED FORCED 00S — then a restore is only permitted by a frame request. If recovery actions occur due to a frame request, immediately power down the store. The store is suspected of babbling on both buses and may require the replacement of all memory packs.

STOPPED FROZEN — then conditionally restore the frozen store before requesting any other restore.

STOPPED INVALID — then use the SET:PS input message to normalize the MCODE assignments.

STOPPED MCODE ALREADY DUPLICATED — then use the SET:PS input message to normalize the MCODE assignments.

STOPPED 00S FAULT — then repair the unit.

STOPPED 00S REMOVED — then restore via manual input message.

STOPPED 00S TROUBLE ANALYSIS — then use interrupt messages to analyze the trouble and/or use demand diagnostic phases to localize the trouble.

STOPPED UNAVAILABLE FORCED — then check frame power switch.

5. REFERENCES

PIDENTs
MIRA
PSFRBSLV
PSFRPSPG

Practice 254-280-210, *Maintenance Control Program*

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Input Messages

RMV:PS

RST:PS

SET:PS

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ID RST:PSB
WORK CENTER.. MOC
GENERIC 4E20 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

RST:PSB a b

2. REASON FOR OUTPUT

There are two possible reasons for the output of this message:

To report the final disposition of a RST:PSB input request to restore a program store bus (PSB) to service.

To report acceptance or denial of a master control complex (MCC) request to restore a PS to service. A message reporting the final disposition of the restore will print later.

3. VARIABLE FIELD DEFINITIONS

- a Program store bus member number (0 or 1).
- b Disposition of the request:
- ABORTED — The request was terminated abnormally, probably because of an interrupt.
- COMPLETED — Program store bus was successfully restored to service.
- COMPLETED REMOVE DENIED — The unit could not be removed from service to begin the restoral process, but it is now in service.
- NOT STARTED FAC BUSY RETRY LATER — The frame request was not started because the scan point acknowledgement table was full.
- REQUEST ACCEPTED — The MCC request has been accepted and the maintenance job has been scheduled.
- REQUEST DENIED - DISK ACCESS DUPLEX FAILED — The MCC request has been denied because diagnostic paging was not available.
- REQUEST DENIED - FAC BUSY RETRY LATER — The MCC request has been denied because the job queue was full.
- REQUEST DENIED - GROWTH UNIT — The MCC request has been denied because the member number was in the growth state.

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REQUEST DENIED - INVALID MEMBER NUMBER — The MCC request has been denied because the member number (MEMN) was invalid.

REQUEST DENIED - UNEQ UNIT — The MCC request has been denied because the member number was unequipped.

STOPPED ABORTED — The diagnostic was abnormally terminated.

STOPPED DGN REQ — Request was for a diagnostic without restoral.

STOPPED DUPLEX FAILED — Diagnostics are not available from the disk system. The unit has been removed.

STOPPED FROZEN — The bus could not be removed because of a frozen store.

STOPPED OOS FAULT — The diagnosis failed.

STOPPED OOS REMOVED — A manual remove input message has not been followed by a manual restore input message.

STOPPED UNAVAILABLE FORCED — The request out-of-service (ROS) power control switch is off normal.

4. ACTION TO BE TAKEN

If the disposition of the request is:

ABORTED — then retry the request.

COMPLETED — then take no action.

COMPLETED REMOVE DENIED — then reconfigure the system before trying again.

NOT STARTED FAC BUSY RETRY LATER — then retry the request later.

REQUEST ACCEPTED — then wait for final disposition message.

REQUEST DENIED - DISK ACCESS DUPLEX FAILED — then resolve the problem with diagnostic paging and try again.

REQUEST DENIED - FAC BUSY RETRY LATER — then try again later.

REQUEST DENIED - GROWTH UNIT — then verify the member number (MEMN). If the member number was wrong, try again with the correct number. If the member number was correct, change the state of the store to operational and try again. (Units in the growth state cannot be restored.)

REQUEST DENIED - INVALID MEMBER NUMBER — then verify the member number (MEMN) and try again.

REQUEST DENIED - UNEQ UNIT — then verify the member number (MEMN) and try again.

STOPPED ABORTED — then retry the request.

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STOPPED DGN REQ — and the unit passed the diagnostic, restore it. Otherwise locate and repair the problem.

STOPPED DUPLEX FAILED — then resolve the problem with diagnostic paging and try again.

STOPPED FROZEN — then conditionally restore the frozen store before requesting any other restore.

STOPPED OOS FAULT — then repair the unit. See diagnostic results.

STOPPED OOS REMOVED — then restore via the manual input message.

STOPPED UNAVAILABLE FORCED — then check frame power switch.

5. REFERENCES

PIDENTs
MIRA
PSFRBSLV
PSFRCSPG

Practice 254-280-210, *Maintenance Control Program*

Input Messages
RMV:PSB
RST:PSB

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ID RST:PUB
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RST:PUB a b c

2. REASON FOR OUTPUT

To respond to a power switch request, a teletypewriter (TTY) restore message, and a DGN:PUB-RPT input message.

3. VARIABLE FIELD DEFINITIONS

- a Peripheral unit bus (PUB) member number (0 - 1)
- b Optional subunit submember:
 PUBB — Peripheral unit bus branching frame (0).
 PUBR — Public message detail recording (MDR) record (0 - 3).
- c Disposition of request:
 COMPL — Completed.
 NOT STARTED FAC BUSY RETRY LATER — The frame request was
 not started because the scan point
 acknowledgement table was full.
 STOPPED DUPLEX FAILED — Diagnostics are not available from the
 disk system. The unit has been removed.
 STOPPED INVALID UNIT OR SUBUNIT — Growth or unequipped.
 STOPPED OS DGN — Request was for diagnose, not restore.
 STOPPED OS FAULT — Diagnosis was some tests failed (STF).
 STOPPED OS RMUD — Removed by TTY, cannot be restored by
 power switch.
 STOPPED UNAVAIL FORCED — Power switch off normal.

4. ACTION TO BE TAKEN

If disposition of the request is:

NOT STARTED FAC BUSY RETRY LATER , retry the request later.

STOPPED DUPLEX FAILED , use the TTY requests.

Otherwise, no action is required.

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5. REFERENCES

PIDENT
MCFWPEMO

Input Messages
DGN : PUB - RPT
RST : PUB

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ID RST:RA
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] RST:RA a ALL
- [2] RST: RA a RACHAN b c

2. REASON FOR OUTPUT

To report that a recorded announcement channel (RACHAN) or an entire recorded announcement (RA) machine has been restored to a non out-of-service state. Format [1] prints if the entire announcement machine has been restored to service. Format [2] prints if an announcement channel has been restored to service.

3. VARIABLE FIELD DEFINITIONS

- a Announcement machine number (0 - 1).
- b Channel number. Range is 0-23, depending upon how many channels are assigned on the machine.
- c State to which the channel has been restored:
- ACT — Active.
- GROWTH — Not implemented.
- SBY — Standby.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
SVCTRAMP

- Practice 201-520-101, *Common Systems Recorded Announcement Frame (CSRAF) - Description*
- Practice 201-520-301, *Common Systems Recorded Announcement Frame (CSRAF) - Operating Procedures*
- Practice 201-520-501, *Common Systems Recorded Announcement Frame (CSRAF) - Tests and Trouble Analysis*
- Practice 201-520-701, *Common Systems Recorded Announcement Frame (CSRAF) - Requirements and Adjusting Procedures*
- Practice 234-110-090, *Recorded Announcement Frame - Description*
- Practice 234-110-091, *Recorded Announcement Frame - Theory*
- Practice 234-180-242, *Service Circuit Test Program (SVCT) - Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Message
RST : RA

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RST:SCLK
WORK CENTER.. MAC, MOC, NMOC, TEC,
 TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RST:SCLK 0 a b

2. REASON FOR OUTPUT

To respond to a system clock (SCLK) restore stimulus. This can be from an automatic, manual, or teletypewriter (TTY) stimulus.

3. VARIABLE FIELD DEFINITIONS

- a Subunit type and submember number:
- CONTR — Controller (0 - 1).
- IPUB — Interface peripheral unit bus (0 - 1).
- NCSU — Network clock synchronization unit (0).
- REF — (0 or 1).
- b Disposition of input request:
- COMPL — Restore completed.
- NOT STARTED FAC BUSY RETRY LATER — The frame request was
 not started because the scan point
 acknowledgement table was full.
- STOPPED DUPLEX FAILED — Diagnostics are not available from the
 disk system. The unit has been removed.
- STOPPED OOS DGN — TTY diagnosis request.
- STOPPED OOS FAULT — Diagnostic some tests failed (STF).
- STOPPED OOS TBC ANAL — Error analysis.
- STOPPED UNAVAILABLE FORCED — The request out of service
 (ROS) (power control) switch is off normal. Check
 frame power switch.

4. ACTION TO BE TAKEN

If disposition of the request is:

 NOT STARTED FAC BUSY RETRY LATER , retry the request later.

 STOPPED DUPLEX FAILED , use the TTY requests.

Otherwise, take corrective action if necessary, according to text phrase.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
FRDIMREQ
MIRA

Input Message
RST:SCLK

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RST:SCS
WORK CENTER.. MOC
GENERIC 4E20 Rel. 3 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RST:SCS a b c [FAILDATA=[dde0000f|04gggggg]]

2. REASON FOR OUTPUT

Reports results from a manual Teletypewriter (TTY) or Power Control Switch (PCS) Restore (RST) or Diagnose (DGN) request.

3. VARIABLE FIELD DEFINITIONS

- a Service Circuit System (SCS) member number (0-7).
- b Subunit type and submember number:
CONTR — Controller (0 - 1).
IPUB — Interface peripheral unit bus (0 - 1).
SCU — Service circuit unit (0 - 15).
- c Disposition of request:
ABORTED ANN UPD FAILED — Requested SCU was unable to perform announcement update.
ABORTED ANN UPD REQUEST FAILED — Announcement update request was not accepted.
ABORTED CONTROLLER UPDATE FAILED — Restore to duplex failed due to update failure.
ABORTED PUMP FAILED - DISK CHECKSUM ERROR — Checksum error occurred during controller pump.
ABORTED PUMP FAILED - INVALID MACRO RESPONSE — Controller pump request returned incorrect response.
ABORTED PUMP FAILED - MACRO CHECKS FAILED — Macro checks failed during controller pump.
ABORTED PUMP FAILED - MACRO REJECTED — Response to controller pump request not accepted.
ABORTED PUMP FAILED - MACRO TIMEOUT — Response to controller pump request not received in allotted time.
ABORTED PUMP FAILED - MICRORAM CHECKSUM ERROR — Microram checksum error occurred during controller pump.
ABORTED PUMP FAILED - SCU ERROR — Error reported by SCU during pump.

SEE PROPRIETARY NOTICE ON COVER PAGE

ABORTED PUMP FAILED - SCU UNAVAIL — Unable to obtain controller pump data from SCU.

ABORTED SCU PUMP FAILED — Unable to pump SCU from SCU disk.

ANN UPD IP — This periodic status report indicates that announcement updates are being received via the Local Area Network (LAN). A COMPL message will be generated when a announcement updates complete successfully and the SCU is automatically restored.

ANN UPD STARTED — SCU requires announcement update before RST:. Announcement update started.

COMPL — Action completed.

IP ANN UPD STARTED — The SCU will be restored when required announcement updates via the LAN complete successful. Periodic status reports will be issued during announcement update until complete.

NOT STARTED FAC BUSY RETRY LATER — The frame request was not started because the scan point acknowledgement table was full.

STOPPED ANN UPD ALREADY IP — A restore of the specified SCU is already in progress and the SCU is receiving required announcement updated via the LAN. When announcement updates complete successfully, the SCU will be restored automatically.

STOPPED CONTR DUPLEX FAILURE — Restore of SCU is not allowed when frame is duplex failed.

STOPPED DUPLEX FAILED — Diagnostics are not available from the 3B disk system. The unit has been removed.

STOPPED FW VER MISMATCH — Restore to duplex could not be performed due to mismatch between controller firmware versions in translations.

STOPPED INVALID UNIT OR SUBUNIT

STOPPED IPUBS OS — Restore denied, both IPUBs out-of-service.

STOPPED OS DGN

STOPPED OS FAULT — Diagnostic Some Tests Failed (STF).

STOPPED OS RMVD — Power Control Switch (PCS) only, removed by TTY.

STOPPED OS TBL ANAL — Error analysis.

STOPPED SCU DISK IN USE — A copy or init (format) operation is in progress for the subject SCU.

SEE PROPRIETARY NOTICE ON COVER PAGE

- STOPPED SCU NOT OPERATIONAL — Restore of SCU denied due to incorrect SCU equipage.
- STOPPED TSI DUPLEX FAILED — Restore of SCU is not allowed when connecting TSI is duplex failed.
- STOPPED UNAVAIL FORCED
- STOPPED UNIT OR SUBUNIT IN GROWTH
- dd Failure code (octal):
- 01 — Program update failed during controller restore
 - 02 — Random Access Memory (RAM) update failed during controller restore
 - 03 — Verify hashsum failed during controller restore
 - 05 — Controller hard init failed
 - 22 — SCU init failed
 - 23 — SCU Equipment Configuration Data (ECD) failed
 - 24 — SCU Multifaceted Signal Processor (MSP) failed
 - 25 — SCU Multifunctional Interface Processor (MIP) failed
 - 26 — Custom Data Services Unit (CDSU) failed
- e Unit/ macro failure code (octal):
- 0 — Macro failed. (f contains macro failure data)
 - 4 — Macro successful but unit(s) reported failure. (f always 0)
- f Message dispenser (macro) failure data:
- 0 — Invalid macro ID passed to message dispenser (1A program error)
 - 1 — Macro not accepted by frame (all 1's response not received from frame)
 - 2 — Macro response not received in time allowed, Peripheral Maintenance Operating System (PMOS) task hold timeout
 - 3 — Macro response not received in time allowed (Macro response not ready)
 - 4 — Message dispenser request was successful but a task hold was not requested (1A program error)
- 04 Errors occurred after RAM update.

SEE PROPRIETARY NOTICE ON COVER PAGE

ggggggg

Global RAM Error Source Register (GRESR) (octal):

- BIT 0-3 — RAM bank A parity error bits, Error Analysis Program (ERAP)
- 4-7 — RAM bank B parity error bits (ERBP)
- 8-11 — Destination bus data parity error bits (EDDP)
- 13 — Source bus A Address parity error (ESAAP)
- 14 — Source bus B Address parity error (ESBAP)
- 15 — Cross-connect update bus mismatch (EXUMM)
- 16 — Cross-connect SYNDROBUS mismatch (EXSMM)
- 17 — Always 1. Indicates macro success but unit reported failure

4. ACTION TO BE TAKEN

If disposition of the request is:

ANN UPD IP, no action is required.

IP ANN UPD STARTED, no action is required.

NOT STARTED FAC BUSY RETRY LATER, retry the request later.

STOPPED ANN UPD ALREADY IP, no action is required.

STOPPED SCU DISK IN USE, Retry the SCU restore request following completion of the copy or init operation. If the restoral retry fails after waiting, the copy operation was aborted and further recovery is needed:

- Stop the copy process using the STOP:COPY:SCS x input command.
- Re-do the copy command originally requested for the SCS.
- Retry the SCU restore after the COPY:SCS x COMPLETED output message is observed.

5. REFERENCES

PIDENTs
FRDIPRNT
SCSFRDIO
SCSTOPEX
SCSTOPOP
SCUTOPEX
SCUTOPOP
TOPIC000

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Messages

DGN:SCS

RST:SCS

STOP:COPY

Output Message

COPY:SCS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RST:SIGLK
WORK CENTER.. MOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RST:SIGLK aabb c

2. REASON FOR OUTPUT

To respond to the RST:SIGLK input message and indicate the end of the manual out of service (MAN OOS) condition on the link.

3. VARIABLE FIELD DEFINITIONS

- a A terminal grouping (TGR) frame number (00-15).
- b A terminal subunit number within the terminal grouping frame (00-15).
- c Disposition of the request:
- COMPLETED — At manual priority, the MAN OOS condition has been removed; at information priority, the signaling link and its mate are both in-service.
- COMPLETED MATE FAILED — At information priority, the signaling link has been restored to service, but the mate is still in an out-of-service condition.
- COMPLETED — The MAN OOS condition has been removed and the link recovery procedure has been started.
- STOPPED, RETRY LATER — The link is in a transient state. Restore request cannot be handled at this time. Retry after one minute.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
CCISIOPR
CCISLSIO
CCISMNAC
CCISSLCN

Input Message
RST:SIGLK

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

If disposition of the request is:

NOT STARTED FAC BUSY RETRY LATER , retry the request later.

STOPPED DUPLEX FAILED , use the TTY requests.

Otherwise, no action is required.

5. REFERENCES

PIDENT
MCFWPEMO

Input Messages
DGN:SP
RST:SP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RST:SSD
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

RST:SSD a b

2. REASON FOR OUTPUT

To report the results of a request to restore a scan and signal distributor (SSD) to service.

3. VARIABLE FIELD DEFINITIONS

- a Member number of the SSD to be restored (0 or 1).
b Disposition of the request:

NOTE: Most of the outputs apply only to conditional restores unless otherwise specified.

ABORTED — The request was aborted because of a maintenance interrupt or interject, or diagnostics returned no tests run (NTR). This applies to both conditional and unconditional restores.

COMPLETED — The request was completed successfully. It applies to both conditional and unconditional restores.

STOPPED IFB OOS — The request was denied because the corresponding interface bus (IFB) is out of service.

STOPPED NON-OPER UNIT — The request was denied because the unit is non-operational. It applies to both conditional and unconditional restores.

STOPPED OOS DIAGNOSE — A restore was not attempted because a diagnostic (DGN or EX) was requested.

STOPPED OOS FAULT — The SSD diagnosis or a deferred SSD fault recognition test failed on a conditional SSD restore request.

STOPPED OOS REMOVED — A prior teletypewriter (TTY) remove input message has not been followed by a TTY restore input message.

STOPPED OOS TROUBLE ANALYSIS — A restore was not attempted because of a previous SSD excessive automatic diagnostic requests.

STOPPED UNAVAILABLE FORCED — The request out of service (ROS) power control switch is off normal.

SEE PROPRIETARY NOTICE ON COVER PAGE

STOPPED UNEQ UNIT — The request was denied because the unit is not equipped.

4. ACTION TO BE TAKEN

If the disposition of the request (variable b) is:

ABORTED — Try again.

COMPLETED — None.

STOPPED NON-OPER UNIT — Verify input member number and try again.

STOPPED OOS DIAGNOSE — Restore the unit.

STOPPED OOS FAULT — Repair the unit.

STOPPED OOS REMOVED — Restore the unit via RST:SSD;UCL from the TTY.

STOPPED OOS TROUBLE ANALYSIS — Repair the unit after analyzing the fault recognition printout.

STOPPED UNAVAILABLE FORCED — Check the ROS switch.

5. REFERENCES

PIDENT
SDFRBASE

Input Messages
RMV:SSD
RST:SSD

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RST:TGR
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RST:TGR a b c

2. REASON FOR OUTPUT

To respond to a terminal grouping (TGR) frame restore stimulus from an automatic, manual, or teletypewriter (TTY) stimulus.

3. VARIABLE FIELD DEFINITIONS

- a TGR member number (0-15).
- b Subunit type and submember number:
CONTR — Controller (0 - 1).
IPUB — Interface peripheral unit bus (0 - 1).
TER — Terminal (0 - 15).
- c Disposition of input stimulus:
COMPL — Restore completed.
NOT STARTED FAC BUSY RETRY LATER — The frame request was not started because the scan point acknowledgement table was full.
STOPPED DUPLEX FAILED — Diagnostics are not available from the disk system. The unit has been removed.
STOPPED INVALID UNIT OR SUBUNIT — In growth or unequipped.
STOPPED OOS DGN — TTY diagnostic request. Diagnostic some tests failed (STF).
STOPPED OOS TBL ANAL — Error analysis.
STOPPED UNAVAIL FORCED — Other A link bus powered down.
STOPPED UPDATE FAILURE — Restoral unsuccessful.

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

If disposition of the request is:

NOT STARTED FAC BUSY RETRY LATER , retry the request later.

STOPPED DUPLEX FAILED , use the TTY requests.

Otherwise, take corrective action if necessary, according to disposition.

5. REFERENCES

PIDENT
MCFWPEMO

Input Messages
DGN:TGR
RST:TGR

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RST:TMSP
WORK CENTER.. MOC, TEC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RST:TMSP a b c

2. REASON FOR OUTPUT

To report the results of a teletypewriter (TTY) restore message, a DGN:TMSP input message, or a power control switch request to the time multiplexed switch (TMS).

3. VARIABLE FIELD DEFINITIONS

- a TMS member number (0-3).
- b Subunit type and submember number:
CONTR — Controller (0 - 1).
C0IPUB — (0 - 1).
C1IPUB — (0 - 1).
- c Disposition of request:
COMPL — Completed.
NOT STARTED FAC BUSY RETRY LATER — The frame request was not started because the scan point acknowledgement table was full.
STOPPED DUPLEX FAILED — Diagnostics are not available from the disk system. The unit has been removed.
STOPPED INVALID UNIT OR SUBUNIT — In growth or unequipped.
STOPPED OOS FAULT — Diagnostic found fault.
STOPPED OOS DGN — Left out of service (OOS) because of diagnostic request.
STOPPED OOS TBL ANAL — Error analysis.
STOPPED TTY RMVD — Power switch control only.
STOPPED UNAVAIL FORCED — Left OOS because of PCS status.
STOPPED UPDATE FAILURE — Restoral unsuccessful.
STOPPED ALB UNAVAIL FORCED — A-link bus PCS off-normal.

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

If disposition of the request is:

NOT STARTED FAC BUSY RETRY LATER , retry the request later.

STOPPED DUPLEX FAILED , use the TTY requests.

Otherwise, no action is required.

5. REFERENCES

PIDENT
MCFWPEMO

Input Messages
DGN : TMSP
RST : TMSP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RST:TONE
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RST:TONE a b c COMPL

2. REASON FOR OUTPUT

To print as a result of restoring one of a pair of duplicated tone trunks from the ringing and tone plant or the milliwatt supply.

3. VARIABLE FIELD DEFINITIONS

- a Type of tone trunk restored:
- BT60 — Busy tone at 60 impulses per minute (IPM).
 - BT120 — Reorder tone at 120 IPM.
 - AR — Audible ringing tone.
 - MW — Milliwatt tone.
 - TPT — Test progress tone.
- b Indicates which of the pair of trunks is restored (0 - 1).
- c New state of the trunk:
- ACT — Active.
 - SBY — Standby.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
SVCTRTPP

Practice 234-110-092, *820A (J87822) Ringing, Tone, and Interrupter Plant - Description*

Practice 234-110-093, *820A (J87822) Ringing, Tone, and Interrupter Plant - Theory*

Input Message
RST:TONE-MWF

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RST:TSI
WORK CENTER.. MAC, MOC, NMOC, TEC,
 TOC
GENERIC 4E21 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RST: TSI a, b c d

2. REASON FOR OUTPUT

To report the result of a Teletypewriter (TTY) request, a power control switch store request, or a diagnostic request to the Time Slot Interchange (TSI).

3. VARIABLE FIELD DEFINITIONS

- a Time Slot Interchange Frame (TSIF) member number (0-63).
- b Subunit type:
 ALC — (0-1).
 CONTR — Controller (0-1).
 IPUB — Interface peripheral unit bus (0-1).
- c Subunit type submember number.
- d Disposition of request:
 COMPL — Completed.
 NOT STARTED FAC BUSY RETRY LATER — The frame request was
 not started because the scan point acknowledgement table was
 full.
 STOPPED DUPLEX FAILED — Diagnostics are not available from the
 disk system. The unit has been removed.
 STOPPED INVALID UNIT OR SUBUNIT — In growth or
 unequipped.
 STOPPED OS DGN — Left Out-Of-Service (00S), diagnostics
 requested.
 STOPPED 00S FAULT — Left 00S, diagnostics found fault.
 STOPPED 00S TBL ANAL — Error analysis.
 STOPPED RMVD — TTY removed, cannot restore from power switch.
 STOPPED UPDATE FAILURE — Left 00S, could not update.
 STOPPED UNAVAIL FORCED — Power switch off normal.

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

If disposition of the request is:

NOT STARTED FAC BUSY RETRY LATER , retry the request later.

STOPPED DUPLEX FAILED , use the TTY requests.

Otherwise, no action is required.

5. REFERENCES

PIDENT
MCFWPOMO

Practice 234-010-107, *Maintenance Reference Handbook*

Input Messages
DGN:TSI
RST:TSI

Output Messages
DGN:TSI-ILL
DGN:TSI-NOT
DGN:TSI-PUB
DGN:TSI-TERM
DGN:TSI-TEST

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RST:VIF
WORK CENTER.. MAC, MOC, NMOC, TEC,
 TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RST:VIF a b c

2. REASON FOR OUTPUT

To report the result of a teletypewriter (TTY) request, a power control switch restore request, or a DGN:VIF input message request.

3. VARIABLE FIELD DEFINITIONS

- a Video interface frame (VIF) member (1-127).
- b Subunit type and submember number:
 CONTR — Controller (0 - 1).
 IPUB — Interface peripheral unit bus (0 - 1).
 VIU Voiceband interface unit (0 - 7).
- c Disposition of request:
 COMPL — Completed.
 NOT STARTED FAC BUSY RETRY LATER — The frame request was
 not started because the scan point acknowledgement
 table was full.
 STOPPED DUPLEX FAILED — Diagnostics are not available from the
 disk system. The unit has been removed.
 STOPPED INVALID UNIT OR SUBUNIT — In growth or
 unequipped.
 STOPPED OOS DGN — Request was to diagnose, not restore.
 STOPPED OOS FAULT DGN STF — Left VIF out-of-service (OOS),
 diagnostics found fault.
 STOPPED OOS RMVD — TTY removed cannot restore from power
 switch.
 STOPPED OSTBL ANAL — Error Analysis.
 STOPPED TSIF CONT OOS — Time slot interchange frame (TSIF)
 controller is out-of-service.
 STOPPED UNAVAIL FORCED — Power switch off normal.

SEE PROPRIETARY NOTICE ON COVER PAGE

STOPPED UNIT IN TROUBLE ON BUS — Unconditional restore
only.

4. ACTION TO BE TAKEN

If disposition of the request is:

NOT STARTED FAC BUSY RETRY LATER , retry the request later.

STOPPED DUPLEX FAILED , use the TTY requests.

Otherwise, no action is required.

5. REFERENCES

PIDENT
MCPWPPEMO

Input Messages
DGN:VIF
RST:VIF

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RST:XPWR
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

RST:XPWR a b

2. REASON FOR OUTPUT

To report the results of a request to restore a miscellaneous power (XPWR) unit to service.

3. VARIABLE FIELD DEFINITIONS

- a Member number of the XPWR (0 or 1).
- b Disposition of the request:
- ABORTED — The request was aborted due to a maintenance interrupt or interject. It applies to both conditional and unconditional restores.
- COMPLETED — The request was completed successfully. It applies to both conditional and unconditional restores.
- STOPPED NON-OPER UNIT — The request was denied because the unit is non-operational. It applies to both conditional and unconditional restores.
- STOPPED ACTIVE MAIN — The unit is not diagnosable because the unit is providing essential service.
- STOPPED OOS FAULT — The XPWR diagnosis failed on a conditional XPWR restore request.
- STOPPED OOS REMOVED — A prior teletypewriter (TTY) remove input message has not been followed by a TTY restore input message.
- STOPPED OOS TROUBLE ANALYSIS — A restore was not attempted because an XPWR excessive automatic diagnostic was previously requested.
- STOPPED SSD OOS — The unit is not diagnosable because either or both SSDs are out-of-service (OOS).
- STOPPED UNAVAILABLE FORCED — The request out-of-service (ROS) power control switch is in the out-of-service position.
- STOPPED UNEQ UNIT — The request was denied because the unit is not equipped.

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

ABORTED — Try again.

COMPLETED — None.

STOPPED ACTIVE MAIN — None.

STOPPED NON-OPER UNIT — Verify input member number and try again.

STOPPED OOS FAULT — Repair the unit.

STOPPED OOS REMOVED — Restore the unit via RST:XPWR from TTY.

STOPPED OOS TROUBLE ANALYSIS — Repair the unit after analyzing status output.

STOPPED SSD OOS — Restore SSD first before restoring XPWR.

STOPPED UNAVAILABLE FORCED — Check the ROS switch.

5. REFERENCES

Input Messages

DGN:XPWR

EX:XPWR

OP:XPWRSTAT

RMV:XPWR

RST:XPWR

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RST:XTSI
WORK CENTER.. MAC, MOC, NMOC, TEC,
TOC
GENERIC 4E24 Rel. 2 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

[1] RST: XTSI a, b c d [FAILDATA=eefggggg]

[2] RST: XTSI a, b c d [FAILDATA=260hhh00]

2. REASON FOR OUTPUT

To report the result of a Teletypewriter (TTY) request, a power control switch store request, or a diagnostic request to the Expanded Time Slot Interchange (XTSI).

Format 2 is for a pump code failure with a value of 26. A XTSI pump failed - flash checksum mismatch between controllers.

3. VARIABLE FIELD DEFINITIONS

a XTSI frame member number (0-63).

b Subunit type:

ALC — A-Link controller (0-1).

CONTR — Controller (0-1).

D3U — Digital Signal Level 3 Unit (D3U) subunit (0-7).

IBU — In-Band Unit (IBU) subunit (0).

IPUB — Interface peripheral unit bus (0-1).

SPU — Signal Processing Unit (SPU) subunit (0-11).

c Subunit type submember number.

d Disposition of request:

COMPL — Completed.

COMPLETE CONFIGURE DENIED — A rerestore of D3U, SPU or IBU completed successfully. However, the D3U, SPU or IBU found the new configuration data in the D3U, SPU or IBU translator incorrect and it is utilizing the old data.

NOT STARTED FAC BUSY RETRY LATER — The frame request was not started because the scan point acknowledgement table was full.

STOPPED CONTR DUPLEX FAILED — Restore of D3U, SPU or IBU fails when frame is duplex failed.

SEE PROPRIETARY NOTICE ON COVER PAGE

STOPPED DUPLEX FAILED — Diagnostics are not available from the disk system. The unit has been removed.

STOPPED INVALID UNIT OR SUBUNIT — In growth or unequipped.

STOPPED OS DGN — Left Out-Of-Service (OOS), diagnostics requested.

STOPPED OOS FAULT — Left OOS, diagnostics found fault.

STOPPED OOS TBL ANAL — Error analysis.

STOPPED RESTORE FAILED — Restore of D3U, SPU or IBU failed. Refer to the Maintenance Reference Handbook to find fail reason.

STOPPED RMVD — TTY removed, cannot restore from power switch.

STOPPED UPDATE FAILURE — Left OOS, could not update.

STOPPED UNAVAIL FORCED — Power switch off normal.

STOPPED UNEQUIPPED — D3U, SPU or IBU is unequipped.

STOPPED UNIT OR SUBUNIT IN GROWTH — D3U, SPU or IBU is in special growth or growth state.

ee

Pump Failure code (octal):

01 — XTSI CONTR pump failed - read file status order failed.

02 — XTSI CONTR pump failed - MISC error macro failed.

03 — XTSI CONTR pump failed - flash pump macro failed.

04 — XTSI fabric INIT failed - TSI status REG error.

05 — XTSI fabric INIT failed - TSI XLAT RAM macro failed.

06 — XTSI fabric INIT failed - TSI time_slot MEM macro failed.

07 — XTSI fabric INIT failed - ALF busy/idle MEM macro failed.

10 — XTSI fabric INIT failed - ALF XLAT RAM macro failed.

11 — XTSI CONTR pump failed - invalid reply (all zeroes).

12 — XTSI update program RAM failed.

13 — XTSI update program RAM failed - hard INIT failure.

14 — XTSI update program RAM failed - checksum failure.

15 — XTSI update other RAM failed.

16 — XTSI update other RAM failed - GESR bits set.

17 — XTSI pump / update failed - internal error.

20 — XTSI update failed - lockstep failed.

21 — XTSI pump failed - first checksum failed.

SEE PROPRIETARY NOTICE ON COVER PAGE

- 22 — XTSI pump failed - recalculated checksum failed.
 - 23 — XTSI update program memory - update macro failed.
 - 24 — XTSI access test failed.
 - 25 — XTSI pump failed - internal error.
 - 27 — XTSI pump failed - no file one flash.
 - 30 — XTSI pump failed - disk job.
 - 31 — XTSI pump failed - empty file.
 - 32 — XTSI pump failed - Control Bus (CB) copy.
 - 33 — XTSI pump failed - transfer.
 - 34 — XTSI pump failed - file error.
 - 35 — XTSI SPU tear-down - nail-up macro success.
 - 36 — XTSI SPU tear-down - nail-up macro maintenance buffer read failed.
 - 37 — XTSI SPU tear-down - nail-up macro failure.
 - 40 — XTSI Controller Signal Processor (CSP) pump failed - read file status order failure.
 - 41 — XTSI CSP pump failed - miscellaneous error macro failure.
 - 42 — XTSI CSP pump failed - flash pump macro failure.
 - 43 — XTSI CSP pump failed - internal error.
 - 44 — XTSI CSP initialize - initialize CSP memory failed.
- f Frame reply indicator:
- 0 — Variable gggggg is not frame reply data.
 - 4 — Variable gggggg is frame reply data.
- ggggg Message dispenser (macro) failure data:
- 0 — Invalid macro ID passed to message dispenser (1B program error).
 - 1 — Macro not accepted by frame (all 1's response not received from frame).
 - 2 — Macro response not received in time allowed, Peripheral Maintenance Operating System (PMOS) task hold timeout.
 - 3 — Macro response not received in time allowed (Macro response not ready).
 - 4 — Message dispenser request was successful but a task hold was not requested (1B program error).

SEE PROPRIETARY NOTICE ON COVER PAGE

hhh Message dispenser (macro) failure data for error code 26. These bits represent the failing file number in octal.

4. ACTION TO BE TAKEN

If disposition of the request is:

NOT STARTED FAC BUSY RETRY LATER , retry the request later.

STOPPED DUPLEX FAILED , use the TTY requests.

If the pump failure code is 26 (Format 2) then:

Restore the file in the OOS controller, the active controller, or both. See the input commands COPY:TSIFILE and COPY:XTSI. Be aware that both commands require the file number to be in decimal. The octal number printed in the failure data must be converted to decimal format before using.

Otherwise, no action is required.

5. REFERENCES

PIDENT
MCFWPEMO
PSCTOPEX
PSCTOPMS
PSCTOPOP
XTSTOPEX
XTSTOPMS
XTSTOPOP
TOPIC000

Practice 234-010-107, *Maintenance Reference Handbook*

Input Messages

COPY:TSIFILE
COPY:XTSI
DGN:XTSI
RST:XTSI
UPD:XTSI

Output Messages

DGN:XTSI-ILL
DGN:XTSI-NOT
DGN:XTSI-PUB
DGN:XTSI-TERM
DGN:XTSI-TEST
UPD:XTSI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RST:XTSI-SCHEDUL
WORK CENTER.. MAC, MOC, NMOC, TEC,
TOC
GENERIC 4E24 Rel. 2 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RST:XTSI a,b SCHEDULE IN PROGRESS
RST:XTSI a,b SCHEDULE COMPLETE
[D3US 0-7 c]
[SPUS 0-11 d]
[IBU 0 e]

2. REASON FOR OUTPUT

To report the result of a Teletypewriter (TTY) request to the Expanded Time Slot Interchange (XTSI).

NOTE: The one line message per subunit indicates pass or fail of the restore and a service degraded summary report (See OP:SDC output message) will follow.

3. VARIABLE FIELD DEFINITIONS

- a Member number of the XTSI to be restored (0-63). Companion member numbers (odd numbers) generate Input/Output(I/O) error text.
- b Type of rapid restore:
- ALLD3U — All Digital Signal Level 3 Units (D3Us) only.
- ALLPSC — All D3Us, all Signal Processing Units (SPUs) and the In-Band Unit (IBU).
- ALLSPU — All SPUs only.
- c A bit map of D3Us to be restored in octal with least significant bit refers to D3U 0.
- d A bit map of SPUs to be restored in octal with least significant bit refers to SPU 0.
- e A bit map of IBU to be restored in octal with least significant bit refers to IBU 0.

4. ACTION TO BE TAKEN

None, for information only.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENT
PSCTOPEX
PSCTOPMS
PSCTOPOP
SDEGRPRT
TOPIC000

Input Message
RST:XTSI-ALL

Output Message
OP:SDC

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RTE:ALM-FROM
WORK CENTER.. MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RTE:ALM FROM a [(SIL)] TO b COMPL

2. REASON FOR OUTPUT

To respond to RTE:ALM input message. The alarms and output messages have been routed from maintenance center a to maintenance center b.

3. VARIABLE FIELD DEFINITIONS

- a Maintenance center from which alarms are to be routed:
- ALL MC'S — all maintenance centers (excluding center b)
 - MOC — Master operations center.
 - TEC1 — Terminal equipment center 1.
 - TEC2 — Terminal equipment center 2.
 - TEC3 — Terminal equipment center 3.
 - TEC4 — Terminal equipment center 4.
 - TEC5 — Terminal equipment center 5.
 - TOC — Trunk operations center.
- (SIL) Indicates if the audible alarms have been silenced in maintenance center. Alarm silence is accomplished by operation of the alarm transfer system (ATS) relay in all the alarm grids assigned to the maintenance center.
- b Maintenance center to which alarms are to be routed:
- MOC — Master operations center.
 - TEC1 — Terminal equipment center 1.
 - TEC2 — Terminal equipment center 2.
 - TEC3 — Terminal equipment center 3.
 - TEC4 — Terminal equipment center 4.
 - TEC5 — Terminal equipment center 5.
 - TOC — Trunk operations center.

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

Observe the alarm transfer/alarm grouping (AT-AG) lamp on the Alarm Grid Display Panel light for all the grids assigned to the maintenance center being routed (MC a).

5. REFERENCES

PIDENT
ALRM01

Practice 234-100-040, *Office Alarm System Description and Theory*

Input Message
RTE:ALM

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RTE:TP
WORK CENTER.. TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RTE:TP a:TP b,c

2. REASON FOR OUTPUT

To respond to RTE:TP input message requesting the rerouting of incoming 101 call terminations from test position (TP) a to test position TP b. It may also be a response to a request for the current 101 routing of a test position TP a.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | The 2-digit name of the test position being reassigned or the 2-digit name code for which current 101 routing was requested. |
| b | The 2-digit name of the test position to which TP a is being rerouted, or the 2-digit name of the test position to which TP a is currently routed. |
| c | The disposition of the original input request:

COMPLETED — Request completed successfully.

UNA — Test position TP b in a reroute request is unassigned. Test position TP a in a current routing request is unassigned. |

4. ACTION TO BE TAKEN

Verify that 101 routing calls have been rerouted if output message is in response to a reroute request.

5. REFERENCES

PIDENT
TACCSUPV

Input Message
RTE:TP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RTR:ALM
WORK CENTER.. MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RTR:ALM a COMPL

2. REASON FOR OUTPUT

To indicate that all software (system) alarms have been retired in all alarm grids assigned to maintenance center a as a result of: RTR:ALM input message, activation of the alarm retire switch on the master control complex (MCC), the alarm grid display panel, or the alarm grid circuit in the miscellaneous frame. Alarms will automatically be retired for any applicable centers which are grouped or routed to the requested center.

3. VARIABLE FIELD DEFINITIONS

a The maintenance center for which software alarms have been retired.

 MOC — master operations center

 TEC1 — terminal equipment center 1

 TEC2 — terminal equipment center 2

 TEC3 — terminal equipment center 3

 TEC4 — terminal equipment center 4

 TEC5 — terminal equipment center 5

 TOC — trunk operations center

4. ACTION TO BE TAKEN

If alarms continue to sound, it is probably due to a hardware failure (fuse, etc.) and must be corrected at the equipment frame in trouble.

5. REFERENCES

PIDENT
ALRM01

Practice 234-100-040, *Office Alarm System Description and Theory*

Input Message
RTR:ALM

SEE PROPRIETARY NOTICE ON COVER PAGE

ID RTR:ALM-GRID
WORK CENTER.. MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

RTR:a ALM b GRID c COMPL

2. REASON FOR OUTPUT

To indicate that a hardware alarm (frame fuse, etc.) condition has been retired or cut off at an equipment frame in trouble. The equipment frame is located in the specified alarm grid.

3. VARIABLE FIELD DEFINITIONS

- a The alarm level which retired:
- ABS — Alarm battery supply.
 - CR — Critical.
 - FOR — Foreign alarm (grouped or transferred into this grid).
 - MJ — Major.
 - MN — Minor (continuous).
 - PMJ — Power major.
 - PMN — Power minor.
- b The maintenance center responsible for the alarm grid:
- MOC — Master operations center.
 - TEC1 — Terminal equipment center 1.
 - TEC2 — Terminal equipment center 2.
 - TEC3 — Terminal equipment center 3.
 - TEC4 — Terminal equipment center 4.
 - TEC5 — Terminal equipment center 5.
 - TOC — Trunk operations center.
- c The member number of the alarm grid involved (1-15).

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENT
ALRM01

Practice 234-100-040, *Office Alarm System Description and Theory*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID SCHED:MEASREPT
WORK CENTER.. MAC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

SCHED:MEASREPT aa;b:c d d d d

2. REASON FOR OUTPUT

To print in response to any of the SCHED:MEASREPT input messages which add or delete a measurement report or any of its components. The primary purpose of this message is to relate the disposition of the corresponding input message.

3. VARIABLE FIELD DEFINITIONS

- a Measurement report number (1-23).
- b The action option for adding to or deleting from measurement report:
- ADD — Additions are made to measurement report.
- DLT — Deletions are made from measurement report.

c See (1) - (6).

(1) Output Time

a bbbb

This form is output in response to input messages of the form:
SCHED:MEASREPT aa;ADD: SUN a, MON b ... , SAT c.
Only one day keyword is repeated on the response, that representing the earliest day in the week. If more than four numbers are input only the first four are repeated on the response.

a — Day of the week (SUN, MON, TUE, WED, THU, FRI, SAT).

b — The times of the day at which the schedule is to be output in the form hhmm where h is the hour of the day (00 - 23) and m is the number of minutes (00,15,30,45).

(2) ACCINT

ACCINT aaaaa

This form is output in response to input messages of the forms:
SCHED:MEASREPT aa;ADD:ACCINT; etc.

SEE PROPRIETARY NOTICE ON COVER PAGE

- a — The accumulation interval of the report in the form hhhmm where h is the hour of the week (000 - 168) and m is the number of minutes (00,15,30,45).

(3) CHAN

a b b b b b

This form is output in response to input messages of the form: SCHED:MEASREPT aa;ADD:CHAN; etc.

a — CHAN

b — Output channels on which the report is output.

(4) MSCOMS

a bbbbbb bbbbbb bbbbbb bbbbbb bbbbbb bbbbbb bbbbbb bbbbbb

This form is output in response to input messages of the forms: SCHED:MEASREPT aa;ADD:MSCOMS; etc.. If more than eight numbers are input, only the first eight are repeated on the response.

a — MSCOMS or TDASMC.

b — Measurement subclasses, output measurement sets on the measurement report in the form mm0000 where m is the measurement subclass (00 - 12, 14 - 63) and o is the output measurement set (0000 - 2047).

— PRIM

PRIM a

This form is output in response to input messages of the form: SCHED:MEASREPT aa;ADD:PRIM; etc.

a — Primary channel on which changes to the schedule are made

(5) TSG,TG

a bbbbcccc cc cc ccc ccc bbbbcccc cc cc ccc ccc
bbbbcccc cc cc ccc ccc

This form is output in response to input messages of the forms: SCHED:MEASREPT aa;ADD:TSG; etc., ,TG; etc., and SCHED:MEASREPT aa;ADD:TG; etc. If both trunk subgroup (TSG) and trunk group (TG) are specified on the input message then the output form is TSG.

SEE PROPRIETARY NOTICE ON COVER PAGE

- a — TSG or TG.
- b, c — The circuit identification numbers (CINs) of trunk groups or subgroups appearing on the measurement report where b is the base traffic number of the trunk subgroup, or 0000 in the case of the trunk groups, and c is the CIN.
- d The disposition of the corresponding input message processing:
- ABORTED — Processing is not completed; memory may have been updated.
- COMPLETED — Processing is completed.
- NOT STARTED — Processing is completed; no memory has been updated.
- NOT STARTED ACCINT INVALID — Processing cannot continue:
1. Minutes are not of the form 00, 15, 30, 45.
 2. The accumulation interval does not match that which was previously assigned.
 3. An illegal attempt to change the accumulation interval for a tape schedule failed.
 4. An illegal attempt is made to delete accumulation and/or output times for a measurement report with an unassigned accumulation interval (accumulation interval of zero).
- NOT STARTED ACCINT PREVIOUSLY ASN — Processing cannot continue; accumulation interval was previously assigned.
- NOT STARTED ACCINT UNAS — Processing cannot continue; accumulation interval is unassigned.
- NOT STARTED ACCUMULATION INTERVAL OVERLAP IN ATT — Processing cannot continue; an attempt to add an accumulation interval for an extended interval schedule failed because the accumulation interval overlapped the boundary of a previously specified accumulation interval, e.g., if the accumulation interval covered the previously specified times (1000 - 1200) then the input (1100 - 1300) would be rejected.
- NOT STARTED ATT INVALID INPUT — Processing cannot continue; changes were specified to be made to the ATT for a nonextended interval schedule, i.e., a schedule for which ENGMEM was not specified.
- NOT STARTED CHAN PREVIOUSLY ASN — Processing cannot continue; channel was previously assigned, or five channels were previously assigned.

SEE PROPRIETARY NOTICE ON COVER PAGE

NOT STARTED DATA AUDIT IN PROGRESS — Processing cannot continue; audit of the measurement report data base is in progress.

NOT STARTED ENGMEM EXCEEDED — Processing cannot continue; engineered memory is exceeded, or an attempt to add a trunk subgroup (TSG) to a schedule exceeded the number of TSGs allowed on that schedule.

NOT STARTED INVALID INPUT CHAN — Processing cannot continue; attempt to update measurement report on channel other than PRIM channel, MTC, SREC1, or SREC2 failed, or an illegal attempt to assign output channels to a tape schedule failed.

NOT STARTED MAXM EXCEEDED — Processing cannot continue; the number of measurements to be added to the schedule exceeds MAXM for that schedule.

NOT STARTED MAXM NOT INPUT — Processing cannot continue; MAXM was not input.

NOT STARTED MEASREPT PREVIOUSLY ASN — Processing cannot continue; measurement report was previously assigned.

NOT STARTED MEASREPT UNAS — Processing cannot continue; measurement report is unassigned. Use VER:MEASREPT aa! to determine which case prevails.

NOT STARTED MSCOMS PREVIOUSLY ASN — Processing cannot continue; MSCOMS was previously assigned.

NOT STARTED MSCOMS UNAS — Processing cannot continue; MSCOMS is unassigned.

NOT STARTED OUTPUT CHAN UNAS — Processing cannot continue; channel is unassigned.

NOT STARTED TSG PREVIOUSLY ASN — Processing cannot continue; TSG was previously assigned.

NOT STARTED TSG UNAS — Processing cannot continue; TSG is unassigned.

4. ACTION TO BE TAKEN

If the disposition of the input message is ABORTED, verify the components of the measurement report to determine what changes were made, if any, to the report.

5. REFERENCES

PIDENT
TRAFMSGs

SEE PROPRIETARY NOTICE ON COVER PAGE

Practice 234-100-045, *Plant Measurements and Machine Performance Report Description*

Translation Guide, 4ESSTM, TG-4, Division 10, Section 3i

Input Messages

SCHED:MEASREPT

VER:MEASREPT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID SCHED:TDASMC
WORK CENTER.. MAC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

SCHED:TDASMC a;b:MSC c d

2. REASON FOR OUTPUT

To report whether the measurement sub-classes (MSCs) have been added or deleted to the traffic data administration system (TDAS) measurement classes (TDASMCs).

3. VARIABLE FIELD DEFINITIONS

- a TDASMC number (3, 4, or 8).
- b Action option:
- ADD — Additions to the TDASMC.
 - DLT — Deletions to the TDASMC.
- c Measurement sub-classes in the range 0-55, excluding 10, 13, and 14.
- d The disposition of the corresponding input message processing:
- ABORTED — Processing is not completed; memory may have been updated.
 - COMPLETED — Processing is completed.
 - NOT STARTED DATA AUDIT IN PROGRESS — Processing cannot continue; audit of the measurement report data base is in progress.
 - NOT STARTED PREVIOUSLY ASN — Processing aborted due to a MSC that is already assigned to the TDASMC; no memory updated.
 - NOT STARTED UNAS — Processing aborted due to an unassigned MSC; no memory updated.

4. ACTION TO BE TAKEN

If the disposition of the input message is not COMPLETED, verify the input message components to determine what changes should be made.

5. REFERENCES

PIDENT
TRAFMSGs

SEE PROPRIETARY NOTICE ON COVER PAGE

Translation Guide, 4ESSTM, TG-4, Division 10, Section 3i

Input Message
SCHED:TDASMC

SEE PROPRIETARY NOTICE ON COVER PAGE

ID SET:0
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

SET:{CS|PS} a b
[c c c]

2. REASON FOR OUTPUT

To respond to an input requesting that an off-line store be set to a particular KCODE.

3. VARIABLE FIELD DEFINITIONS

CS	Call store.
PS	Program store.
a	Member number of the requested unit.
b	Disposition of the request: ABORTED — Operation unsuccessful. COMPLETED— Operation successful.
c	MTCE — Store is configured in the maintenance mode.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
GULRUTCR

SEE PROPRIETARY NOTICE ON COVER PAGE

ID SET:ANNSTAT
WORK CENTER.. TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

SET:ANNSTAT {UCLVER|UCLSCHED}, VSSID a, SID b
FAILURE REASON c

2. REASON FOR OUTPUT

To print the reason that the input message SET:ANNSTAT was not acted upon.

3. VARIABLE FIELD DEFINITIONS

UCLVER	Callback failure.
UCLSCHED	Transmission check failure.
a	Voice storage system (VSS) identification (VSSID).
b	Service identification (SID).
c	Reason for failure: ANN LOCKOUT — Announcement locked out. INVALID STE — Announcement state is not standby full. INVALID TYPE — Announcement is barge-in type. MISC ERROR — Audit problem, etc. NO SBY AUDIO — Standby audio does not exist.

4. ACTION TO BE TAKEN

Correct error before retrying error message.

5. REFERENCES

PIDENTs
ANNHTTYM
TMAD0005

Input Message
SET:ANNSTAT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID SET:BP-SCS
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] SET:BP SCS a CONTR b
- [2] SET:BP SCS a SCU c d

2. REASON FOR OUTPUT

This message prints in response to a SET:BP-SCS input message.

Format [1] is output if the input request specified that a breakpoint be set in a Service Circuit System (SCS) simplex controller or duplex controllers.

Format [2] is output if the input request specified a breakpoint be set in a Service Circuit Unit (SCU).

3. VARIABLE FIELD DEFINITIONS

- a SCS member number in decimal (0-7).
- b Controller request code:
- COMPLETED The breakpoint was set.
- DENIED - CONTR DUP FAILED Request denied because the frame is duplex failed.
- DENIED - SCC IN GROWTH Request denied because the frame is in growth or special growth.
- DENIED - SCC UNEQ Request denied because the frame is unequipped.
- RL - CONTR LOM Request denied because the frame controller is in listen-only mode.
- STOPPED - MACRO FAILED Request for the controller was stopped because the controller failed in processing the set command. There may already be two breakpoints in the controller or there may already be a breakpoint at the micro-instruction address specified. Use the OP:BP-SCS input message command to list the breakpoints in the controller. The breakpoint buffer for storing breakpoint data may be full, use the CLR:BP-SCS input message command to reset the buffer.
- c SCU number in decimal (0-15).

SEE PROPRIETARY NOTICE ON COVER PAGE

- d SCU request status code:
- ABORTED - MACRO REJECTED Request for the given SCU was aborted because the SCS frame rejected the set command.
 - ABORTED - MACRO TIMEOUT Request for the given SCU was aborted because the SCS frame did not reply to the set command.
 - COMPLETED The breakpoint was set.
 - DENIED - CONTR DUP FAILED Request denied because the frame is duplex failed.
 - DENIED - SCU IN GROWTH Request for the given SCU was denied because the SCU is in growth or special growth.
 - DENIED - SCU IS OOS Request for the given SCU was denied because the SCU is out of service.
 - DENIED - SCU UNEQ Request for the given SCU was denied because the SCU is unequipped.
 - FAILED - INTERNAL ERROR Request for the given SCU failed because of an unexpected software error when processing the set command.
 - RL - CONTR LOM Request denied because the frame controller is in listen-only mode.
 - STOPPED - MACRO FAILED Request for the given SCU was stopped because the SCU failed in processing the set command. There may already be two breakpoints in the SCU or there may already be a breakpoint at the micro-instruction address specified. Use the OP:BP-SCS command to list the breakpoints in the SCU.

4. ACTION TO BE TAKEN

If variable b is:

- RL - CONTR LOM — then retry later, as this condition should be cleared quickly.
- STOPPED - MACRO FAILED — then contact the Technical Assistance Center for further information.

SEE PROPRIETARY NOTICE ON COVER PAGE

If variable d is:

ABORTED - MACRO REJECTED — then contact the Technical Assistance Center for further information.

ABORTED - MACRO TIMEOUT — then contact the Technical Assistance Center for further information.

FAILED - INTERNAL ERROR — then contact the Technical Assistance Center for further information.

RL - CONTR LOM — then retry later, as this condition should be cleared quickly.

STOPPED - MACRO FAILED — then contact the Technical Assistance Center for further information.

5. REFERENCES

PIDENT
SCSBPMEM

Input Messages
CLR:BP-SCS
OP:BP-SCS
SET:BP-SCS

Output Messages
OP:BP-SCS
REPT:BP-SCS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID SET:CAMATRFS
WORK CENTER.. MOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

SET:CAMATRFS a IN PROGRESS

2. REASON FOR OUTPUT

To print when n=1, and a key associated with the centralized automatic message accounting (CAMA) lamp on the master control complex (MCC) is operated. Traffic sampling is done on one of n CAMA calls where n is specified by the user via a teletypewriter (TTY) message.

3. VARIABLE FIELD DEFINITIONS

a Traffic sampling limit (1-99).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
CAMA0000

Practice 234-180-110, *Call Processing Programs*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID SET:CONN
WORK CENTER.. TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

SET:CONN a;TP b;{OTAN c|TAN d|CIN e|TSN f}, g,
h

2. REASON FOR OUTPUT

To respond to the SET:CONN input message request for a connection from a test position to a specified trunk.

3. VARIABLE FIELD DEFINITIONS

- a Connection requested to trunk access test (TAT) 0 or 1 at the test position.
- b Name of the test position requested (10 through 99).
- c Octal trunk appearance number (TAN) of trunk.
- d TSI-SP-PORT-CHANNEL, making up the trunk appearance number (TAN) of trunk, where:
- TSI — A 2-digit decimal number indicating the time slot interchange (TSI) member number, range 00-63.
 - SP — A 1-digit decimal number indicating signaling processor (SP) of TSI, range 0-1.
 - PORT — A 1-digit decimal number indicating port of TSI, range 0-6.
 - CHANNEL — A 3-digit decimal number indicating channel, range 0-127.
- e Circuit identification number (CIN) of trunk.
- f SP-ROW-POINT, making up the trunk scanner number (TSN) of trunk, where:
- SP — A 2-digit decimal number indicating the SP member number, range 00-31.
 - ROW — A 3-digit decimal number indicating the row in the SP, range (for miscellaneous scanner number [MSN] and miscellaneous distributor number [MDN]) 000-127, range (for TSN and trunk distributor number [TDN]) 000-255.
 - POINT — A 2-digit decimal number indicating the point in the row, range 00-15.

SEE PROPRIETARY NOTICE ON COVER PAGE

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Data relating to a successful completion or reason for failure:

ASSOC CKT COMPLETE — A request associated circuit connection (mode 0) was completed successfully.

COMPLETED, VPA FAILED — Specified circuit connect to common channel interoffice signaling (CCIS) trunk successful - voice path assurance test failed.

COMPLETED, VPA PASSED — Specified circuit connect to CCIS trunk successful - voice path assurance test passed.

CONVERSION COMPLETED — Monitor-to-talk or TNUP-to-DNUP conversion completed.

CONVERSION NOT VALID — Mode 8 conversion failed.

ILLEGAL OPERATION — Two domestic test positions attempted to originate a test call on common channel signaling system number 5 (CCITT5) or CCITT6 trunks.

INVALID DIGITS — Digits entered in teletypewriter (TTY) input message are invalid. Applies only to input modes 2 and 3 (i.e., DNER not 103, or 105).

MONITOR COMPLETED — A requested monitor connection (mode 5) was completed successfully.

MONITOR TABLE FULL — Request for monitor connection denied - monitor table currently filled.

NETWORK CONN FAILED — Network blocking - connection failed.

NO OUTPUT COMPLETE — A requested no-output pulse connection (mode 4) was completed successfully.

NO TEST AVAILABLE — A request to output pulse prestored directory numbers has failed - no prestored directory number / per call control (PCC) universal services echo canceler (USEC) exists for test requested.

NO TMR AVAILABLE — No trunk maintenance registers available.

NONOPERATIONAL UNIT — Trunk is not usable until all units are in operational state and trunk translators exist.

NOT DUPLEX MONITOR — Mode 8 conversion failed.

OGT IGNORE STATE — Connection denied for this mode because requested trunk is in out-of-service ignore state. TAT should be connected to a reorder tone.

OGT ILLEGAL — Outputting of digits is illegal on trunk requested (i.e., trunk is a one-way incoming trunk).

OGT UNA — Requested trunk is unassigned.

SEE PROPRIETARY NOTICE ON COVER PAGE

OUTGOING TRUNK BUSY — Connection denied for mode requested because outgoing trunk requested is not idle or, in case of associated circuit connect, no idle associated trunk could be found.

REJECTED, CKT MUST BE IN MTC — Must take trunk out-of-service before connecting TAT (see SET:TRKSTAT input message).

SPEC CKT COMPLETE — A requested specified circuit connection (mode 1,2,3 and 6) was completed successfully.

TAT BUSY — The trunk access test (TAT) requested is not idle; possible maintenance busy or TAT not released after previous connection.

TAT FAILED ANSWER — Seizure attempted on the TAT, but the TAT failed to respond with answer. Hardware problem in the SP or the test position.

TEST POSITION UNASSIGNED — Test position requested is unassigned.

TRANSLATION FAILURE — Attempt to obtain translations data has failed.

TRUNK ALREADY BEING MONITORED — Request for monitor denied because trunk is already monitored by another position or by service evaluation. Trunk can be monitored by only one test position or service evaluation position.

VPA TEST CANCELED — Specified circuit connect to CCIS trunk was successful, but the voice path assurance test was canceled.

h The final handling code for outpulsing failures. Format is:
OUTPULSING FAIL, FHCODE = h.

4. ACTION TO BE TAKEN

Initiate trunk testing at the test position if connection was successful. For outpulsing failures, analyze the final handling code. Codes are listed in COMPOOL under state assignment of the item.

5. REFERENCES

PIDENTs
TACCORIG
TMAD0005

Input Messages
SET:CONN
SET:TRKSTAT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID SET:DCONN
WORK CENTER.. TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] SET:DCONN a;[b,]c g
- [2] SET:DCONN a;c,d: e, f g
- [3] SET:DCONN;TST:CIN h, SLS i,
j [k]

2. REASON FOR OUTPUT

Format [1] reports the establishment or release of a connection between the trunk under test (TUT) and the designated digital test access trunk (DTAT). Format [2] reports the type of connection (associated circuit, duplex monitor, duplex split, outpulse or no outpulse) if the connection is established. Format [3] reports the round trip delay time (RMRT) or the reason for failure.

3. VARIABLE FIELD DEFINITIONS

- a Traffic number of connected DTAT.
- b Release connection removed. Prints only for a release message.
- c "RED" circuit identifier.
- d Unconditional (UCL) identifier (mode 9 connections).
- e Identity of trunk tested:
 - CIN — Traffic number and circuit identification number (CIN).
 - OTAN — Octal format trunk appearance number (TAN).
 - TAN — Decimal format TAN.
 - TSN — Decimal format trunk scanner number (TSN).
- f Specific final handling code resulting from outpulsing failure.
- g Information regarding the test in text format. Refer to Table 1 for possible values and their explanations.
- h Circuit identification number / name.
- i Signaling link selection used (0-31).

SEE PROPRIETARY NOTICE ON COVER PAGE

j	Test results:	
	FTS	Failed to send message.
	RMRT xxxms	Round trip delay time (in increments of 10 ms).
	RTN	Returned message.
k	T0	Time out.
	ABORT	Testing aborted.
	COMPL	Completed.

4. ACTION TO BE TAKEN

This message is informational; any action taken must be based on the specific information printed and its technical impact.

5. REFERENCES

PIDENTs
TMAD0005
TMTCDATA

Input Message
SET:DCONN

SEE PROPRIETARY NOTICE ON COVER PAGE

Table 1
Possible Values of Variable g

VARIABLE g	EXPLANATION
ABDN	Outpulse connection abandoned as a result of reset message from the far end test line.
CAMP_ON FAILURE	Unsuccessful attempt to camp on an out-of-service TUT.
CIRCUIT UNASSIGNED	Specified DTAT was unassigned.
COMPLETE	Outpulse connection completed.
COMPLETED, VPA-FAILED	Voice path assurance (VPA) test was unsuccessful.
COMPLETED, VPA-SUCCESS	VPA was successful.
ILLEGAL OPERATION	Requested action cannot be performed-illegal conditions.
INVALID TR STATE FOR TESTING	Trunk under test is not nailed up.
INVALID TRUNK SPECIFICATION	Trunk under test is not attached to a digital interface frame.
MONITOR TABLE FULL	All monitor table slots are occupied.
NETWORK CONN FAILED	Unable to complete the network connection between the DTAT and the TUT.
NO CALL REGISTER	Unable to secure a trunk maintenance register (TMR) for digit outpulsing.
NO TEST CKTS AVAILABLE	No associated circuit was available.
NO TEST CKTs AVAILABLE	Connection denied because no idle associated trunk could be found.

SEE PROPRIETARY NOTICE ON COVER PAGE

Table 1 (Continued)
Possible Values of Variable g

VARIABLE g	EXPLANATION
NONOPERATIONAL	DTAT is connected to a nonoperational digital interface frame (DIF).
NOOUTPULSE COMPLETE	No outpulse network connection completed.
OGT IGNORE	TUT is out of service; ignore it.
OGT ILLEGAL	TUT is not connected to a DIF, or not the correct outgoing signaling type.
OUTGOING TRUNK BUSY	TUT is not in an acceptable testing state.
REJECTED	No connection in progress or unable to disconnect the TUT and DTAT.
TAT BUSY	Specified DTAT is not idle.
TRUNK ALREADY BEING MONITORED	Specified trunk is already being monitored.
WARNING-RED CKT MON COMPL	Monitor connection on a "RED" circuit is completed.

SEE PROPRIETARY NOTICE ON COVER PAGE

ID SET:DIGROUP
WORK CENTER.. MOC, TEC, TOC
GENERIC 4E21 Rel. 4 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

SET:DIGROUP,a:b,c [d]

2. REASON FOR OUTPUT

To respond to a SET:DIGROUP input message. This message acknowledges that the request to set the digroup to IGNORE or ACCEPT was completed or that it was rejected for some reason.

3. VARIABLE FIELD DEFINITIONS

- a The identity of the digroup. This is output in the same form as specified by the input request. Possible identifiers are:
- CIN — Circuit Identification Number (CIN) of a trunk in the digroup.
- DIF, DIU, DG — Digital Interface Frame (DIF) number, Digital Interface Unit (DIU) number and Digroup number.
- DT, DTU, DG — The Digroup Terminal (DT), Digroup Terminal Unit (DTU), and Digroup (DG) number of the digroup.
- OTAN — Octal Trunk Appearance Number (OTAN) of a trunk in the digroup.
- TAN — TSI-SP-PORT-CHANNEL Trunk Appearance Number (TAN) of trunk.
- TSI — 2-digit decimal number indicating the Time Slot Interchange (TSI) member number, range 00-63.
- SP — 1-digit decimal number indicating Signaling Processor (SP) of TSI, range 0-1.
- PORT — 1-digit decimal number indicating port of TSI, range 0-6.
- CHANNEL — 3-digit decimal number indicating channel, range 0-127.

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- TSN — SP-ROW-POINT Trunk Scanner Number (TSN) of trunk.
- SP — A 2-digit decimal number indicating the SP member number, range 00-31
- ROW — A 3-digit decimal number indicating the row in the SP, range 000-255.
- POINT — A 2-digit decimal number indicating the point in the row, range 00-15.
- XTSI, D3U, DG — Expanded Time Slot Interchange (XTSI) member number, D3U unit number and Digroup number.
- b ACCEPT — Request was to put digroup into accept state.
- IGNORE — Input request was to put the digroup into the ignore state.
- c COMPLETED — Request was honored.
- REJECTED — Request was denied (trunks not out-of-service).
- d (blank) — Request was honored.
- DG ALREADY ACCEPT — Accept request was on a digroup already in the accept state.
- DG ALREADY IGNORE — The ignore request was on a digroup already in accept.
- NON DTU TRUNK — Input trunk is not on a DTU, DIU or D3U.
- NONOPERATIONAL UNIT — TSI port, DT, or DTU, or DIF, DIU, or TSI, D3U, are not operational
- TRUNKS NOT DSA <MAN> — The ignore request must be preceded by a manual removal of the trunks.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
TMAD0005
TMAD0061
TMTCXTSI

Input Messages
ANALY:DIGROUP
INIT:DGSTAT
OP:DGSTAT
SET:DIGROUP
SET:TRKSTAT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID SET:DTAC
WORK CENTER.. MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

SET:DTAC;a:{OTAN b|CIN c|TSN d|TAN e}, f, g

2. REASON FOR OUTPUT

To output the status of the requested direct test access connection or release function.

3. VARIABLE FIELD DEFINITIONS

- a Connection mode:
- ACC
 - LOOP
 - MON
 - RLS
 - SPLIT
- b Octal trunk appearance number.
- c Circuit identification name.
- d Trunk scanner number.
- e Trunk appearance number.
- f Specific final handling code resulting from an outpulsing failure.
- g Information regarding the test:
- ACCESS IN EFFECT
 - ACCESS NOT PROVIDED — Access to protocol analyzer not obtained.
 - CAMP-ON FAILURE — Failure to retain outage reasons on Trunk Under Test (TUT).
 - CIRCUIT IN INVALID STATE — Nailed-up trunk not in the Trunk Used For Large Scale Nailup (TNUP) state; single trunk not IDLE/ Out Of Service (OOS).
 - COMPLETE — Function completed.
 - COMPLETED, VPA-FAILED
 - COMPLETED, VPA-PASSED
 - DOMAIN MISMATCH — 2nd access domain ≠ 1st.

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FAIL, ACCESS CANCELED — Test canceled; unable to provide request or to loop.

FAIL, LOOP REINSTATED — Requested function failed, returned to loop.

IN PROGRESS — Function in effect.

ILLEGAL OPERATION — Non-existent mode.

NETWORK CONN FAILED

NO TMR — Trunk Maintenance Register (TMR) unavailable.

REJECTED - INOPERATIVE CIRCUIT — TUT on a non-operational unit.

REJECTED - TABLE-FULL RETRY LATER — All Direct Test Access Connection (DTAC) slots filled.

REPEAT LATER — Outpulsing in progress.

TRUNK ALREADY BEING MONITORED

VPA TEST CANCELED

4. ACTION TO BE TAKEN

This message is informational.

5. REFERENCES

PIDENTs
TMAD0005
TMTCDTAC

Input Messages
OP:DTAC
SET:DTAC

Output Message
OP:DTAC

SEE PROPRIETARY NOTICE ON COVER PAGE

ID SET:SDSTAT
WORK CENTER.. MAC, MOC, NMOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

SET:SDSTAT, a, COMPLETED

2. REASON FOR OUTPUT

Response to a SET:SDSTAT input message which requested that the cache table be activated or deactivated.

3. VARIABLE FIELD DEFINITIONS

a Request:

 ACTIVATE — Indicates that the cache table has been activated.

 DEACT — Indicates that the cache table has been deactivated.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
CCSDSDIW

Input Message
SET:SDSTAT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID SET:TRKSTAT
WORK CENTER.. MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] SET:TRKSTAT a TRAF<{b|c} d> [e], f ...
[g|h TSNS AFFECTED. BASE TSN i][j|k CKT FAILED. LAST REASON = l]
- [2] SET:TRKSTAT CAD[.BLK].LKO<m>[.DSA<n[n[...n]]>]
TRAF<{b|c} d> [e], f [g|h TSNS AFFECTED.
BASE TSN i][j|k CKT FAILED. LAST REASON = l]
- [3] SET:TRKSTAT CAD[.BLK].RSF.LKO<m>[.DSA<n[n[...n]]>]
TRAF<{b|c} d> [e], f [g|h TSNS AFFECTED.
BASE TSN i][j|k CKT FAILED. LAST REASON = l]
- [4] SET:TRKSTAT CAD[.BLK].MC3.LKO<m>[.DSA<n[n[...n]]>]
TRAF<{b|c} d> [e], f [g|h TSNS AFFECTED.
BASE TSN i][j|k CKT FAILED. LAST REASON = l]
- [5] SET:TRKSTAT CAD[.BLK].DSA<n[n[...n]]> TRAF<{b|c} d> [e], f ...
[g|h TSNS AFFECTED. BASE TSN i][j|k CKT FAILED. LAST REASON = l]
- [6] SET:TRKSTAT CAD.DSA<n[n[...n]]> TRAF<{b|c} d> [e], f ...
[g|h TSNS AFFECTED. BASE TSN i][j|k CKT FAILED. LAST REASON = l]
- [7] SET:TRKSTAT MTC[.BLK].DSA<n[n[...n]]> TRAF<{b|c} d> [e], f ...
[g|h TSNS AFFECTED. BASE TSN i][j|k CKT FAILED. LAST REASON = l]
- [8] SET:TRKSTAT MTC[.BLK].LKO<m>[.DSA<n[n[...n]]>]
TRAF<{b|c} d> [e], f [g|h TSNS AFFECTED.
BASE TSN i][j|k CKT FAILED. LAST REASON = l]
- [9] SET:TRKSTAT op TRK COUNT q
.
.
.
op TRK COUNT q

2. REASON FOR OUTPUT

To report the state of a trunk(s) after the input message SET:TRKSTAT STATE CHANGE REQUEST has been processed. The resulting trunk state may not be the state requested on the input message if the request failed or if nonmanual out-of-service reasons cannot be overridden.

Format [1] through [8] will be printed if the input request was for a single trunk.

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Format [9] will be printed if the input request was for a group of trunk status information. If a group of trunks was specified on the input message, an individual message, Formats [1-8], is output for each trunk in the group (unless SUM was specified). The last message has no status information, but rather contains a count of trunks for which a state change request was submitted to the trunk state change program, and an indication that the group state change request has terminated.

3. VARIABLE FIELD DEFINITIONS

- a Maintenance status of the trunk after a state change request has been processed:
- ACT — Trunk is active, that is, no maintenance control.
 - BLK — Out-of-band trunk is blocked, no other maintenance control.
 - MC3 — Integrated Services Digital Network (ISDN) User Part (ISUP) only - Unable to signal to far end.
 - MC3.BLK — ISUP only - Unable to signal to far end, also blocked.
 - MTC — Maintenance. If this status is reported, it will print in either one if the two formats shown (the variables will be the same as those described for CAD):
 - RSF — Ring service failure.
 - RSF.BLK — Out-of-band trunk is blocked and a ring service failure is in effect.
 - UNA — Trunk is unassigned.
- CAD Circuit administration. If this status is reported, it will print in one of the following formats:
- BLK Out-of-band trunk is blocked.
 - LKO Lockout.
 - DSA Disabled.
 - RSF Ring service failure.
 - MC3 Integrated Services Digital Network (ISDN) User Part (ISUP) only - Unable to signal to far end.
- b Trunk register (TR) state code information. (see item TR4CODE on COMPOOL) Values which correspond to exactly one TR state:
- 2WOPB — 2-way operator trunk in busy to operate state.
 - AUDLIST — Audit list.
 - AUDST — Audit state, trunk would not fit on audit list.
 - CTRA — Connected to recorded announcement or tone, e.g., reorder or No Circuit Available (NCA).

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	HWL	—	Trunk is in the high and wet state.
	HWT	—	High and wet timing - trunk is in the 2 to 3 minute timing interval prior to going high and wet.
	IDLE	—	Idle.
	OOSI	—	Trunk is in out-of-service ignore state (CAD.DSA or MTC.DSA).
	UNA	—	Unassigned trunk.
c	Trunk register (TR) state code information. (see item TR4CODE on COMPOOL) Values which correspond to a group of TR states:		
	ICT	—	Incoming trunk - trunk is associated with incoming side of a call. The call may be in any one of a number of states.
	MISC	—	Miscellaneous trunk state.
	OGT	—	Outgoing trunk - trunk is associated with the outgoing side of a call. The call may be in any one of a number of states.
	TEST	—	Trunk is involved in some kind of a test.
	UNDEF	—	Undefined - trunk is in an illegal state.
d	Decimal value of the state code.		
e	*MBT* if the Trunk Subgroup (TSG) is at or beyond the maintenance busy threshold (magic number). Nothing is printed if the TSG is below the threshold.		
f	Identity of trunk for which state change request was processed.		
g	(blank) - Single trunk state change request,		
h	For multiport trunk circuits, e.g., ROTL, all of the trunks connected to the circuit have their states changed whenever a request to change one of them is processed. For these cases, the number of trunks which were processed.		
i	The base Trunk Scanner Number (TSN) of the group. The TSNs for the multiport circuits are always consecutive.		
j	(blank) - Successful state change processing,		
k	For state change requests that failed or could not be processed for some reason, either the number of trunks that failed to be processed or in the case of multiport circuits, the number of the first one that failed, and the reason for failure are indicated. Number of TSNs which could not be processed.		

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- l The reason why the last TSN (if more than one) could not be processed:
- CAMP-ON FAILURE — A busy trunk was requested to be made DSA, but the camp-on list is full.
 - D CHANNEL NONFUNCTIONAL — D channel associated with input Q931 trunk is either nonoperational or not nailed up. Activation request is denied.
 - DENIED - XTSI LOOPBACK IN EFFECT — Restoral denied since and Expanded Time Slot Interchange (XTSI) loopback is in effect.
 - INVALID CKT TYPE FOR STATE REQUESTED — The state requested is not valid for the type of trunk, e.g., a Common Channel Interoffice Signaling (CCIS) terminal trunk cannot be made disabled, a Centralized Automatic Message Accounting (CAMA) operator trunk cannot be made Lockout (LKO).
 - INVALID CODE — The TR state code is in a state which cannot be handled by the trunk state change program.
 - NONOPERATIONAL UNIT — One of the units, (e.g., SP, VIU, TSI, etc.), associated with the trunk is not in an operational state. The trunk is forced to CAD.DSA<MAN> and cannot have its state changed.
 - NONOPERATIONAL XTSI-DS1 — The DS1 is not equipped, trunks must remain CAD.DSA<MAN>.
 - RESERVED FOR NAILUP — Trunks reserved for nailup cannot undergo a state change. State is always CAD.DSA.
 - UNA — Trunk is unassigned in translations.
- m Lockout type:
- MAN — Manual.
 - AUT — Automatic.
- n Out of service states:
- AUT — Automatic, e.g., error analysis, test failure.
 - CAR — Carrier alarm.
 - HAW — High and wet.
 - MAN — Manual.
 - RBA — Recent change rollback.
 - RSF — Ring service failure.
 - SCP — Scan pack matrix family disabled.
 - SDM — Signal distributor matrix pack family disabled.

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SDP — Signal distributor relay pack family disabled.

SPF — Signal processor failure.

TSF — CCIS total signaling failure.

TSI — Duplex Time Slot Interchange (TSI) failure.

VIU — Voiceband Interface Unit (VIU) failure, no protection switch done.

o Trunk identity of the trunk which was input on the group SET:TRKSTAT input message, or Trunk Control Area (TCA) identity, or ALL if specified, plus additional information.

The keywords which are present on the input message requesting possible options are output:

CAR — All trunks on the same carrier group as the input trunk.

NUM — Consecutive TSNs, TANs, or traffic numbers as specified on input message.

SCP — All trunks on the same scan matrix circuit pack as the input trunk.

SDM — All trunks on the same Signal Distributor (SD) matrix circuit pack as the input trunk.

SDP — All trunks on the SD relay circuit pack as the input trunk.

STAT — Only processed trunks in state specified by Status (STAT) data on input message.

SUM — Summary request. Only the completed message is output. If SUM is present, the trunk count (TRK COUNT) on the completed message indicates the number of trunks which were attempted to be processed, not the number which were successfully processed. All failure printouts are inhibited.

TSG — All trunks in trunk subgroup.

p Reason for termination of group SET:TRKSTAT processing:

COMPLETED — Processing of all trunks in the group has normally completed.

STOPPED, DISK READ FAILURE — A disk read request has failed. The disk program returned but indicated a failure.

STOPPED, DISK READ TIMEOUT — A disk read request was submitted, but no return was made.

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STOPPED, FUNCTION UNAVAILABLE — The options requested on the input message are not available in the current version of the 4ESS™ generic.

STOPPED, MAN — A manual request to stop has been received.

STOPPED, STATE CHANGE QUEUE FULL — The queue used to process the individual trunk in the group is full. Repeat later.

STOPPED, UNA — The input data used to identify the desired group contains unassigned data.

q The number of trunks which were processed up to the point of the completed message. All of these trunks are in the group identified on the input message.

If the input request was for SUM, this is the number of trunks for which processing was attempted, not the number that was successfully processed. All failure printouts are inhibited.

4. ACTION TO BE TAKEN

This output message is informational. Any action taken must be based on the specific information printed and the technical impact of the data.

5. REFERENCES

PIDENTs
TMAD0001
TMAD0005
TMAD0006

Practice 234-180-240, *Trunk Maintenance Administration Program Description*

Input Messages
OP: TRKSTAT
SET: TRKSTAT
STOP: SET - TRKST

SEE PROPRIETARY NOTICE ON COVER PAGE

ID SET:TSGATC
WORK CENTER.. MOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

SET:TSGATC {TAN a|OTAN b|CIN c|TSN d| TCA e|ALL}:f,g

2. REASON FOR OUTPUT

To report the results of a request to set the trunk subgroup (TSG) automatic test control for a specified TSG, or group of TSGs, to a specified value.

3. VARIABLE FIELD DEFINITIONS

- | | |
|-----|---|
| a | Octal trunk appearance number (TAN) of a trunk in a single TSG. |
| b | TSI - SP - PORT - CHANNEL TAN of trunk in affected TSGs.

<div style="margin-left: 40px;">TSI — A 2-digit decimal number indicating the time slot interchange (TSI) member number, range 00-63.</div> <div style="margin-left: 40px;">SP — A 1-digit decimal number indicating signaling processor (SP) of TSI, range 0-1.</div> <div style="margin-left: 40px;">PORT — A 1-digit decimal number indicating port of TSI, range 0-6.</div> <div style="margin-left: 40px;">CHANNEL — A 3-digit decimal number indicating channel, range 0-127.</div> |
| c | Circuit identification number (CIN) of trunk in affected TSG. |
| d | SP - ROW - POINT trunk scanner number (TSN) of trunk in affected TSGs.

<div style="margin-left: 40px;">SP — A 2-digit decimal number indicating the SP member number, range 00-31.</div> <div style="margin-left: 40px;">ROW — A 3-digit decimal number indicating the row in the SP, range 000-255.</div> <div style="margin-left: 40px;">POINT — A 2-digit decimal number indicating the point in the row, range 00-15.</div> |
| e | Trunk control area (TCA). All TSGs in the control area were affected except the multi-frequency (MF) receivers, MF transmitters, and common channel interoffice signaling (CCIS) transceivers. |
| ALL | All TSGs in the office were affected except the service circuits listed in TCA e. |

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- f Automatic test control type:
- INH — Automatic trunk testing on the TSG was inhibited.
 - NOLIMIT — Automatic trunk tests on the TSG were allowed and failing trunks were removed, even beyond the magic number.
 - NORM — Automatic trunk tests on the TSG were allowed and the failing trunks removed until the "magic number" (25 percent) was reached.
 - REPT — Automatic trunk tests were allowed to run but failing trunks were not removed from service, report only.
- g Input message request results:
- ABORTED
 - COMPLETED
 - REJECTED — UNASSIGNED
 - REJECTED **MFR, MFX, XCVRS SKIPPED**

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
TERA00

Practice 234-103-016, *Trunk Error Analysis (TERA)*

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ID SET:TSGEAC
WORK CENTER.. MOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

SET:TSGEAC a b [c] : d , e , f

2. REASON FOR OUTPUT

To respond to the SET:TSGEAC input message.

3. VARIABLE FIELD DEFINITIONS

a	Trunk identification or trunk range.
b	ALL TCA — Trunk control area (TCA).
c	Trunk control area (TCA) number.
d	Error analysis control: INH NOLIMIT NORM REPT
e	Results: ABORT COMPLETED REJECTED
f	Reason for rejection.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
TERA00

Practice 234-103-016, *Trunk Error Analysis (TERA)*

Input Message
SET:TSGEAC

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ID SET:TSIBP
WORK CENTER.. MOC
GENERIC 4E24 Rel. 2 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] SET:TSIBP XTSI a MRAM b FAST COMPLETE
- [2] SET:TSIBP XTSI a MRAM b FAST c
- [3] SET:TSIBP XTSI a MRAM b NORM COMPLETE
- [4] SET:TSIBP XTSI a b MRAM b NORM c
- [5] SET:TSIBP XTSI a MRAM b CUST {GRAM d|LRAM e|CRAM f} L g COMPLETE
- [6] SET:TSIBP XTSI a MRAM b CUST {GRAM d|LRAM e|CRAM f} L g c
- [7] SET:TSIBP XTSI a MRAM b CUST c {GRAM d|LRAM e| REG h} ...
INDIR {GRAM |LRAM | CRAM} L g COMPLETE
- [8] SET:TSIBP XTSI a MRAM b CUST c {GRAM d|LRAM e| REG h} ...
INDIR {GRAM |LRAM | CRAM} L g c
- [9] SET:TSIBP XTSI a D3U j MRAM k FAST COMPLETE
- [10] SET:TSIBP XTSI a D3U j MRAM k FAST m
- [11] SET:TSIBP XTSI a D3U j MRAM k NORM COMPLETE
- [12] SET:TSIBP XTSI a D3U j MRAM k NORM m
- [13] SET:TSIBP XTSI a D3U j MRAM k CUST HADR n [INDIR] L g COMPLETE
- [14] SET:TSIBP XTSI a SPU o MRAM k CUST HADR n [INDIR] L g m
- [15] SET:TSIBP XTSI a SPU o MRAM k FAST COMPLETE
- [16] SET:TSIBP XTSI a SPU o MRAM k FAST m
- [17] SET:TSIBP XTSI a SPU o MRAM k NORM COMPLETE
- [18] SET:TSIBP XTSI a SPU o MRAM k NORM m
- [19] SET:TSIBP XTSI a SPU o MRAM k CUST HADR n [INDIR] L g COMPLETE
- [20] SET:TSIBP XTSI a SPU o MRAM k CUST HADR n [INDIR] L g m

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- [21] SET:TSIBP XTSI a IBU 0 MRAM k FAST COMPLETE
- [22] SET:TSIBP XTSI a IBU 0 MRAM k FAST m
- [23] SET:TSIBP XTSI a IBU 0 MRAM k NORM COMPLETE
- [24] SET:TSIBP XTSI a IBU 0 MRAM k NORM m
- [25] SET:TSIBP XTSI a IBU 0 MRAM k CUST HADR n [INDIR] L g COMPLETE
- [26] SET:TSIBP XTSI a IBU 0 MRAM k CUST HADR n [INDIR] L g m

2. REASON FOR OUTPUT

This message prints in response to a SET:TSIBP input message.

Formats [1-8] are output if the input request specified that a breakpoint be set in a Expanded Time Slot Interchange (XTSI) simplex controller or duplex controllers.

Formats [9-14] are output if the input request specified a breakpoint be set in a Digital Signal Level 3 Unit (D3U).

Formats [15-20] are output if the input request specified a breakpoint be set in a Signal Processing Unit (SPU).

Formats [21-26] are output if the input request specified a breakpoint be set in an In-Band Unit (IBU).

3. VARIABLE FIELD DEFINITIONS

- a XTSI member number in decimal.
- b XTSI controller Micro-Instruction Random Access Memory (MRAM) memory address in hexadecimal (0-FFFF).
- c Controller request status code:
 - ABORTED - FRAME ERROR Request for the given XTSI was aborted because of an error returned from the frame. There may already be two breakpoints in the controller or there may already be a breakpoint at the micro-instruction address specified. Use the OP:TSIBP command to list the breakpoints in the controller. The breakpoint buffer for storing breakpoint data may be full, use the CLR:TSIBP command to reset the buffer. Contact the Technical Assistance Center for further information.
 - COMPLETE The breakpoint was set.
 - DENIED - INV TSI TYPE OR UNEQ Request denied because only an XTSI can be specified, or the frame is unequipped, in growth, or special growth state.

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- DENIED - ODD TSI MEMBER Request denied because only the even member number can be specified.
- DENIED - TSI DUPF Request denied because the frame is duplex failed.
- DENIED - TSI LOM Request denied because the frame controller is in listen-only mode. Retry later, as this condition should be cleared quickly.
- d Controller starting address of Global Random Access Memory (GRAM) region to be copied to custom breakpoint save area.
- e Controller starting address of Local Random Access Memory (LRAM) region to be copied to custom breakpoint save area.
- f Controller starting address of Control-Bus Random Access Memory (CRAM) region to be copied to custom breakpoint save area.
- g Number of "words" copied to the custom breakpoint save area. For XTSI controller, D3U, SPU and IBU, a word is 32-bits.
- h Controller register number in hexadecimal.
- j D3U number in decimal.
- k D3U SPU local memory RAM instruction address in hexadecimal (100000-17FFFF).
- m D3U, SPU or IBU request status code:
- ABORTED - FRAME ERROR Request for the given D3U, SPU or IBU was aborted because of an error returned from XTSI frame. Contact the Technical Assistance Center for further information.
- ABORTED - MACRO ERROR Request was aborted because the given D3U, SPU or IBU failed in processing the set command. Contact the Technical Assistance Center for further information.
- ABORTED - MACRO REJECTED Request for the given D3U, SPU or IBU was aborted because the XTSI frame rejected the set command. Contact the Technical Assistance Center for further information.
- ABORTED - MACRO TIMEOUT Request for the given D3U, SPU or IBU was aborted because the XTSI frame did not reply to the set command within the allotted time limit. Contact the Technical Assistance Center for further information.
- COMPLETE The breakpoint was set.
- DENIED - BREAKPOINT ALREADY AT ADDRESS Request for the given D3U, SPU or IBU was denied since there already is a breakpoint at the instruction address specified. Use OP:TSIBP to list the breakpoints in the D3U, SPU or IBU.

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- DENIED - DATA ADDRESS RANGE ERROR Request for the given D3U, SPU or IBU was denied because an illegal custom breakpoint address to be dumped is specified. The custom breakpoint address plus the entry in the L field must equal legal address. The instruction address specified. Use OP:TSIBP to list the breakpoints in the D3U, SPU or IBU.
- DENIED - DATA LENGTH ERROR Request for the given D3U, SPU or IBU was denied because an illegal amount of custom data to be dumped was specified. Re-enter the command with a different value in the L field.
- DENIED - INV TSI TYPE OR UNEQ Request denied because either a TSI, not XTSI, was specified, the frame or D3U, SPU or IBU was unequipped, in growth, or special growth state.
- DENIED - NON-ADDRESSABLE DATA BYTE Request for the given D3U, SPU or IBU was denied because the breakpoint attempts to dump data starting on an illegal byte address boundary in shared memory. Re-enter the command either incrementing or decrementing the address.
- DENIED - NON-ADDRESSABLE MRAM BYTE Request for the given D3U, SPU or IBU was denied because it attempts to set a breakpoint on at an illegal address in XTSI micro-instruction RAM. Re-enter the command either incrementing or decrementing the address.
- DENIED - ODD TSI MEMBER Request denied because only the even member number can be specified.
- DENIED - SUBUNIT IS OOS Request for the given D3U, SPU or IBU was denied because the D3U, SPU or IBU is out of service.
- DENIED - TOO MANY BREAKPOINTS Request for the given D3U, SPU or IBU was denied there already are two breakpoints in the D3U, SPU or IBU. Use OP:TSIBP to list the breakpoints in the D3U, SPU or IBU.
- DENIED - TSI DUPF Request denied because the frame is duplex failed.
- DENIED - TSI LOM Request denied because the frame controller is in listen-only mode. Retry later, as this condition should be cleared quickly.
- DENIED - UNUSED DATA ADDRESS Request for the given D3U, SPU or IBU was denied because the specified custom breakpoint starting address to be dumped into the save area is currently not being used.
- DENIED - UNUSED MRAM ADDRESS Request for the given D3U, SPU or IBU was denied because the specified micro-instruction address is currently not being used.

SEE PROPRIETARY NOTICE ON COVER PAGE

- n D3U, SPU or IBU starting address of memory region to be copied to custom breakpoint save area. If INDIR option is specified, the contents of the address specified are the starting address of the D3U, SPU or IBU RAM memory region to dump.
- o SPU number in decimal.

4. REFERENCES

PIDENT
XTSIBKPT

Input Messages
CLR: TSIBP
OP: TSIBP
SET: TSIBP

Output Messages
CLR: TSIBP
OP: TSIBP
REPT: TSIBP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID STOP:CFR-ALMGR
WORK CENTER.. MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

STOP:CFR;ALMGRP ab COMPL

2. REASON FOR OUTPUT

To respond to STOP:CFR-ALMGRP input message. The alarm grouping has been terminated between the maintenance centers specified.

3. VARIABLE FIELD DEFINITIONS

ab The maintenance center for which alarm routing is terminated:

ALL MC'S — All maintenance centers.

MOC — Master operations center.

TEC1 — Terminal equipment center 1.

TEC2 — Terminal equipment center 2.

TEC3 — Terminal equipment center 3.

TEC4 — Terminal equipment center 4.

TEC5 — Terminal equipment center 5.

TOC — Trunk operations center.

4. ACTION TO BE TAKEN

Observe the alarm transfer/alarm grouping (AT-AG) lamp on the Alarm Grid Display Panel extinguished for all the grids assigned to the maintenance centers specified.

5. REFERENCES

PIDENT
ALRM01

Practice 234-100-040, *Office Alarm System Description and Theory*

Output Message
CFR:ALMGRP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID STOP:COPY
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

STOP:COPY;SCS a b

2. REASON FOR OUTPUT

This message prints in response to an STOP:COPY input message request to stop the Service Circuit Unit (SCU) disk copy.

3. VARIABLE FIELD DEFINITIONS

a Service Circuit System (SCS) member number (0-7) containing the SCU.
b COMPLETE - The SCU disk copy is stopped.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
SCSFPUMP

Input Messages
COPY:SCS
STOP:COPY

SEE PROPRIETARY NOTICE ON COVER PAGE

ID STOP:INIT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

STOP:INIT;SCS a b

2. REASON FOR OUTPUT

This message prints in response to an STOP:INIT input message request to stop the service circuit unit (SCU) format (Init) process.

3. VARIABLE FIELD DEFINITIONS

a Service circuit system (SCS) member number (0-7) containing the SCU.
b COMPLETE - The SCU disk format is stopped.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
SCSFPUMP

Input Messages
INIT:SCS
STOP:INIT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID STOP:LIBSYS
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

STOP:LIBSYS: PKG aaaaaaaa. PGM bbbb, TASK c, CLIENT d e.

2. REASON FOR OUTPUT

To report the disposition of a STOP:LIBSYS input message.

3. VARIABLE FIELD DEFINITIONS

- a Library package name.
- b Program name of the program in package a.
- c Task number within program b.
- d Client number assigned to program b (0-7).
- e Disposition of the requested action:

COMPLETED
COMPLETED MACLI REQUEST
RELEASE COMPLETED
STOPPED INVALID PGM
STOPPED INVALID PKG
STOPPED INVALID TASK
STOPPED PGM INACTIVE.

4. ACTION TO BE TAKEN

If the output message indicated STOPPED INVALID, correct the indicated problem and reenter the STOP:LIBSYS input message.

5. REFERENCES

PIDENT
LIBRSTOP

Input Message
STOP:LIBSYS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID STOP:MON-DGSTT
WORK CENTER.. MOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

STOP:MON;DGSTAT; {SLIP|ALL}: ALL, a!

2. REASON FOR OUTPUT

To print in response to a request to stop monitoring all digroups currently on the slip monitor list.

3. VARIABLE FIELD DEFINITIONS

SLIP	Slip monitor list.
ALL	Same as SLIP.
	Entire slip monitor list.
a	COMPLETED
	STARTED

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
TMAD0005
TMAD0061

Input Messages
MON:DGSTAT
STOP:MON-DGSTT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID STOP:OP
WORK CENTER.. MAC, MOC, NMOC, TEC,
 TOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

STOP:OP;MSGRCD COMPLETED

2. REASON FOR OUTPUT

To report that the output of message records has stopped.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
IOCPMSR1

Input Message
STOP:OP-MSGRCD

SEE PROPRIETARY NOTICE ON COVER PAGE

ID STOP:OVRWRT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

STOP:OVRWRT a

2. REASON FOR OUTPUT

To report the results of requests to replace overwrites with original data and terminate the overwrite procedure.

3. VARIABLE FIELD DEFINITIONS

a Status of request:

ABORTED QUEUE FULL — Attempt to write original data to the file system failed because of input error or full file system queue. Overwrite procedure not terminated.

COMPLETED — All original data replaced. Overwrite procedure terminated.

NG, CODE 160 — File system queue full.

NG, CODE 161 — 1B file system reject-core address is out of range. This may indicate mutilation.

NG, CODE 162 — 1B file system reject-file system address mismatches identification (ID) tag.

NG, CODE 164 — 1B file system reject-size too big.

NG, CODE 165 — 1B file system reject-file specified is out of service.

NG, CODE 166 — 1B file system reject-blocked.

NG, CODE 167 — 1B file system reject-write trouble to system file.

NG, CODE 168 — 1B file system reject-queue invalid for generic utility program (GULP).

NG, CODE 169 — 1B file system reject-mutilated queue.

NG, CODE 170 — 1B file system reject-no queue specified.

4. ACTION TO BE TAKEN

If the status of the request was:

ABORTED QUEUE FULL — Reenter the STOP:OVRWRT input message. Then run SAWS. If it fails again, run the corresponding system audit of stores using tape (SAST).

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- NG, CODE 161 — Run corresponding audit tape (system audit of writable stores [SAWS] or system audit of stores using tape [SAST]).
- NG, CODE 162 — Run corresponding audit tape (SAWS or SAST).
- NG, CODE 164 — Run corresponding audit tape (SAWS or SAST).
- NG, CODE 165 — Run corresponding audit tape (SAWS or SAST).
- NG, CODE 166 — Run corresponding audit tape (SAWS or SAST).
- NG, CODE 167 — Run corresponding audit tape (SAWS or SAST).
- NG, CODE 168 — Run corresponding audit tape (SAWS or SAST).
- NG, CODE 169 — Reenter. If repeated, run corresponding audit tape (SAWS or SAST).
- NG, CODE 170 — Run corresponding audit tape (SAWS or SAST).

5. REFERENCES

PIDENTs
GULPOWRT
GULRUTCR

Practice 234-301-003, *1B Processor Generic Utility Program (GULP) Application - Description*

PA-4A002-01, *4ESSTM User's Manual*

Input Message
STOP:OVRWRT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID STOP:RTE-ALM
WORK CENTER.. MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

STOP:RTE;ALM FROM ab COMPL

2. REASON FOR OUTPUT

To respond to input message STOP:RTE;ALM. The alarm routing has been terminated from maintenance center ab. Audible alarm silence (if active) is also terminated in maintenance center ab.

3. VARIABLE FIELD DEFINITIONS

ab The maintenance center for which alarm routing is terminated:

ALL MC'S — All maintenance centers.

MOC — Master operations center.

TEC1 — Terminal equipment center 1.

TEC2 — Terminal equipment center 2.

TEC3 — Terminal equipment center 3.

TEC4 — Terminal equipment center 4.

TEC5 — Terminal equipment center 5.

TOC — Trunk operations center.

4. ACTION TO BE TAKEN

Observe the alarm transfer/alarm grouping (AT-AG) lamp on the Alarm Grid Display Panel extinguished for all the grids assigned to the maintenance center specified.

5. REFERENCES

PIDENT
ALRM01

Practice 234-100-040, *Office Alarm System Description and Theory*

Input Message
STOP:RTE-ALM

SEE PROPRIETARY NOTICE ON COVER PAGE

ID SW:AMA
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

SW:AMA COMPL TUC aaa ACT

2. REASON FOR OUTPUT

To indicate that the switch of automatic message accounting (AMA) units, requested either manually or automatically by the system, has completed successfully.

3. VARIABLE FIELD DEFINITIONS

a Member number of the tape unit controller (TUC) which is now designated as the active AMA unit (0 - 15).

4. ACTION TO BE TAKEN

Demount the AMA tape from the standby AMA TUC. Assign a new TUC to the AMA function.

5. REFERENCES

PIDENTs
AMDX
IOCPOMC1

SEE PROPRIETARY NOTICE ON COVER PAGE

ID SW:AMA-NOT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

SW:AMA NOT STARTED

2. REASON FOR OUTPUT

To indicate that the requested switch of automatic message accounting (AMA) units cannot be done.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

Note that a switch of AMA units cannot be performed because the standby AMA tape unit controller (TUC) is out-of-service. Restore the standby AMA TUC to service and a manual switch requested. If the standby TUC cannot be restored to service, mount a new tape on the AMA TUC or another TUC assigned to the AMA function.

5. REFERENCES

PIDENTs
AMDX
IOCPOMC1

SEE PROPRIETARY NOTICE ON COVER PAGE

ID SW:APS
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1A-APS
TYPE Output

1. FORMAT

SW:APS a b

2. REASON FOR OUTPUT

To report the disposition of a SW:APS request to switch the mate attached processor interface (API) unit to its active state.

3. VARIABLE FIELD DEFINITIONS

- a Attached processor system (APS) member number (0-7).
- b Disposition of the request:
- COMPLETED — The request was successfully completed.
- STOPPED AU BUS OOS — The auxiliary unit bus (AUB) to which the mate API is assigned is out of service (OOS). This also means that the mate API is out of service.
- STOPPED, ERROR CODE x — Stopped due to code x, where x is:
- 105 — Failed, bus OOS.
 - 106 — Failed, unit not in operational state.
 - 125 — Active API found for this APS.
 - 126 — Active member number (MEMN) for this APS is not operational.
 - 127 — Message handler failed to send message.
 - 130 — Timeout waiting for message acknowledgment.
 - 131 — Acknowledgment message from 3B computer was no good.
 - 201 — APS member number out of range.
 - 202 — Fail to restore OOS mate API before switching.
 - 203 — Member number to base address conversion failed.
 - 204 — Switch API failed due to the OOS mate API. Use the unconditional (UCL) command if needed.

4. ACTION TO BE TAKEN

If disposition of the request is:

COMPLETED, take no action.

STOPPED AU BUS OOS, restore the associated AUB before attempting another switch command.

STOPPED, ERROR CODE x, try again later.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
APFRBASE, Subroutine SW-API
MIRA

Practice 254-280-210, *Maintenance Control Program*

PA-4A002-01, *4ESSTM User's Manual*

Input Message
SW:APS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID SW:AUI
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

SW:AUI a

2. REASON FOR OUTPUT

To report the final disposition of the SW:AUI request to switch the auxiliary unit interface (AUI).

3. VARIABLE FIELD DEFINITIONS

a Disposition of the switch request:

ABORTED	— The request was aborted because of a maintenance interrupt.
COMPLETED	— The switch request completed successfully.
STOPPED IFB OOS	— The interface bus (IFB) to which the mate AUI is assigned is out-of-service.
STOPPED NO ACT AUI	— The switch request was rejected because no active AUI exists.
STOPPED NO SBY AUI	— A conditional switch request was rejected because the mate AUI is out-of-service. An unconditional switch request does not require a standby AUI.

4. ACTION TO BE TAKEN

If the disposition of the switch request is:

COMPLETED	— no action is needed.
STOPPED IFB OOS	— restore the associated interface bus (IFB), and retry the request.
STOPPED NO ACT AUI	— restore an AUI via RST:AUI from teletypewriter (TTY).
STOPPED NO SBY AUI	— restore the mate AUI and retry the conditional request.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENT
AUFRBASE

Input Messages
RST:AUI
SW:AUI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID SW:CC
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

SW:CC a

2. REASON FOR OUTPUT

To report the results of a request to conditionally switch the central controllers (CCs).

3. VARIABLE FIELD DEFINITIONS

- a Disposition of the request:
- COMPLETED — The request has successfully completed.
- FAILED, CODE 500 — The master control complex (MCC) CC force is enabled preventing the CCs from being switched. The CC force when enabled, forces the current active CC in the active state until the force is removed.
- FAILED, CODE 510 — A clock error exists which prevents the standby CC from assuming the duties of the active CC.
- FAILED, CODE 520 — The CC Trouble flip-flop is set in the active CC indicating that either:
- the standby CC is stopped because of a fault, or
 - the standby CC was manually removed from service.
- NOTE:** The CCs must be running in-step to perform a conditional CC switch.
- FAILED, CODE 530 — The freeze or clear stop flip-flop is set in the standby CC indicating that the standby CC is stopped, and therefore, is out-of-service.
- NOTE:** The CCs must be running in-step to perform a conditional CC switch.
- FAILED, CODE 540 — The CC software status word (CC1STATUS) indicates that the CCs are not running in-step.
- NOTE:** The CCs must be running in-step to perform a conditional CC switch.
- FAILED, CODE 550 — A conditional CC switch was attempted but failed due to a fault in either the active or standby CC.

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4. ACTION TO BE TAKEN

- COMPLETED — None.
- FAILED, CODE 500 — Remove MCC force using the MCC emergency action interface (EAI) page. Then, repeat the conditional CC switch attempt.
- FAILED, CODE 510 — Diagnose the standby CC to analyze the problem.
- FAILED, CODE 520 — Try a conditional restore of the standby CC. If the CC is restored to service, repeat the conditional CC switch attempt.
- FAILED, CODE 530 — Try a conditional restore of the standby CC. If the CC is restored to service, repeat the conditional CC switch attempt.
- FAILED, CODE 540 — All hardware status indicates that the CCs are in-step, but the software status indicates that the CCs are not in-step. Manually remove the standby CC, then perform a conditional restore.
- FAILED, CODE 550 — Diagnose the standby CC to analyze the problem and/or run Deferred Tests on the active CC.

5. REFERENCES

PIDENT
CCFRTEST

Input Messages
RMV:CC
RST:CC
SW:CC
TEST:CC

SEE PROPRIETARY NOTICE ON COVER PAGE

ID SW:DIF
WORK CENTER.. MOC
GENERIC 4E21 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

SW:DIF a [b c] d

2. REASON FOR OUTPUT

Reports the disposition of a Digital Interface Frame (DIF) which was manually requested.

3. VARIABLE FIELD DEFINITIONS

- a Member number of the specified unit.
- b If present, the subunit type:
CONTR — Controller.
DIU — Digital interface unit.
- c If present, the submember number.
- d Disposition of the request:
COMPL — Action completed.
STOPPED PROTECTION SWITCH NOT ACTIVE — Protection switch
is not active.
STOPPED UNIT OR SUBUNIT INGROWTH — Unit or subunit in
growth state.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
DIFRCNFG
DIFRUNFG
DZFRSUBS
MAINIPUB

SEE PROPRIETARY NOTICE ON COVER PAGE

ID SW:MUP
WORK CENTER.. MOC
GENERIC 4E20 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

SW:MUP a

2. REASON FOR OUTPUT

To report the final disposition of the SW:MUP request to switch the Master Control Complex (MCC) and Utility Processor (MUP).

3. VARIABLE FIELD DEFINITIONS

- a Disposition of the switch request:
- ABORTED — The request was aborted because of a maintenance interject/interrupt or a STOP:MACLI input message.
- COMPLETED — The switch request completed successfully.
- STOPPED ERROR CODE b — Where the error code b is:
- 1 — Maximum save/restore operations performed.
 - 2 — Access to save/restore buffer prohibited.
 - 3 — Save command failed.
 - 4 — Save command timeout occurred.
 - 5 — Internal MUP error.
 - 6 — Restore command failed.
 - 7 — Restore command timeout.
 - 8 — Save buffer not equal to restore buffer.
 - 9 — Hardware activity did not switch.
 - 10 — MUP processes still being restored.
 - 11 — MUP reset failed.
 - 12 — Switch instruction fail.
- STOPPED FORCED — The switch request was rejected because the force for the MUPs is set.
- STOPPED IFB OOS — The Interface Bus (IFB) to which the mate MUP is assigned is Out-Of-Service (OOS).
- STOPPED NO ACT MUP — The switch request was rejected because no active MUP exists.

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STOPPED NO SBY MUP — The conditional switch request was rejected because the mate MUP is out-of-service.

4. ACTION TO BE TAKEN

If the disposition of the request is:

- | | |
|--------------------|---|
| COMPLETED | — then no action is needed. |
| STOPPED FORCED | — then, if appropriate, remove the force and try the switch again. |
| STOPPED IFB OOS | — restore the associated Interface Bus (IFB) and MUP, and then retry the request. |
| STOPPED NO ACT MUP | — then restore MUPs via RST:MUP input message. |
| STOPPED NO SBY MUP | — then restore the OOS MUP via RST:MUP input message. |

5. REFERENCES

PIDENT
MCFRBASE

Input Messages
RST:MUP
STOP:MACLI
SW:MUP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID SW:PUB
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

SW:PUB a

2. REASON FOR OUTPUT

To document the results of a manually requested switch of peripheral unit bus (PUB) activity.

3. VARIABLE FIELD DEFINITIONS

a Disposition of the switch request:
COMPL — Action done.
STOPPED ACTIVE MAIN:MATE 00S — Action not done since the
PUB is simplex.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
MCFWPEMO
PUCN00

SEE PROPRIETARY NOTICE ON COVER PAGE

ID SW:RT
WORK CENTER.. MOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

SW:RT 0 COMPL a b ACT

2. REASON FOR OUTPUT

To indicate when a transfer or switch of ringing and tone (RT) plants or 20-Hz ringing generators has occurred and which plants or generators are now active.

3. VARIABLE FIELD DEFINITIONS

- a 20-Hz GEN — Indicates 20-Hz ringing generators has occurred.
 PLANT — Indicates switch of ringing and tone (RT) plants has occurred.
- b Active side (0 or 1).

4. ACTION TO BE TAKEN

The action depends upon whether a trouble message associated with the RT precedes this message. The message could simply be providing information as a result of manual operations at the frame.

5. REFERENCES

PIDENT
SVCTRTPP

Practice 234-110-092, *820A (J87822) Ringing, Tone, and Interrupter Plant - Description*
Practice 234-110-093, *820A (J87822) Ringing, Tone, and Interrupter Plant - Theory*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID SW:SCLK
WORK CENTER.. MAC, MOC, NMOC, TEC,
TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

SW:SCLK a b c

2. REASON FOR OUTPUT

To report the disposition of a manually requested switch.

3. VARIABLE FIELD DEFINITIONS

- a Member number of the specified unit.
- b Disposition of the request:
- COMPL — Action completed.
- COMPL CONTROLLER PESTS SET-ESR — Unit had to be pested following an unconditional switch where unit recorded errors.
- STOPPED ACCESS TEST FAILED-ESR — Initial unit access tests failed or unit recorded errors after conditional switch.
- STOPPED CONTR DUPLEX FAILED — Controller duplex failed.
- c If present, the contents of the error source register which caused the switch to be stopped.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
MCFWIOCP
MCFWPEDO
PUCN00

SEE PROPRIETARY NOTICE ON COVER PAGE

ID SW:SCS
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

SW:SCS a b c d

2. REASON FOR OUTPUT

Reports the disposition of a Service Circuit System (SCS) Teletypewriter (TTY) switch message.

3. VARIABLE FIELD DEFINITIONS

- a SCS member number (0-7).
- b Subunit type:
CONTR — Controller (0 - 1).
- c Submember number.
- d Disposition of the request:
ABORTED ACCESS TEST FAIL— Access test of out-of-service controller failed.
ABORTED CONTROLLER UPDATE FAILED— Update of out-of-service controller failed.
COMPL — Action completed.
STOPPED CONTR DUPLEX FAILED— Both Controllers (CONTRs) are out-of-service.
STOPPED INVALID UNIT OR SUBUNIT
STOPPED UNIT OR SUBUNIT INGROWTH — Unit or subunit in growth state.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
SCSTOPEX
SCSTOPMS
SCSTOPOP
TOPIC000

SEE PROPRIETARY NOTICE ON COVER PAGE

ID SW:TGR
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

SW:TGR a b c

2. REASON FOR OUTPUT

To report the disposition of a manually requested switch.

3. VARIABLE FIELD DEFINITIONS

- a Member number of the specified unit.
- b Disposition of the request:
- COMPL — Action completed.
- COMPL ACTIVITY SWITCHED — Frame duplex; requested controller switch resulted in toggle of controller activity.
- COMPL CONTROLLER PESTS SET-ESR — Unit had to be pested following an unconditional switch where unit recorded errors.
- STOPPED ACCESS TEST FAILED-ESR — Initial unit access tests failed or unit recorded errors after conditional switch.
- STOPPED CONTR DUPLEX FAILED — Controller duplex failed.
- c If present, the contents of the error source register which caused the switch to be stopped.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
MCFWPEMO
PUCN00

SEE PROPRIETARY NOTICE ON COVER PAGE

ID SW:VIF
WORK CENTER.. MAC, MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

SW:VIF a, [b c] d [e]

2. REASON FOR OUTPUT

To report the disposition of a manually requested switch.

3. VARIABLE FIELD DEFINITIONS

- a Member number of the specified unit.
- b If present, the subunit type:
VIU — Voiceband interface unit.
- c If present, submember number.
- d Disposition of the request:
COMPL — Action completed.
COMPL ACTIVITY SWITCHED — Frame duplex; requested controller switch resulted in toggle of controller activity.
COMPL CONTROLLER PESTS SET-ESR= — Unit had to be pested following an unconditional switch where unit recorded errors.
STOPPED SPARE NOT AVAILABLE — Subunit switch not done since spare is out of service (OOS).
STOPPED SUBUNIT NOT O/S — Subunit switch not done since subunit is not OOS.
STOPPED ACCESS TEST FAILED-ESR — Initial unit access tests failed or unit recorded errors after conditional switch.
STOPPED CONTR DUPLEX FAILED — Controller duplex failed.
STOPPED DT CONTR O/S — Switch dependent on OOS digroup terminal (DT) controller.
STOPPED TSI CONTR O/S — Switch dependent on OOS time slot interchange (TSI) controller.
STOPPED VIF CONTR O/S — Switch dependent on OOS voiceband interface frame (VIF) controller.
STOPPED UNIT TBL ON BUS — Switch not performed because bus interface of unit is OOS.

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e If present, the contents of the error source register which caused the switch to be stopped.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
MCFWPEMO
PUCNOO

SEE PROPRIETARY NOTICE ON COVER PAGE

1. FORMAT

2. REASON FOR OUTPUT

3. VARIABLE FIELD DEFINITIONS

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STOPPED PROTECTION SWITCH ALREADY ACTIVE—Request was stopped because the specified subunit is already protection switched. The desired action is already in effect.

STOPPED RESTORE FAILED—Restore of the spare subunit as protection switching another non-spare unit has failed. Refer to the *Maintenance Reference Handbook* to find fail reason in the spare's software status.

STOPPED SUBUNIT NOT OS—Request was stopped because the specified D3U or SPU is in-service. Only out-of-service subunits may be protection switched.

STOPPED UNIT OR SUBUNIT IN GROWTH—Request was stopped because the specified subunit is in growth or special growth. Only operational subunits are protection switched.

f

Pump Failure code (octal):

- 00 — No errors.
- 01 — XTSI CONTR pump failed - read file status order failed.
- 02 — XTSI CONTR pump failed - MISC error macro failed.
- 03 — XTSI CONTR pump failed - flash pump macro failed.
- 04 — XTSI fabric INIT failed - TSI status REG error.
- 05 — XTSI fabric INIT failed - TSI XLAT RAM macro failed.
- 06 — XTSI fabric INIT failed - TSI time_slot MEM macro failed.
- 07 — XTSI fabric INIT failed - ALF busy/idle MEM macro failed.
- 10 — XTSI fabric INIT failed - ALF XLAT RAM macro failed.
- 11 — XTSI CONTR pump failed - invalid reply (all zeroes).
- 12 — XTSI update program RAM failed.
- 13 — XTSI update program RAM failed - hard INIT failure.
- 14 — XTSI update program RAM failed - checksum failure.
- 15 — XTSI update other RAM failed.
- 16 — XTSI update other RAM failed - GESR bits set.
- 17 — XTSI pump / update failed - internal error.
- 20 — XTSI update failed - lockstep failed.
- 21 — XTSI pump failed - first checksum failed.
- 22 — XTSI pump failed - recalculated checksum failed.
- 23 — XTSI update program memory - update macro failed.
- 24 — XTSI access test failed.
- 25 — XTSI pump failed - internal error.

SEE PROPRIETARY NOTICE ON COVER PAGE

- 26 — XTSI update failed - flash checksum.
- 27 — XTSI update failed - one controller indicates no file found; the other shows file in flash.

g

Message dispenser (macro) failure data:

- 0 — Invalid macro ID passed to message dispenser (1B program error)
- 1 — Macro not accepted by frame (all 1's response not received from frame)
- 2 — Macro response not received in time allowed, Peripheral Maintenance Operating System (PMOS) task hold timeout
- 3 — Macro response not received in time allowed (Macro response not ready)
- 4 — Message dispenser request was successful but a task hold was not requested (1B program error)

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
PSCTOPEX
PSCTOPOP
XTSTOPEX
XTSTOPMS
XTSTOPOP
TOPIC000

Practice 234-010-107, *Maintenance Reference Handbook*

Input Message
SW:XTSI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID TEST:API
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B-APS
TYPE Output

1. FORMAT

TEST:API a b
FAIL DATA
cccccccc dddddddd eeeeeeee
CC REGS
F = ffffffff G = gggggggg J = hhhhhhhh K = iiiiiiii
L = jjjjjjjj X = kkkkkkkk Y = llllllll Z = mmmmmmmm
[SUSPECT TROUBLE ON n]

2. REASON FOR OUTPUT

To give the results of the attached processor interface (API) deferred fault recognition tests.

3. VARIABLE FIELD DEFINITIONS

a	API number (0-1).
b	Disposition of the test. ATP — The request was completed successfully. ABORTED — The request was aborted because of a maintenance interrupt. NOT STARTED AU BUS OOS — The auxiliary unit (AU) bus (AUB) to which the API is assigned is out-of-service (OOS). STF — A failure was detected. The status of the API is not altered and the failure is reported on the second line of the message and described by variables c through m.
c	Program address at point of failure.
d	Base address of the failing unit..
e	Test options.
f	Contents of F register at point of failure.
g	Contents of G register at point of failure.
h	Contents of J register at point of failure.
i	Contents of K register at point of failure.
j	Contents of L register at point of failure.
k	Contents of X register at point of failure.
l	Contents of Y register at point of failure.

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m Contents of Z register at point of failure.
n Failing unit.

4. ACTION TO BE TAKEN

If response is STF, request the API diagnostic.

If response is NOT STARTED - AU BUS OOS, attempt to restore the AU bus and repeat test message.

5. REFERENCES

PIDENTs
APFRBASE
AUFRAUIC
AUFRAUIL
AUFRDFOR

Practice 254-280-210, *Maintenance Control Program*

Input Message
TEST:API

SEE PROPRIETARY NOTICE ON COVER PAGE

ID TEST:AUB
WORK CENTER.. MOC
GENERIC 4E21 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

[1] TEST:AUB a b

[2] TEST:AUB a STF
F = c G = d J = e K = f
L = g X = h Y = i Z = j
PROGRAM ADDRESS k
UNIT IDENTIFIER l
TEST OPTIONS/FLAGS m

SUSPECTED FAULTY UNIT n

2. REASON FOR OUTPUT

To report the results of the auxiliary unit bus (AUB) deferred fault recognition tests. All in-service clients of the bus are tested without affecting the status of the formation on the bus. Only the AUB is tested when the AUB is out-of-service (OOS). Format [1] prints after all tests passed (ATP) for the specified AUB or upon manual request by a TEST:AUB input message. When the AUB or auxiliary unit (AU) fails, format [2] is printed for each failure.

3. VARIABLE FIELD DEFINITIONS

a AUB member number (0 or 1).

b The disposition of the test:

 ATP — The request was successfully completed.

 ABORTED — The request was aborted because of a maintenance interrupt or a STOP:MACLI input message.

 NTR — No tests were run (NTR) or diagnostics returned NTR.

STF A failure was detected. Failure data is collected in a failure block consisting of 8 registers at the time of failure.

c F register at time of test failure.

d G register at time of test failure.

e J register at time of test failure.

f K register at time of test failure.

g L register at time of test failure.

h Unit type member number of auxiliary unit (AU) under test.

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i	Y register at time of test failure.
j	Z register at time of test failure.
k	Program address at failure. This is the same as the contents of the J register.
l	Implicated unit identifier. The contents may be one of the following: • Base address of AU if the AUB is implicated. • 0 for central control (CC) 0 or 1 for CC 1 if the CC is implicated. • 0 for interface bus (IFB) 0 or 1 for IFB 1 if the IFB is implicated.
m	Test options and flags set at failure. Contains information outlining what tests are run and other test conditions and what unit or AUB implicated as failing. Units refers to CC or IFB.
n	The suspected faulty unit is provided based on the flag set in variable m by the system. Diagnostics should be requested on the indicated unit.

4. ACTION TO BE TAKEN

If system response is some tests failed (STF), use the failing register information to determine the failure and failing unit(s). A diagnostic of these failing unit(s) should then be requested.

5. REFERENCES

PIDENTs
AUFRDFOR
AUFRTST

Input Messages
DGN:AUB
RST:AUB
STOP:MACLI
TEST:AUB

SEE PROPRIETARY NOTICE ON COVER PAGE

ID TEST:AUI
WORK CENTER.. MOC
GENERIC 4E21 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

[1] TEST:AUI a b

[2] TEST:AUI a STF
F = c G = d J = e K = f
L = g X = h Y = i Z = j
PROGRAM ADDRESS k
UNIT IDENTIFIER l
TEST OPTIONS/FLAGS m

SUSPECTED FAULTY UNIT n

2. REASON FOR OUTPUT

To give the results of the auxiliary unit interface (AUI) deferred fault recognition tests.

3. VARIABLE FIELD DEFINITIONS

a AUI number (0 or 1).

b Disposition of the test.

 ABORTED — The request was aborted because of a maintenance interrupt.

 ATP — The restore request completed successfully.

 NOT STARTED – IFB OOS — The interface bus (IFB), to which the AUI is assigned, is out-of-service.

STF A failure was detected. Failure data collected in a failure block consisting of 8 registers at the time of failure.

c F register at time of test failure.

d G register at time of test failure.

e J register at time of test failure.

f K register at time of test failure.

g L register at time of test failure.

h X register at time of test failure.

i Y register at time of test failure.

j Z register at time of test failure.

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k	Program address at failure. This is the same as the contents of the J register.
l	Implicated unit identifier. The contents may be one of the following: • Base address of AUI if the AUI is implicated. • Ten-bit MCODE if a store is implicated. • 0 for central control (CC) 0 or 1 for CC 1 if the CC is implicated. • 0 for IFB 0 or 1 for IFB 1 if the IFB is implicated.
m	Test options and flags set at failure. Contains information outlining what tests are run and other test conditions and what unit or AUI implicated as failing. Units refers to CC or IFB.
n	The suspected faulty unit is provided based on the flag set in variable m by the system. Diagnostics should be requested on the indicated unit.

4. ACTION TO BE TAKEN

If the response is NOT STARTED — IFB OOS, attempt to restore the IFB and repeat the test input message.

If the response is STF, request the AUI diagnostic.

5. REFERENCES

PIDENTs
AUFRBASE
AUFRDFOR

Input Messages
DGN:AUI
RST:AUI
TEST:AUI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID TEST:CC
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

[1] TEST:CC a DFR b

[2] TEST:CC a DFR FAIL

AC1FR(H)	AC1FR(L)	AC1GR(H)	AC1GR(L)	AC1JR(H)	AC1JR(L)
C1KR(H)	AC1KR(L)	AC1LR(H)	AC1LR(L)	AC1XR(H)	AC1XR(L)
C1YR(H)	AC1YR(L)	AC1ZR(H)	AC1ZR(L)	AC1BR(H)	AC1BR(L)
C1ER	AC1CSC	AC1CCS(H)	AC1CCS(L)	AC1ILA	CC1TESTFAIL
C1ACW	CC1BCW	CC1STATUS			

[3] TEST:CC a DFR FAIL

ST1FR(H)	ST1FR(L)	ST1GR(H)	ST1GR(L)	ST1JR(H)	ST1JR(L)
1KR(H)	ST1KR(L)	ST1LR(H)	ST1LR(L)	ST1XR(H)	ST1XR(L)
1YR(H)	ST1YR(L)	ST1ZR(H)	ST1ZR(L)	ST1MMR	CC1TESTFAIL
1MSR	ST1MSR	ST1BR(H)	ST1BR(L)	AC1ME0(H)	AC1ME0(L)
1CAR(H)	ST1CAR(L)	ST1DAR(H)	ST1DAR(L)	ST1MI0(H)	ST1MI0(L)
1MI0(H)	AC1MI0(L)	AC1ME1(H)	AC1ME1(L)	AC1MI1(H)	AC1MI1(L)
T1ME0(H)	ST1ME0(L)	ST1MI1(H)	ST1MI1(L)	ST1ME1(H)	ST1ME1(L)

2. REASON FOR OUTPUT

To describe the results of deferred central control (CC) fault recognition testing. Additional data is printed if either the active or the standby CC has failed a test.

Format [2] prints if the active central control (CC) fails the test.

Format [3] prints if the standby CC fails the test.

3. VARIABLE FIELD DEFINITIONS

a The member number of the CC being tested.

b Results of non-failing test.

ABORTED — The deferred CC fault recognition has been aborted because of a maintenance interrupt.

ATP — All tests passed.

STOPPED — The deferred CC fault recognition has been terminated by the STOP:MACLI input message.

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Description of selected variable names:

ACW — CCFR control word.
BCW — Backup control word.
STATUS — CC status word.
TESTFAIL — Indication of which test failed.

See the REPT:CC output message for ACW, BCW, STATUS, and TESTFAIL word layouts.

4. ACTION TO BE TAKEN

If the active CC failed, consider switching CCs and diagnosing the failing CC. If the test was STOPPED or ABORTED, the standby CC is left out of service. In this case, request a restore of the standby CC (see the RST:CC input message).

5. REFERENCES

PIDENTs
CCFRMAIN
CCFRTEST

Input Messages
RST:CC
STOP:MACLI
TEST:CC

Output Message
REPT:CC

SEE PROPRIETARY NOTICE ON COVER PAGE

ID TEST:CC-DFR
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

[1] TEST:CC a DFR b

[2] TEST:CC a DFR FAIL
 CCCCCCCC CCCCCCCC CCCCCCCC CCCCCCCC CCCCCCCC CCCCCCCC
 CCCCCCCC CCCCCCCC CCCCCCCC CCCCCCCC CCCCCCCC CCCCCCCC
 CCCCCCCC CCCCCCCC CCCCCCCC CCCCCCCC CCCCCCCC CCCCCCCC
 CCCCCCCC CCCCCCCC CCCCCCCC CCCCCCCC

2. REASON FOR OUTPUT

To describe the results of deferred central controller (CC) fault recognition testing. Format [2] data is printed if either the active or standby CC has failed a test.

3. VARIABLE FIELD DEFINITIONS

a Member number of the CC (0 or 1).

b Results of non-failing test:

ABORTED — The deferred CC fault recognition has been aborted because of a maintenance interrupt.

ATP — All tests passed.

STOPPED — The deferred CC fault recognition has been terminated by the STOP:MACLI input message.

c Dump of the failing data:

If a is the standby CC:

(A)MSR	(S)MSR	(A)MI0	(S)ME0	(A)MI1	(S)ME1
(S)MI0	(A)ME0	(S)MI1	(A)ME1	(S)B	(S)F
(S)G	(S)J	(S)K	(S)L	(S)X	(S)Y
(S)Z	(S)CAR	(S)DAR	FAILING		
			TEST		

If a is the active CC:

(A)B	(A)F	(A)G	(A)J	(A)K	(A)L
(A)X	(A)Y	(A)Z	(A)E	(A)CSC	(A)BCS
(A)ILA	BCW	ACW	STATUS	FAILING	
				TEST	

NOTE: Definitions of format mnemonics are as follows:

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(A) = Active CC register.	STATUS = CC status word.
(S) = Standby CC register.	FAILING TEST = One of 18 tests that failed.
ACW = CCFR control word.	BCW = Backup control word.

4. ACTION TO BE TAKEN

If the active CC failed, consider unconditionally switching CCs and diagnosing the failing CC. If the test was STOPPED or ABORTED, the standby CC is left out of service. In this case, request a restore for the standby CC (see the RST:CC input message).

See the REPT:CC output message for ACW, BCW, STATUS and FAILING TEST layouts.

5. REFERENCES

PIDENTs
CCFRMAIN
CCFRTEST

Input Messages
RST:CC
STOP:MACLI
TEST:CC

Output Message
REPT:CC

SEE PROPRIETARY NOTICE ON COVER PAGE

ID TEST:CC-FAIL
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

TEST:CC a bbbbbbbb ACC FAIL

2. REASON FOR OUTPUT

To print a report if the active central control (CC) cannot access the call store (CS), program store (PS), or interface bus (IFB) communities during deferred CC fault recognition testing or during interrupt recovery.

3. VARIABLE FIELD DEFINITIONS

- a Type of unit that could not be accessed:
- CS — Call store access failure.
 - IFB — Interface bus access failure.
 - PS — Program store access failure.
- b Client's failing base address if IFB or failing MCODE address if CS or PS.

4. ACTION TO BE TAKEN

Take action if CS or PS access failure. Request IFB deferred fault recognition if IFB failure.

5. REFERENCES

PIDENT
CCFRMAIN

Input Messages
RST:CC
TEST:CC
TEST:IFB

SEE PROPRIETARY NOTICE ON COVER PAGE

ID TEST:COREUPD
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

- [1] TEST:COREUPD a CODE b
- [2] TEST:COREUPD a TAPE INCONSISTENCIES c
- [3] TEST:COREUPD a TAPES INPUT: d[,d,d]

2. REASON FOR OUTPUT

To report the results of the request to test update tape compatibility. Format [1] prints error code information. Format [2] prints when an error has occurred in merging tapes. Format [3] prints out those tapes which have been input and will be used to update the system.

3. VARIABLE FIELD DEFINITIONS

- a Disposition of the request:
- ABORTED — Test terminated. File stores, tape unit, rover store must be restored manually.
- COMPLETED — Test merge completed successfully. Tapes are compatible.
- IN PROGRESS — Test procedure is continuing.
- b Error code number information:
- 72 System audit of writable stores (SAWS) lockout failure
- 100 NORMAL key selection removed
- 101 Unable to transfer unlock message
- 102 3B unable to unlock update file
- 103 Unable to SUB file switch command
- 104 Submit unlock message failure
- 105 Active attached processor interface (API) check failure
- 110 Writes stopped message SUB failure
- 111 Writes stopped message transfer failure
- 112 Unable to stop writes
- 113 Update file already unlocked

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	114	Update file is logical normal
	122	Unlock message completion timeout
	123	Write stop message completion timeout
	124	Attached processor system (APS) file too large for buffer
	125	Open file request failed submit
	126	Timed out waiting for open file request
	127	Bad API status on file open
	128	Bad file manager interface (FMI) status on file open
	129	Read file request failed submit
	130	Timed out waiting for read file request
	131	Bad API status on read file
	132	Bad FMI status on read file
	133	Active code file too large for buffer
	134	Found zero in WORDCT field in buffer
	135	No data in non-active code file
	136	GEN keyword not in input message
	137	PARTIAL keyword not in input message
	138	Hash error in data read from APS
	139	No match on hash id for non-active file
	140	No match on hash id for active file
c		Error code number information:
	0	Invalid combination of tapes input (none)
d		Tapes which have been input and will be used to update the system.
		GEN — Generic data.
		ODA — Office data.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
SYUP
SYUR
SYURPS20

SEE PROPRIETARY NOTICE ON COVER PAGE

Practice 234-100-001, *Generic Retrofit and Update Description*
Practice 254-280-210, *Maintenance Control Program*
Practice 254-280-270, *System Update Program Description*

Input Messages

STOP: TEST-CORE
UPD: FS-GEN

Output Message

UPD: CORE

SEE PROPRIETARY NOTICE ON COVER PAGE

ID TEST:DSIG-DAV
WORK CENTER.. MAC, MOC, NMOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

TEST:DSIG;DAV:NVID a, MODE b,
c
[, QUERY SENT:d REPLY RECEIVED: e]

2. REASON FOR OUTPUT

To respond to a TEST:DSIG;DAV input message which requested a DAV (INFO-1) scenario either to the feature control office, using signaling connection control part (SCCP) messages, or to the vendor, using SCCP and Q931/service access data channel (SADC) messages.

The second line indicates the success or failure of the test query. The third line, present only for successful messages, outputs the time the query was sent and the time the reply was received.

3. VARIABLE FIELD DEFINITIONS

- a National vendor identification number (1-127).
- b Mode:
- 1 Query to the feature control office.
 - 2 Query to the vendor.
 - 2 Individual per call control (IPCC) query using link access circuit identifier (LACID 1) (primary). (Use the VER:ADSLINK input message with an automatic number identification delivery service index (ADSI) of 16 to use this mode, this is only valid with NVID = 99.)
 - 3 Individual per call control (IPCC) query using link access circuit identifier (LACID 2) (secondary).
- c National vendor identification number (1-127).
- CNI RING DOWN—The ring is down, message transmission is impossible.
- COMPLETED - SUCCESS—The test query was sent and a valid reply received.
- CONGESTION— The request is denied if the input vendor has experienced excessive timeouts during the current one minute period.
- INVALID DATA—The input mode is invalid.

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INVALID DIGITS — The digits received at the feature control office are illegal.

LINK TO VENDOR DOWN — The LACID(s) to the vendor are out of service.

TEST TIMED OUT — The 10-second timer has expired and a reply has not been received.

TRANSLATION FAILURE — The translation to an ADSI yields an unassigned destination point code (DPC) or unassigned LACIDs.

UNASSIGNED ADSI — INFO-1 index is unassigned.

4. ACTION TO BE TAKEN

Dependent upon the failure reason, the status of the common network interface (CNI) ring or the SADC links should be examined.

5. REFERENCES

PIDENT
DSIGTEST

Input Messages
TEST:DSIG
VER:ADSLINK

SEE PROPRIETARY NOTICE ON COVER PAGE

ID TEST:DSIG-DSTT
WORK CENTER.. MAC, MOC, NMOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

TEST:DSIG;DSTT: a b,

c

2. REASON FOR OUTPUT

To respond to a TEST:DSIG;DSTT input message which requested a direct signaling translation test (DSTT). The tested direct signaling domain and address is echoed, and a success or reason of failure indication is given. If possible the network node which terminated the test is also identified.

3. VARIABLE FIELD DEFINITIONS

- a Direct signaling domain— Indicates which type of direct signaling address was used to specify the intended destination of the DSTT test. Valid signaling domains are:
- DATABASE — The destination node is associated with a data base and is specified by an numbering plan area (NPA) + exchange number (NXX) that the data base would handle.
 - FNUM — Function number, the destination node was specified by its direct signaling function number.
 - NCD — Network call denial (NCD) data base number. The destination node is associated with an NCD data base and is specified by an NPA+NXX that the data base would handle.
 - SDN — Software defined network (SDN) data base number. The destination node is associated with an SDN data base and is specified by an NPA+NXX that the data base would handle.
 - SOFC — Switching office number - The destination node is a switching office, and is specified by a NPA+NXX which the switching office would terminate.
- b Address of the intended destination of the DSTT test.

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C	Test results indicating success or reason of failure. If possible, the direct signaling node which terminated the test will be identified via its CLLI code. Possible results are:
---	--

COMPLETED FAIL:CCIS NETWORK BLOCKAGE — Primary and alternate routes to the destination are failed.

COMPLETED FAIL:CCIS NETWORK OVERLOAD — Primary and alternate routes to the destination are in an overload condition.

COMPLETED FAIL:INCORRECTLY ROUTED — The test signal was routed to a node other than the intended test termination node.

COMPLETED FAIL:MISROUTING TO STP —The test signal was routed to a signaling transfer point (STP) which is outside of the normal direct signaling route between this office and the destination node.

COMPLETED FAIL:NO RETURN ROUTING ON INCOMING ROUTE — The test signal was received on an incoming route which is outside of the routes normally used to reverse route signals to the node originating the test.

COMPLETED FAIL:STP HAS NO ROUTING DATA — STP has no outgoing route for the intended test destination address.

COMPLETED FAIL:STP MISMATCH ON OUTGOING ROUTE —
Routing information at STP does not agree with
routing information at mate STP.

COMPLETED SUCCESS — The test signal was successfully routed to the intended destination.

TEST TIMED OUT — No reply to test signal was received within
10 seconds.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
DSIGTEST

Input Message
TEST:DSIG

SEE PROPRIETARY NOTICE ON COVER PAGE

ID TEST:DSIG-INWA
WORK CENTER.. MAC, MOC, NMOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

TEST:DSIG;INWATS:DIG a, ORIGNPA b,

c

2. REASON FOR OUTPUT

To respond to a TEST:DSIG;INWATS request to run an inward wide area telecommunications service (INWATS) test call. The first line of the message echoes the INWATS number and originating numbering plan area (NPA) of the input message. The second line indicates failure or success and, optionally, data concerning the reason for failure or the number returned from the database.

3. VARIABLE FIELD DEFINITIONS

- a The INWATS number, with inserted dashes to mark the NPA and exchange number (NXX) fields. Examples: 800-123-4567.
- b The originating NPA (ORIGNPA), the NPA which the common channel interoffice signaling (CCIS) INWATS database uses as the INWATS customer's NPA when doing the translation on the INWATS number.
- c Disposition of the request:
- COMPLETED - FAIL:CCIS ERROR, UNASSIGNED REASON d —
 The INWATS query was returned to the office and the reason code, d, is unassigned. See action 4.
- COMPLETED - FAIL:CCIS NETWORK BLOCKAGE — The INWATS query was blocked in the CCIS signaling network and returned to the office.
- COMPLETED - FAIL:CCIS NETWORK OVERLOAD — The INWATS query was returned to the office due to an overload in the CCIS signaling network.
- COMPLETED - FAIL:CCIS, NO TRANSLATION — The INWATS query could not be switched in the CCIS signaling network and was returned to the office. See action 1.
- COMPLETED - FAIL:DATA BASE OVERLOAD
- COMPLETED - FAIL:INWATS FAILURE, UNASSIGNED
 REASON d — An INWATS failure message was received from a database and the failure code, d, was unassigned. See action 4.

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COMPLETED - FAIL:NONEXISTENT NPA — The database did not recognize the ORIGNPA as a valid NPA. See action 2.

COMPLETED - FAIL:NONSUBSCRIBED NPA — The INWATS number is not allowed to be called from the NPA (ORIGNPA field) input.

COMPLETED - FAIL:SUBSCRIBER BUSY — All lines to the subscriber are busy.

COMPLETED - FAIL:VACANT LINE NUMBER — A vacant code condition.

COMPLETED - FAIL:VACANT NXX — The NXX field of the INWATS number is not assigned to any INWATS subscriber. A vacant code condition.

COMPLETED - FAIL:UNASSIGNED 800+XXX — The INWATS query arrived at a database which was not assigned to the INWATS number. See action 1.

COMPLETED - SUCCESS:RETURNED DIGITS d — The number returned from the database, d, is displayed as NPA-NXX-XXXX.

TEST TIMED OUT — The 3-second timer expired before the reply message was received. See action 3.

UNABLE TO SEND, FHCODE d — d is the final handling code which indicates the reason for the inability to send the INWATS query.

4. ACTION TO BE TAKEN

The action depends upon the specific error or problem encountered by the test. Some of the error messages contain a reference to the following numbered actions.

1. The CCIS signaling network is unable to correctly route the INWATS query to the CCIS INWATS database. Contact the machine administration center (MAC), who should contact the operational network administration center (ONAC).
2. Check the originating numbering plan area (ONPA) field. If it is a valid NPA, contact the MAC who should contact the ONAC.
3. Repeat the test; if it times out continuously, see action 1.
4. A CCIS INWATS database or a CCIS STP is sending an invalid error reason, contact MAC who should contact the operational network administration center (ONAC).

5. REFERENCES

PIDENT
DSIGTEST

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4ESS
OM-4B000-01

TEST:DSIG;INWA

Input Message
TEST:DSIG

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TEST:DSIG-INWA-3

Issue 1.8
September 2001

ID TEST:DSIG-NCD
WORK CENTER.. MAC, MOC, NMOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

TEST:DSIG;NCD:DIG a[, INTLCODE]

b
[, QUERY SENT:c REPLY RECEIVED: d]
[, REPLY CODE:[e] f]

2. REASON FOR OUTPUT

To respond to a TEST:DSIG;NCD input message which requested a network call denial (NCD) test query. The first line of the message echoes the NCD billing number of the input message. The second line of the message indicates the successful completion or failure of the query. The third line of the message, only present for successful messages, indicates the time the query was sent and the time the reply was received. The fourth line of the message, only present for successful messages, indicates the values of the reply code and data base overload indicator.

3. VARIABLE FIELD DEFINITIONS

a	The NCD number, with inserted dashes to mark the numbering plan area (NPA) and exchange number (NXX) fields. For example, 312-123-4567.
INTLCODE	Indicates this was an international query. Default is domestic.
b	Disposition of the request: COMPLETED - FAIL:CCIS ERROR, UNASSIGNED REASON — The query was returned to the office with the unassigned return code. COMPLETED - FAIL:CCIS NETWORK BLOCKAGE — The query was blocked in the common channel interoffice signaling (CCIS) signaling network and returned to the office. COMPLETED - FAIL:CCIS NETWORK OVERLOAD — The query was returned to the office due to an overload in the CCIS signaling network. COMPLETED - FAIL:CCIS, NO TRANSLATION — The query could not be switched in the CCIS signaling network and was returned to the office.

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- COMPLETED - SUCCESS — The query was successfully sent to the data base, and the data base replied. For this response, the time the query was sent and the time the reply was received are printed along with the values of the reply code and data base overload indicator.
- MESSAGE NOT SENT — The query was not sent due to signaling link outages, etc.
- NO CCIS TERMINALS CURRENTLY ASSIGNED TO THE 1STP POOL —
There are currently no CCIS direct signaling terminals in the office assigned to the 1STP network. Since there are no 1STP terminals, the direct signaling query was not sent to its intended destination.
- NO CCIS TERMINALS CURRENTLY ASSIGNED TO THE 2STP POOL —
There are currently no CCIS direct signaling terminals in the office assigned to the 2STP network. Since there are no 2STP terminals, the direct signaling query was not sent to its intended destination.
- TEST TIMED OUT — The five-second timer expired before the reply message was received.
- c The time the query was sent to the NCD / network control point (NCP) in the form hh:mm:ss.tt where hh is the hours, mm is the minutes, ss is the seconds, and tt is the tenths of seconds.
- d The time the reply was received from the NCD/NCP in the form hh:mm:ss.tt where hh is the hours, mm is the minutes, ss is the seconds, and tt is the tenths of seconds.
- e The numeric value (in decimal) of the reply code if it is not one of the following assigned states (4-31):
- ALLOW CALL — The reply code indicates the AT&T-C call will be allowed.
- DENY CALL — The reply code indicates the AT&T-C call will be denied.
- UNABLE TO PROCESS - MISC. — The reply code indicates the NCD/NCP is unable to process the query due to miscellaneous reasons.
- UNABLE TO PROCESS - OVLD. — The reply code indicates the NCD/NCP is unable to process the query due to overload.

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f

DB OVERLOAD LEVEL:1 — The database overload field indicates an overload level of 1.

DB OVERLOAD LEVEL:2 — The database overload field indicates an overload level of 2.

DB OVERLOAD LEVEL:3 — The database overload field indicates an overload level of 3.

DB OVERLOAD LEVEL:4 — The database overload field indicates an overload level of 4.

DB OVERLOAD LEVEL:5 — The database overload field indicates an overload level of 5.

DB OVERLOAD LEVEL:6 — The database overload field indicates an overload level of 6.

DB OVERLOAD LEVEL:7 — The database overload field indicates an overload level of 7.

NO DB OVERLOAD — The database overload field indicates there is no overload - this is the normal condition.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
DSIGTEST

Input Message
TEST:DSIG

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ID TEST:DSIG-NS800
WORK CENTER.. MAC, MOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

TEST:DSIG;NS800:DIG: a{,ORIGNPA b|,ANI c},LATA d,TOS e,II f,
g
[,RECEIVED ACG]
[,RECEIVED TN]

2. REASON FOR OUTPUT

To respond to a TEST:DSIG-NS800 request to run a number services 800 (NS800) test query which uses common channel signaling system 7 (CCS7) direct signaling. The first line of the message echoes the NS800 number, originating numbering plan area (NPA), local access and transport area (LATA), type of service (TOS), and automatic number identification (ANI) information digits of the input message. The second line indicates failure or success and, optionally, data concerning the reason for failure or the number, carrier identification, and domestic/international indicator returned from the database. The third line of the message indicates that an automatic call gap (ACG) control was returned in the response from the database. The fourth line of the message indicates that a request for the terminating notification (TN) data was received in the response from the database.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | The NS800 number, with inserted dashes, to mark the NPA and exchange number (NXX) fields. For example, 800-123-4567. |
| b | The originating NPA — The NPA which the NS800 database uses as the NS800 caller's NPA when doing the translation on the NS800 number. |
| c | Customers ten digit automatic number identification (ANI). |
| d | The originating LATA — The LATA which the NS800 database uses as the NS800 caller's LATA when doing the translation on the NS800 number. |
| e | Type of service (TOS) — The type of service that is assigned as the 800 number type of service. TOS is used to obtain the subsystem number and translation type to use in sending the query. |
| f | The ANI information digits (originating station type) which the NS800 database uses to identify the characteristics of the calling station. |

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g

If disposition of the request is:

COMPLETED - FAIL:ANNOUNCEMENT h — h is the announcement code returned from the database.

COMPLETED - FAILED:BAD DATABASE RESPONSE, FHCODE i, EXCCODE j — i is the final handling code which indicates the reason the response from the database is invalid, and j indicates the specific exception. The exception code is contained in the outgoing trunk state vector (SVOGT) in the final handling code trap printout.

COMPLETED - SUCCESS: RETURNED DIGITS k, CARRIER l, {DOM|INTL} — The number returned from the database, k, is displayed as NPA-NXX-XXXX for domestic numbers, or as a 6-15 digit international number XXX-XXX-XXXXXXXXXX. The carrier identification l, returned from the database; and an indicator whether the number returned from the database is domestic or international.

TEST TIMED OUT — The 3 second timer expired before the reply message was received.

UNABLE TO SEND, FHCODE m — m is the final handling code which indicates the reason for the inability to send the NS800 query.

4. ACTION TO BE TAKEN

If disposition of the request is:

COMPLETED - FAIL:ANNOUNCEMENT h , Verify the announcement code returned from the database.

COMPLETED - FAILED:BAD DATABASE RESPONSE, FHCODE i, EXCCODE j , See final handling code (FHCODE) documentation for exception values.

TEST TIMED OUT , Repeat the test; if the same response is received continuously, the CCS7 signaling network is unable to correctly route the NS800 query to the NS800 database. Contact the machine administration center (MAC) who will contact the operational network administration center (ONAC).

5. REFERENCES

PIDENTs
BOSPQARC
DSIGTEST
TCAPTEST

Input Message
TEST:DSIG

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ID TEST:FNS
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

TEST:FNS a b [c]
[d] [FRM: 1B PROC BAY a]
[e]

2. REASON FOR OUTPUT

This output message provides information on the completion status of the TEST:FNS input message. It will print one success code or one or more error messages to help the user determine the problem(s) with the fan system (FNS).

NOTE: The results from a successful TEST: can be an all tests passed (ATP), or one or more defective fan system parts reported. This can also include the environmental error HIGH FRAME TEMPERATURE. The results from an unsuccessful TEST: could be caused by the FNS being inhibited, the scan and signal distributor (SSD) being out-of-service (OOS), the TEST MACP job being aborted, or an incorrect response(s) from the FNS.

3. VARIABLE FIELD DEFINITIONS

a	The FNS frame number (0 or 1).
b	Status: COMPLETED STOPPED
c	Optional. Only reported under one of the following conditions: ATP — all tests pass. AUTONOMOUS FNS REPORT FNS ALW THRESHOLD EXCEEDED FNS AUTOMATICALLY INHIBITED FNS ERROR THRESHOLD EXCEEDED FNS INHIBITED FNS INVALID RESPONSE FNS NOT RESPONDING MACP JOB ABORTED SSD OOS — Scan and signal distributor out-of-service.

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- d Optional. If fan system errors were reported, the character string FAN SYSTEM ERROR SUMMARY will be displayed followed by one or more of the following error reports:

FAN 1 ERROR
FAN 2 ERROR
FAN 3 ERROR
FAN 4 ERROR
FAN 5 ERROR
FAN 6 ERROR
HIGH FRAME TEMPERATURE
LOWER FRONT TEMPERATURE SENSOR ERROR
LOWER REAR TEMPERATURE SENSOR ERROR
REPLACE AIR FILTER
REPLACE FC— Replace the fan controller (FC).

- e Optional. If the TEST routine fails, specific debugging and error information will be displayed. This information will identify the general software location when the error occurred, and the status of the interface between the 1B and the FNS. The layout and content of this information is described in the following list.

AUX DATA Stands for auxiliary data and identifies the debugging information.

SSDSTATES Followed by a twelve digit binary number in the form of eeeeeeeeefff, where e contains the value of the signal distributor (SD) bits and f is the scan points associated with the FNS when the error occurred.

		SD Values	
Bits		Meaning	
1000	—	ALW:FNS Initialize the FNS, or inhibit the FNS	
1001	—	TEST:FNS Report all fan system errors	
1010	—	Report fan status	
1100	—	Clear fan air filter from the FNS error stack	
1101	—	Verify FNS sanity	
1110	—	Continue reporting	

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Scan Values (1st four, reading from right to left)		
Bits		Meaning
0000	—	Fan controller fault (replace FC)
0001	—	Fan 1 error
0010	—	Fan 2 error
0011	—	Fan 3 error
0100	—	Fan 4 error
0101	—	Heartbeat (FNS sanity verified)
0110	—	Fan 5 error
0111	—	TEST : FNS in-progress
1000	—	Lower front temperature sensor error
1001	—	Lower rear temperature sensor error
1010	—	TEST ATP, or all seems well (ASW)
1011	—	Fan 6 error
1100	—	High frame temperature
1101	—	Replace air filter
1110	—	Not used
1111	—	FNS automatically inhibited

Scan Values (2nd four, reading from right to left)		
Bits		Meaning
0001	—	Heartbeat (FNS sanity verified)
0010	—	ASW
0000-0001, 0011-1111	—	Invalid states: fault detected and reported

SUBTASK Followed by single decimal digit (0-3). This number indicates the location within software or the specific task being executed within the TEST routine when the error occurred.

4. ACTION TO BE TAKEN

NOTE: Whenever the FNS becomes automatically inhibited, the first action should be to re-initialize the FNS by entering the ALW:FNS input command. The fan controller would normally be replaced when the FNS becomes automatically inhibited, but it is possible the error situation which caused the FNS to become inhibited can be cleared by re-initializing the FNS and fan controller. If the FNS passes the initialization, the previous error will have been cleared and the FNS should operate normally. If the initialization fails and the FNS becomes re-inhibited, the fan controller should then be replaced. However, this should only be used as a last resort measure when the FNS will not maintain an in-service state and repetitively becomes inhibited no matter how many re-initializations are attempted.

NOTE: At times, more than one output message can be reported back to back. In these cases, the action for the last reported output message should be followed.

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Refer to variable field definition letters.

For variable c:

If ATP,do nothing. No fan system errors exist.

If AUTONOMOUS FNS REPORT, allow the system to process the new report. This should not take longer than 30 seconds, and a fan system report will be generated at completion. After the report is received, retry the TEST:FNS input command.

If FNS ALW THRESHOLD EXCEEDED and TEST:FNS was manually submitted, a FNS sanity check will be submitted by the system. This check will take approximately 1.5 minutes to execute. If no subsequent fan system error messages are reported during the 1.5 minutes, the sanity check passed. Retry the TEST:FNS input command.

If FNS ALW THRESHOLD EXCEEDED and TEST:FNS was not manually submitted by the system, a request to inhibit the FNS will be submitted. Replace the fan controller and reinitialize the FNS by submitting a ALW:FNS input message. After the ALLOW passes (ALLOW completed reported),submit a TEST:FNS input command request.

If FNS AUTOMATICALLY INHIBITED, there is a power supply problem to the fan controller, or the fan controller is bad and should be replaced.

If FNS ERROR THRESHOLD EXCEEDED and TEST:FNS was manually submitted, a FNS sanity check will be submitted by the system. This check will take approximately 1.5 minutes to execute. If no subsequent fan system error messages are reported during the 1.5 minutes, the sanity check passed. Retry the TEST:FNS input command.

If FNS ERROR THRESHOLD EXCEEDED and TEST:FNS was not manually submitted by the system, a request to initialize or inhibit the FNS will be submitted by the system. If an ALLOW or initialization was submitted and it passed (ALLOW completed reported), submit a TEST:FNS input command request to capture a fan system error report, if desired. If a request to inhibit the FNS was submitted, replace the fan controller and reinitialize the FNS by submitting a ALW:FNS input message. After the ALLOW passes (ALLOW completed reported), submit a TEST:FNS input command request.

If FNS INHIBITED, an ALW:FNS input message must be submitted to reinitialize the FNS to an operational in-service state. After the ALW:FNS completes (ALLOW completed reported), resubmit the TEST:FNS input message request.

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If FNS INVALID RESPONSE and TEST:FNS was manually submitted, a FNS sanity check will be submitted by the system. This check will take approximately 1.5 minutes to execute. If no subsequent fan system error messages are reported during the 1.5 minutes, the sanity check passed. Retry the TEST:FNS input command.

If FNS INVALID RESPONSE, and TEST:FNS was not manually submitted by the system, a request to initialize or inhibit the FNS will be submitted by the system. If an ALLOW or initialization was submitted and it passed (ALLOW completed reported), submit a TEST:FNS input command request to capture a fan system error report, if desired. If a request to inhibit the FNS was submitted, replace the fan controller and reinitialize the FNS by submitting a ALW:FNS input message. After the ALLOW passes (ALLOW completed reported), submit a TEST:FNS input command request.

If FNS NOT RESPONDING, the problem could be either a bad SSD or a bad fan controller. If the SSD is bad, correct it and retry the TEST:FNS input command.

If FNS NOT RESPONDING and TEST:FNS was manually submitted, and the SSD is OK, the fan controller could be bad. A FNS sanity check will be submitted by the system. This check will take approximately 1.5 minutes to execute. If no subsequent fan system error messages are reported during the 1.5 minutes, the sanity check passed. Retry the TEST:FNS input command.

If FNS NOT RESPONDING and TEST:FNS was not submitted manually but by the system, a request to inhibit the FNS will be submitted. Replace the fan controller and reinitialize the FNS by submitting a ALW:FNS input message. After the ALLOW passes (ALLOW completed reported), submit a TEST:FNS input command request.

If MACP JOB ABORTED, retry again.

If SSD OOS check the SSD status. Retry the TEST:FNS input command when the SSD is in-service.

For variable d:

If a defective part exists, replace it.

If a HIGH FRAME TEMPERATURE exists, investigate and repair the cause of the high frame temperature, i.e., remove the blockage to the frame's air inlet.

5. REFERENCES

PIDENTs
MCCMEPS1
FNFRBASE

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Input Messages

ALW:FNS
CLR:FNS
INH:FNS
TEST:FNS

Output Messages

ALW:FNS
CLR:FNS
REPT:FAN-ST

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ID TEST:IFB
WORK CENTER.. MOC
GENERIC 4E21 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

[1] TEST:IFB a b

[2] TEST:IFB a STF
F = c G = d J = e K = f
L = g X = h Y = i Z = j
PROGRAM ADDRESS k
UNIT IDENTIFIER l
TEST OPTIONS/FLAGS m

SUSPECTED FAULTY UNIT n

2. REASON FOR OUTPUT

To report the results of the interface bus (IFB) deferred fault recognition. All in-service clients of the bus are tested without affecting the status of the formation on the bus. Only the IFB is tested when the IFB is out-of-service (OOS). Format [1] prints after all tests passed (ATP) for the specified IFB or upon manual request by a TEST:IFB input message. When the IFB or one or more clients fail, format [2] is printed for each failure.

3. VARIABLE FIELD DEFINITIONS

a IFB member number (0 or 1).

b The disposition of the test:

 ATP — The request was successfully completed.

 ABORTED — The request was aborted because of a maintenance interrupt or a STOP:MACLI input message.

 NTR — No tests were run (NTR) because diagnostics returned NTR.

STF A failure was detected. Each failing IFB or client(s) is identified and the failure data collected in a failure block consisting of 8 registers at the time of failure.

c F register at time of test failure.

d G register at time of test failure.

e J register at time of test failure.

f K register at time of test failure.

g L register at time of test failure.

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h	X register at time of test failure.
i	Y register at time of test failure.
j	Z register at time of test failure.
k	Program address at failure. This is the same as the contents of the J register.
l	Implicated unit identifier. The contents may be one of the following: • Base address of client if the client is implicated. • Ten-bit MCODE if a store is implicated. • 0 for central control (CC) 0 or 1 for CC 1 if the CC is implicated. • 0 for IFB 0 or 1 for IFB 1 if the IFB is implicated.
m	Test options and flags set at failure. Contains information outlining what tests are run and other test conditions and what unit or IFB implicated as failing. Units refers to CC or IFB.
n	The suspected faulty unit is provided based on the flag set in variable m by the system. Diagnostics should be requested on the indicated unit.

4. ACTION TO BE TAKEN

If system response is some tests failed (STF), use the failing register information to determine the failure and failing unit(s). A diagnostic of these failing unit(s) should then be requested.

5. REFERENCES

PIDENTs
IFFRBASE
IFFRTEST

Input Messages
DGN:IFB
RST:IFB
STOP:MACLI
TEST:IFB

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ID TEST:MUP
WORK CENTER.. MOC
GENERIC 4E21 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

[1] TEST:MUP a b

[2] TEST:MUP a STF
F = c G = d J = e K = f
L = g X = h Y = i Z = j
PROGRAM ADDRESS k
UNIT IDENTIFIER l
TEST OPTIONS/FLAGS m

SUSPECTED FAULTY UNIT n

2. REASON FOR OUTPUT

To give the results of the master control complex (MCC) and utility processor (MUP) deferred fault recognition tests.

NOTE: If the MUPs duplex fail, format[1] may be followed by another format[1] or format[2] if hardware activity changes during the restoral process. The second test request performs the MCC utility interface (MUI) tests which are skipped during the initial testing since the MUP was not active in hardware.

3. VARIABLE FIELD DEFINITIONS

a MUP number (0 or 1).

b Disposition of the test:

 ABORTED — The request was aborted because of a maintenance interrupt.

 ATP — The interface bus (IFB) and MUP tests completed successfully. (Tests are run only during diagnostics and restores.)

 STOPPED IFB 00S — The interface bus (IFB) to which the MUP is assigned is out-of-service.

STF A failure was detected. Failure data collected in a failure block consisting of 8 registers at the time of failure.

c F register at time of test failure.

d G register at time of test failure.

e J register at time of test failure.

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f	K register at time of test failure.
g	L register at time of test failure.
h	X register at time of test failure.
i	Y register at time of test failure.
j	Z register at time of test failure.
k	Program address at failure. This is the same as the contents of the J register.
l	Implicated unit identifier. The contents may be one of the following: • Base address of MUP if the MUP is implicated. • Ten-bit MCODE if a store is implicated. • 0 for central control (CC) 0 or 1 for CC 1 if the CC is implicated. • 0 for IFB 0 or 1 for IFB 1 if the IFB is implicated.
m	Test options and flags set at failure. Contains information outlining what tests are run and other test conditions and what unit or MUP implicated as failing. Units refers to CC or IFB.
n	The suspected faulty unit is provided based on the flag set in variable m by the system. Diagnostics should be requested on the indicated unit.

4. ACTION TO BE TAKEN

If the disposition of the request is:

STF Request the MUP diagnostic. If diagnostics were running, repair the unit.

STOPPED IFB 00S Attempt to restore the IFB and repeat the test input message.

5. REFERENCES

PIDENT
MCFRBASE

Input Messages

DGN:MUP
RST:MUP
TEST:MUP

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ID TEST:MUPAUD
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

- [1] TEST:MUPAUD MUP a COMPLETED b ERRORS FOUND
- [2] TEST:MUPAUD MUP a STOPPED c
- [3] TEST:MUPAUD MUP a ERROR REPORT
[BANK 0, NUM 1 X'd X'e X'f]
[BANK 0, NUM 2 X'd X'g X'h X'i]
.
.
.
[BANK 0, NUM 4 X'd X'j]
[BANK 0, NUM 5 X'd X'k X'l]
.
.
.
[BANK 0, NUM 6 X'd X'm X'n X'o]
[BANK 0, NUM 7 X'd X'p X'q]
.
.
.
TEST:MUPAUD MUP a COMPLETED b ERRORS FOUND
- [4] TEST:MUPAUD MUP a ABORTED

2. REASON FOR OUTPUT

To report the termination of status of the TEST:MUPAUD input message and/or any errors that were found during the execution of the Master Control Complex (MCC) And Utility Processor (MUP) audit.

For Format [3] the information included is for:

BANK 0, NUM 1 prints for Dual Asynchronous Receiver Transmitter (DUART) timer audit failure.

BANK 0, NUM 2 prints for memory management structure audit failure. May print multiple lines.

BANK 0, NUM 4 prints for memory parity audit failure case.

BANK 0, NUM 5 prints for 1B/MCC matrix audit. May print multiple lines.

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BANK 0, NUM 6 prints for the page manager array to array audit.

BANK 0, NUM 7 prints for global variables audit. May print multiple lines.

NOTE: Audit data will be dumped in hexadecimal and the range of the audit numbers will be from 1 to 128.

NOTE: There is no error report in Format [3] for audit 3.

3. VARIABLE FIELD DEFINITIONS

a Member number of the MUP (0-1).

b Number of errors found.

NOTE: If no errors were found, Format [1] output will be printed with the b variable set to 0. If errors were found, Format [1] output will be printed with the b variable set to the number of errors found after all the error reports.

c Possible reasons for stop:

MUP/IFB COMMUNICATION ERROR — Failed to communicate with MUP.

MUPAUD ERROR — Error source is the MUP Audit (MUPAUD) process.

MUPOS ERROR — Error source is the MUP Operating System (MUPOS) process.

MUP OOS — MUP is out of service.

TIME OUT ERROR — Failed to finish the job within the time limit.

d Audit number.

e Time difference check value.

f Actual timer difference.

g Process identification.

h Memory segment start address.

i Memory segment end address.

j Address of memory word with bad parity.

k Failing matrix field number.

l Failing field value.

m System assigned page number.

n Defined page number server bit(s).

o System assigned page number / defined page number, page server bit(s).

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p	General audit number.
q	Value being checked.

4. ACTION TO BE TAKEN

Switch MUP if the active one causes a problem. If the standby MUP causes a problem, run diagnostics and restore if diagnostics result in All Tests Passed (ATP).

5. REFERENCES

Input Messages
ALW:MUPAUD
INH:MUPAUD
OP:MUPAUD
STOP:MUPAUD
TEST:MUPAUD

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ID TEST:PUB
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

TEST:PUB a:b c, d e, EDATA f, PUDATA g,PLDATA
h
TROUBLE ON BUS
i
j k, l, m
n
o
p

2. REASON FOR OUTPUT

To aid in determining the source of failure (babbling) affecting the peripheral unit bus (PUB).

3. VARIABLE FIELD DEFINITIONS

a	Member number of the PUB (0 or 1).
b	Unit type.
c	Unit type member number.
d	Subunit type.
e	Subunit type member number.
f	Enable address bus test data.
g	Peripheral unit address bus op-code and extended op-code.
h	Peripheral unit address bus data.
i	The 24-bit address where the failure (babbling) was first detected.
j	Unit type of the suspected babbler.
k	Unit-type member number of the suspected babbler.
l	Subunit type of the suspected babbler.
m	Subunit-type member number of the suspected babbler.
n	Octal-encoded EDATA of the peripheral unit address bus at the time failure was detected.
o	Octal-encoded peripheral unit op-code and extended op-code at the time failure was detected.
p	Octal-encoded peripheral unit address bus data at the time failure was detected.

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4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
BBFR0000
MIRA

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ID TEST:PUSYS
WORK CENTER.. MOC
GENERIC 4E22 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

TEST:PUSYS a
CODE = bbbb
TEST SCHEDULE OF PERIPHERAL UNITS
DATA:
cccccc dddddd eeeee fffffff gggggg hhhhhh iiiiii jjjjjj kkkkkk
l11111
•
•
•
cccccc dddddd eeeee fffffff gggggg hhhhhh iiiiii jjjjjj kkkkkk
l11111

2. REASON FOR OUTPUT

To indicate that the peripheral unit routine exercise program has completed the test schedule for this day. Bits set in the data correspond to the units that were scheduled to be tested.

3. VARIABLE FIELD DEFINITIONS

- a Disposition of the routine exercise:
- ABORTED — Internal check failed.
- COMPLETED — All units tested.
- STOPPED — Terminated by STOP:TEST-PUSY input message or time is up.
- b Termination code:
- 0000 — Normal end.
- 0001 — Manual stop or time allocated for exercise is up.
- 0002 — More than five abnormal diagnostic completion codes.
- 0003 — Unit type does not match unit type requested.
- 0004 — Member number does not match member number requested.
- 0005 — Subunit type does not match subunit requested.
- 0006 — Submember number does not match submember requested.
- 0007 — Not a valid unit type.

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c through l A 10-word dump in octal corresponding to the units that were scheduled to be tested. If a unit is equipped and due to be exercised, the corresponding bit is set. If, however, the unit or its mate is out of service, it will not be tested. See the tables for a description of the octal data.

4. ACTION TO BE TAKEN

This output message is informational. Any action taken must be based on the specific information printed and the technical impact of that data.

5. REFERENCES

PIDENT
PUEX

Practice 234-180-251, *Automatic Routine Maintenance Exercise Program - Description*

Input Message
STOP:TEST-PUSY

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ROW 1

word		BIT POSITION															
		15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
1	UTYP MEMN CONT	TSI 3 1	TSI 3 0	TSI 2 1	TSI 2 0	TSI 1 1	TSI 1 0	TSI 0 1	TSI 0 0	TMS 3 1	TMS 3 0	TMS 2 1	TMS 2 0	TMS 1 1	TMS 1 0	TMS 0 1	TMS 0 0
2	UTYP MEMN CONT	TSI 11 1	TSI 11 0	TSI 10 1	TSI 10 0	TSI 9 1	TSI 9 0	TSI 8 1	TSI 8 0	TSI 7 1	TSI 7 0	TSI 6 1	TSI 6 0	TSI 5 1	TSI 5 0	TSI 4 1	TSI 4 0
3	UTYP MEMN CONT	TSI 19 1	TSI 19 0	TSI 18 1	TSI 18 0	TSI 17 1	TSI 17 0	TSI 16 1	TSI 16 0	TSI 15 1	TSI 15 0	TSI 14 1	TSI 14 0	TSI 13 1	TSI 13 0	TSI 12 1	TSI 12 0
4	UTYP MEMN CONT	TSI 27 1	TSI 27 0	TSI 26 1	TSI 26 0	TSI 25 1	TSI 25 0	TSI 24 1	TSI 24 0	TSI 23 1	TSI 23 0	TSI 22 1	TSI 22 0	TSI 21 1	TSI 21 0	TSI 20 1	TSI 20 0
5	UTYP MEMN CONT	TSI 35 1	TSI 35 0	TSI 34 1	TSI 34 0	TSI 33 1	TSI 33 0	TSI 32 1	TSI 32 0	TSI 31 1	TSI 31 0	TSI 30 1	TSI 30 0	TSI 29 1	TSI 29 0	TSI 28 1	TSI 28 0
6	UTYP MEMN CONT	TSI 43 1	TSI 43 0	TSI 42 1	TSI 42 0	TSI 41 1	TSI 41 0	TSI 40 1	TSI 40 0	TSI 39 1	TSI 39 0	TSI 38 1	TSI 38 0	TSI 37 1	TSI 37 0	TSI 36 1	TSI 36 0
7	UTYP MEMN CONT	TSI 51 1	TSI 51 0	TSI 50 1	TSI 50 0	TSI 49 1	TSI 49 0	TSI 48 1	TSI 48 0	TSI 47 1	TSI 47 0	TSI 46 1	TSI 46 0	TSI 45 1	TSI 45 0	TSI 44 1	TSI 44 0
8	UTYP MEMN CONT	TSI 59 1	TSI 59 0	TSI 58 1	TSI 58 0	TSI 57 1	TSI 57 0	TSI 56 1	TSI 56 0	TSI 55 1	TSI 55 0	TSI 54 1	TSI 54 0	TSI 53 1	TSI 53 0	TSI 52 1	TSI 52 0
9	UTYP MEMN *	TSI 6 7	TSI 6 6	TSI 4 7	TSI 4 6	TSI 2 7	TSI 2 6	TSI 0 7	TSI 0 6	TSI 63 1	TSI 63 0	TSI 62 1	TSI 62 0	TSI 61 1	TSI 61 0	TSI 60 1	TSI 60 0
10	UTYP MEMN SPARE D3U	TSI 22 7	TSI 22 6	TSI 20 7	TSI 20 6	TSI 18 7	TSI 18 6	TSI 16 7	TSI 16 6	TSI 14 7	TSI 14 6	TSI 12 7	TSI 12 6	TSI 10 7	TSI 10 6	TSI 8 7	TSI 8 6

* For TSIs 60-63 the subunit is Controller (CONT), for TSIs 0-6 the subunit is D3U.

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ROW 2

word		BIT POSITION															
		15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
1	UTYP	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI
	MEMN	38	38	36	36	34	34	32	32	30	30	28	28	26	26	24	24
	SPARE D3U	7	6	7	6	7	6	7	6	7	6	7	6	7	6	7	6
2	UTYP	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI
	MEMN	54	54	52	52	50	50	48	48	46	46	44	44	42	42	40	40
	SPARE D3U	7	6	7	6	7	6	7	6	7	6	7	6	7	6	7	6
3	UTYP	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI
	MEMN			0	0	0	0	0	0	62	62	60	60	58	58	56	56
	*			5	4	3	2	1	0	7	6	7	6	7	6	7	6
4	UTYP	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI
	MEMN			4	4	4	4	4	4			2	2	2	2	2	2
	D3U			5	4	3	2	1	0			5	4	3	2	1	0
5	UTYP	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI
	MEMN			8	8	8	8	8	8			6	6	6	6	6	6
	D3U			5	4	3	2	1	0			5	4	3	2	1	0
6	UTYP	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI
	MEMN			12	12	12	12	12	12			10	10	10	10	10	10
	D3U			5	4	3	2	1	0			5	4	3	2	1	0
7	UTYP	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI
	MEMN			16	16	16	16	16	16			14	14	14	14	14	14
	D3U			5	4	3	2	1	0			5	4	3	2	1	0
8	UTYP	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI
	MEMN			20	20	20	20	20	20			18	18	18	18	18	18
	D3U			5	4	3	2	1	0			5	4	3	2	1	0
9	UTYP	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI
	MEMN			24	24	24	24	24	24			22	22	22	22	22	22
	D3U			5	4	3	2	1	0			5	4	3	2	1	0
10	UTYP	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI
	MEMN			28	28	28	28	28	28			26	26	26	26	26	26
	D3U			5	4	3	2	1	0			5	4	3	2	1	0

* - Member numbers 56 - 62 have subunit Spare D3U, member number 0 are D3U.

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ROW 3

word		BIT POSITION															
		15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
1	UTYP MEMN D3U	TSI	TSI	TSI 32 5	TSI 32 4	TSI 32 3	TSI 32 2	TSI 32 1	TSI 32 0	TSI	TSI	TSI 30 5	TSI 30 4	TSI 30 3	TSI 30 2	TSI 30 1	TSI 30 0
2	UTYP MEMN D3U	TSI	TSI	TSI 36 5	TSI 36 4	TSI 36 3	TSI 36 2	TSI 36 1	TSI 36 0	TSI	TSI	TSI 34 5	TSI 34 4	TSI 34 3	TSI 34 2	TSI 34 1	TSI 34 0
3	UTYP MEMN D3U	TSI	TSI	TSI 40 5	TSI 40 4	TSI 40 3	TSI 40 2	TSI 40 1	TSI 40 0	TSI	TSI	TSI 38 5	TSI 38 4	TSI 38 3	TSI 38 2	TSI 38 1	TSI 38 0
4	UTYP MEMN D3U	TSI	TSI	TSI 44 5	TSI 44 4	TSI 44 3	TSI 44 2	TSI 44 1	TSI 44 0	TSI	TSI	TSI 42 5	TSI 42 4	TSI 42 3	TSI 42 2	TSI 42 1	TSI 42 0
5	UTYP MEMN D3U	TSI	TSI	TSI 48 5	TSI 48 4	TSI 48 3	TSI 48 2	TSI 48 1	TSI 48 0	TSI	TSI	TSI 46 5	TSI 46 4	TSI 46 3	TSI 46 2	TSI 46 1	TSI 46 0
6	UTYP MEMN D3U	TSI	TSI	TSI 52 5	TSI 52 4	TSI 52 3	TSI 52 2	TSI 52 1	TSI 52 0	TSI	TSI	TSI 50 5	TSI 50 4	TSI 50 3	TSI 50 2	TSI 50 1	TSI 50 0
7	UTYP MEMN D3U	TSI	TSI	TSI 56 5	TSI 56 4	TSI 56 3	TSI 56 2	TSI 56 1	TSI 56 0	TSI	TSI	TSI 54 5	TSI 54 4	TSI 54 3	TSI 54 2	TSI 54 1	TSI 54 0
8	UTYP MEMN D3U	TSI	TSI	TSI 60 5	TSI 60 4	TSI 60 3	TSI 60 2	TSI 60 1	TSI 60 0	TSI	TSI	TSI 58 5	TSI 58 4	TSI 58 3	TSI 58 2	TSI 58 1	TSI 58 0
9	UTYP MEMN *	TSI 6 11	TSI 6 10	TSI 4 11	TSI 4 10	TSI 2 11	TSI 2 10	TSI 0 11	TSI 0 10	TSI	TSI	TSI 62 5	TSI 62 4	TSI 62 3	TSI 62 2	62 1	62 0
10	UTYP MEMN SP SPU	TSI 22 11	TSI 22 10	TSI 20 11	TSI 20 10	TSI 18 11	TSI 18 10	TSI 16 11	TSI 16 10	TSI 14 11	TSI 14 10	TSI 12 11	TSI 12 10	TSI 10 11	TSI 10 10	TSI 8 11	TSI 8 10

* - Member number 62 has subunit D3U, member numbers 0 - 6 are spare SPU.

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ROW 4

word		BIT POSITION															
		15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
1	UTYP	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI
	MEMN	38	38	36	36	34	34	32	32	30	30	28	28	26	26	24	24
	SP SPU	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0
2	UTYP	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI
	MEMN	54	54	52	52	50	50	48	48	46	46	44	44	42	42	40	40
	SP SPU	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0
3	UTYP	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI
	MEMN	0	0	0	0	0	0	0	0	62	62	60	60	58	58	56	56
	*	7	6	5	4	3	2	1	0	1	0	1	0	1	0	1	0
4	UTYP	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI
	MEMN	2	2	2	2	2	2	2	2							0	0
	SPU	7	6	5	4	3	2	1	0							9	8
5	UTYP	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI
	MEMN	4	4	4	4	4	4	4	4							2	2
	SPU	7	6	5	4	3	2	1	0							9	8
6	UTYP	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI
	MEMN	6	6	6	6	6	6	6	6							4	4
	SPU	7	6	5	4	3	2	1	0							9	8
7	UTYP	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI
	MEMN	8	8	8	8	8	8	8	8							6	6
	SPU	7	6	5	4	3	2	1	0							9	8
8	UTYP	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI
	MEMN	10	10	10	10	10	10	10	10							8	8
	SPU	7	6	5	4	3	2	1	0							9	8
9	UTYP	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI
	MEMN	12	12	12	12	12	12	12	12							10	10
	SPU	7	6	5	4	3	2	1	0							9	8
10	UTYP	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI
	MEMN	14	14	14	14	14	14	14	14							12	12
	SPU	7	6	5	4	3	2	1	0							9	8

* - For member numbers 56 - 62 the subunit type is spare SPU, for member number 0 the subunit type is SPU.

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ROW 5

word		BIT POSITION															
		15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
1	UTYP	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI
	MEMN	16	16	16	16	16	16	16	16							14	14
	SPU	7	6	5	4	3	2	1	0							9	8
2	UTYP	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI
	MEMN	18	18	18	18	18	18	18	18							16	16
	SPU	7	6	5	4	3	2	1	0							9	8
3	UTYP	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI
	MEMN	20	20	20	20	20	20	20	20							18	18
	SPU	7	6	5	4	3	2	1	0							9	8
4	UTYP	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI
	MEMN	22	22	22	22	22	22	22	22							20	20
	SPU	7	6	5	4	3	2	1	0							9	8
5	UTYP	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI
	MEMN	24	24	24	24	24	24	24	24							22	22
	SPU	7	6	5	4	3	2	1	0							9	8
6	UTYP	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI
	MEMN	26	26	26	26	26	26	26	26							24	24
	SPU	7	6	5	4	3	2	1	0							9	8
7	UTYP	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI
	MEMN	28	28	28	28	28	28	28	28							26	26
	SPU	7	6	5	4	3	2	1	0							9	8
8	UTYP	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI
	MEMN	30	30	30	30	30	30	30	30							28	28
	SPU	7	6	5	4	3	2	1	0							9	8
9	UTYP	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI
	MEMN	32	32	32	32	32	32	32	32							30	30
	SPU	7	6	5	4	3	2	1	0							9	8
10	UTYP	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI	TSI
	MEMN	34	34	34	34	34	34	34	34							32	32
	SPU	7	6	5	4	3	2	1	0							9	8

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ROW 6

word		BIT POSITION															
		15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
1	UTYP MEMN SPU	TSI 36 7	TSI 36 6	TSI 36 5	TSI 36 4	TSI 36 3	TSI 36 2	TSI 36 1	TSI 36 0	TSI	TSI	TSI	TSI	TSI	TSI	TSI 34 9	TSI 34 8
2	UTYP MEMN SPU	TSI 38 7	TSI 38 6	TSI 38 5	TSI 38 4	TSI 38 3	TSI 38 2	TSI 38 1	TSI 38 0	TSI	TSI	TSI	TSI	TSI	TSI	TSI 36 9	TSI 36 8
3	UTYP MEMN SPU	TSI 40 7	TSI 40 6	TSI 40 5	TSI 40 4	TSI 40 3	TSI 40 2	TSI 40 1	TSI 40 0	TSI	TSI	TSI	TSI	TSI	TSI	TSI 38 9	TSI 38 8
4	UTYP MEMN SPU	TSI 42 7	TSI 42 6	TSI 42 5	TSI 42 4	TSI 42 3	TSI 42 2	TSI 42 1	TSI 42 0	TSI	TSI	TSI	TSI	TSI	TSI	TSI 40 9	TSI 40 8
5	UTYP MEMN SPU	TSI 44 7	TSI 44 6	TSI 44 5	TSI 44 4	TSI 44 3	TSI 44 2	TSI 44 1	TSI 44 0	TSI	TSI	TSI	TSI	TSI	TSI	TSI 42 9	TSI 42 8
6	UTYP MEMN SPU	TSI 46 7	TSI 46 6	TSI 46 5	TSI 46 4	TSI 46 3	TSI 46 2	TSI 46 1	TSI 46 0	TSI	TSI	TSI	TSI	TSI	TSI	TSI 44 9	TSI 44 8
7	UTYP MEMN SPU	TSI 48 7	TSI 48 6	TSI 48 5	TSI 48 4	TSI 48 3	TSI 48 2	TSI 48 1	TSI 48 0	TSI	TSI	TSI	TSI	TSI	TSI	TSI 46 9	TSI 46 8
8	UTYP MEMN SPU	TSI 50 7	TSI 50 6	TSI 50 5	TSI 50 4	TSI 50 3	TSI 50 2	TSI 50 1	TSI 50 0	TSI	TSI	TSI	TSI	TSI	TSI	TSI 48 9	TSI 48 8
9	UTYP MEMN SPU	TSI 52 7	TSI 52 6	TSI 52 5	TSI 52 4	TSI 52 3	TSI 52 2	TSI 52 1	TSI 52 0	TSI	TSI	TSI	TSI	TSI	TSI	TSI 50 9	TSI 50 8
10	UTYP MEMN SPU	TSI 54 7	TSI 54 6	TSI 54 5	TSI 54 4	TSI 54 3	TSI 54 2	TSI 54 1	TSI 54 0	TSI	TSI	TSI	TSI	TSI	TSI	TSI 52 9	TSI 52 8

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ROW 7

word		BIT POSITION															
		15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
1	UTYP MEMN SPU	TSI 56 7	TSI 56 6	TSI 56 5	TSI 56 4	TSI 56 3	TSI 56 2	TSI 56 1	TSI 56 0	TSI	TSI	TSI	TSI	TSI	TSI	TSI 54 9	TSI 54 8
2	UTYP MEMN SPU	TSI 58 7	TSI 58 6	TSI 58 5	TSI 58 4	TSI 58 3	TSI 58 2	TSI 58 1	TSI 58 0	TSI	TSI	TSI	TSI	TSI	TSI	TSI 56 9	TSI 56 8
3	UTYP MEMN SPU	TSI 60 7	TSI 60 6	TSI 60 5	TSI 60 4	TSI 60 3	TSI 60 2	TSI 60 1	TSI 60 0	TSI	TSI	TSI	TSI	TSI	TSI	TSI 58 9	TSI 58 8
4	UTYP MEMN SPU	TSI 62 7	TSI 62 6	TSI 62 5	TSI 62 4	TSI 62 3	TSI 62 2	TSI 62 1	TSI 62 0	TSI	TSI	TSI	TSI	TSI	TSI	TSI 60 9	TSI 60 8
5	UTYP MEMN *	SP 3 1	SP 3 0	SP 2 1	SP 2 0	SP 1 1	SP 1 0	SP 0 1	SP 0 0	TSI	TSI	TSI	TSI	TSI	TSI	TSI 62 9	TSI 62 8
6	UTYP MEMN CONT	SP 11 1	SP 11 0	SP 10 1	SP 10 0	SP 9 1	SP 9 0	SP 8 1	SP 8 0	SP 7 1	SP 7 0	SP 6 1	SP 6 0	SP 5 1	SP 5 0	SP 4 1	SP 4 0
7	UTYP MEMN CONT	SP 19 1	SP 19 0	SP 18 1	SP 18 0	SP 17 1	SP 17 0	SP 16 1	SP 16 0	SP 15 1	SP 15 0	SP 14 1	SP 14 0	SP 13 1	SP 13 0	SP 12 1	SP 12 0
8	UTYP MEMN CONT	SP 27 1	SP 27 0	SP 26 1	SP 26 0	SP 25 1	SP 25 0	SP 24 1	SP 24 0	SP 23 1	SP 23 0	SP 22 1	SP 22 0	SP 21 1	SP 21 0	SP 20 1	SP 20 0
9	UTYP MEMN **	SC 0 1	SC 0 0	PUB 1 0	PUB 0 0	NC 0 3	NC 0 2	NC 0 1	NC 0 0	SP 31 1	SP 31 0	SP 30 1	SP 30 0	SP 29 1	SP 29 0	SP 28 1	SP 28 0
10	UTYP MEMN CONT	TGR 7 1	TGR 7 0	TGR 6 1	TGR 6 0	TGR 5 1	TGR 5 0	TGR 4 1	TGR 4 0	TGR 3 1	TGR 3 0	TGR 2 1	TGR 2 0	TGR 1 1	TGR 1 0	TGR 0 1	TGR 0 0

* - Member number 62 has subunit SPU, member numbers 0 - 3 are controller.

** - For Network Clock (NC) the subunit is chain. For System Clock (SC) or for Signal Processor (SP), the subunit is controller.

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ROW 8

word		BIT POSITION															
		15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
1	UTYP	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR
	MEMN	15	15	14	14	13	13	12	12	11	11	10	10	9	9	8	8
	CONT	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0
2	UTYP	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR
	MEMN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TERM	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
3	UTYP	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR
	MEMN	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	TERM	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
4	UTYP	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR
	MEMN	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	TERM	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
5	UTYP	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR
	MEMN	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	TERM	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
6	UTYP	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR
	MEMN	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	TERM	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
7	UTYP	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR
	MEMN	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	TERM	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
8	UTYP	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR
	MEMN	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	TERM	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
9	UTYP	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR
	MEMN	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	TERM	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
10	UTYP	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR
	MEMN	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
	TERM	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0

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ROW 9

word		BIT POSITION															
		15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
1	UTYP	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR
	MEMN	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
	TERM	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
2	UTYP	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR
	MEMN	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	TERM	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
3	UTYP	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR
	MEMN	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
	TERM	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
4	UTYP	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR
	MEMN	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	TERM	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
5	UTYP	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR
	MEMN	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
	TERM	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
6	UTYP	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR
	MEMN	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
	TERM	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
7	UTYP	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR	TGR
	MEMN	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
	TERM	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
8	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	7	7	6	6	5	5	4	4	3	3	2	2	1	1	0	0
	CONT	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0
9	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	15	15	14	14	13	13	12	12	11	11	10	10	9	9	8	8
	CONT	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0
10	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	23	23	22	22	21	21	20	20	19	19	18	18	17	17	16	16
	CONT	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0

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ROW 10

word		BIT POSITION															
		15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
1	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	31	31	30	30	29	29	28	28	27	27	26	26	25	25	24	24
	CONT	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0
2	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	7	7	6	6	5	5	4	4	3	3	2	2	1	1	0	0
	SP DIU	33	32	33	32	33	32	33	32	33	32	33	32	33	32	33	32
3	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	15	15	14	14	13	13	12	12	11	11	10	10	9	9	8	8
	SP DIU	33	32	33	32	33	32	33	32	33	32	33	32	33	32	33	32
4	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	23	23	22	22	21	21	20	20	19	19	18	18	17	17	16	16
	SP DIU	33	32	33	32	33	32	33	32	33	32	33	32	33	32	33	32
5	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	31	31	30	30	29	29	28	28	27	27	26	26	25	25	24	24
	SP DIU	33	32	33	32	33	32	33	32	33	32	33	32	33	32	33	32
6	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIU	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
7	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIU	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
8	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	DIU	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
9	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	DIU	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
10	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	DIU	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0

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ROW 11

word		BIT POSITION															
		15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
1	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	DIU	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
2	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	DIU	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
3	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	DIU	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
4	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	DIU	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
5	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	DIU	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
6	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	DIU	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
7	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	DIU	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
8	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	DIU	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
9	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	DIU	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
10	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	DIU	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0

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ROW 12

word		BIT POSITION															
		15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
1	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	DIU	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
2	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
	DIU	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
3	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
	DIU	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
4	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
	DIU	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
5	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
	DIU	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
6	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	DIU	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
7	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	DIU	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
8	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
	DIU	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
9	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
	DIU	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
10	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	DIU	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0

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ROW 13

word		BIT POSITION															
		15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
1	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	DIU	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
2	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
	DIU	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
3	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
	DIU	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
4	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
	DIU	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
5	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
	DIU	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
6	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
	DIU	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
7	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
	DIU	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
8	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
	DIU	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
9	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
	DIU	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
10	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
	DIU	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0

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ROW 14

word		BIT POSITION															
		15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
1	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
	DIU	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
2	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
	DIU	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
3	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
	DIU	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
4	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
	DIU	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
5	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
	DIU	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
6	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
	DIU	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
7	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
	DIU	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
8	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
	DIU	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
9	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
	DIU	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
10	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
	DIU	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0

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word		BIT POSITION															
		15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
1	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
	DIU	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
2	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
	DIU	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
3	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
	DIU	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
4	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
	DIU	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
5	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
	DIU	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
6	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
	DIU	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
7	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
	DIU	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
8	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
	DIU	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
9	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
	DIU	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
10	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27
	DIU	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0

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word		BIT POSITION															
		15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
1	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27
	DIU	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
2	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
	DIU	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
3	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
	DIU	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
4	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
	DIU	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
5	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
	DIU	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
6	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
	DIU	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
7	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
	DIU	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
8	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
	DIU	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
9	UTYP	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF	DIF
	MEMN	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
	DIU	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
10	UTYP	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS
	MEMN	7	7	6	6	5	5	4	4	3	3	2	2	1	1	0	0
	CONT	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0

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word		BIT POSITION															
		15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
1	UTYP	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS
	MEMN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	SCU	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
2	UTYP	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS
	MEMN	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	SCU	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
3	UTYP	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS
	MEMN	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	SCU	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
4	UTYP	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS
	MEMN	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	SCU	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
5	UTYP	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS
	MEMN	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	SCU	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
6	UTYP	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS
	MEMN	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	SCU	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
7	UTYP	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS
	MEMN	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	SCU	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
8	UTYP	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS	SCS
	MEMN	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	SCU	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
9	UTYP	DT	DT	DT	DT	DT	DT	DT	DT	DT	DT	DT	DT	DT	DT	DT	NCSU
	MEMN	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	0
10	UTYP	DT	DT	DT	DT	DT	DT	DT	DT	DT	DT	DT	DT	DT	DT	DT	DT
	MEMN	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15

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ROW 18

word		BIT POSITION															
		15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
1	UTYP MEMN	DT 46	DT 45	DT 44	DT 43	DT 42	DT 41	DT 40	DT 39	DT 38	DT 37	DT 36	DT 35	DT 34	DT 33	DT 32	DT 31
2	UTYP MEMN	DT 62	DT 61	DT 60	DT 59	DT 58	DT 57	DT 56	DT 55	DT 54	DT 53	DT 52	DT 51	DT 50	DT 49	DT 48	DT 47
3	UTYP MEMN	DT 78	DT 77	DT 76	DT 75	DT 74	DT 73	DT 72	DT 71	DT 70	DT 69	DT 68	DT 67	DT 66	DT 65	DT 64	DT 63
4	UTYP MEMN	DT 94	DT 93	DT 92	DT 91	DT 90	DT 89	DT 88	DT 87	DT 86	DT 85	DT 84	DT 83	DT 82	DT 81	DT 80	DT 79
5	UTYP MEMN	DT 110	DT 109	DT 108	DT 107	DT 106	DT 105	DT 104	DT 103	DT 102	DT 101	DT 100	DT 99	DT 98	DT 97	DT 96	DT 95
6	UTYP MEMN	DT 126	DT 125	DT 124	DT 123	DT 122	DT 121	DT 120	DT 119	DT 118	DT 117	DT 116	DT 115	DT 114	DT 113	DT 112	DT 111
7	UTYP MEMN CONT	EST 7 0	EST 6 1	EST 6 0	EST 5 1	EST 5 0	EST 4 1	EST 4 0	EST 3 1	EST 3 0	EST 2 1	EST 2 0	EST 1 1	EST 1 0	EST 0 1	EST 0 0	DT 127
8	UTYP MEMN CONT	EST 15 0	EST 14 1	EST 14 0	EST 13 1	EST 13 0	EST 12 1	EST 12 0	EST 11 1	EST 11 0	EST 10 1	EST 10 0	EST 9 1	EST 9 0	EST 8 1	EST 8 0	EST 7 1
9	UTYP MEMN CONT	EST 23 0	EST 22 1	EST 22 0	EST 21 1	EST 231 0	EST 20 1	EST @0 0	EST 19 1	EST 19 0	EST 18 1	EST 18 0	EST 17 1	EST 17 0	EST 16 1	EST 16 0	EST 15 1
10	UTYP MEMN CONT	EST 31 0	EST 30 1	EST 30 0	EST 29 1	EST 29 0	EST 28 1	EST 28 0	EST 27 1	EST 27 0	EST 26 1	EST 26 0	EST 25 1	EST 25 0	EST 24 1	EST 24 0	EST 23 1

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ROW 19

word		BIT POSITION															
		15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
1	UTYP MEMN *	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
		14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	1
2	UTYP MEMN ESU	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST
		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
		14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	15
3	UTYP MEMN ESU	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST
		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1
		14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	15
4	UTYP MEMN ESU	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST
		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2
		14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	15
5	UTYP MEMN ESU	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST
		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3
		14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	15
6	UTYP MEMN ESU	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST
		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4
		14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	15
7	UTYP MEMN ESU	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	5
		14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	15
8	UTYP MEMN ESU	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST
		7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6
		14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	15
9	UTYP MEMN ESU	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST
		8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	7
		14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	15
10	UTYP MEMN ESU	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST
		9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	8
		14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	15

For EST member number 31 subunit type is CONT, for EST member number 0 subunit type is ESU.

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word		BIT POSITION															
		15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
1	UTYP MEMN ESU	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST
		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	9
		14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	15
2	UTYP MEMN ESU	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST
		11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	10
		14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	15
3	UTYP MEMN ESU	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST
		12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	11
		14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	15
4	UTYP MEMN ESU	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST
		13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	12
		14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	15
5	UTYP MEMN ESU	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST
		14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	13
		14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	15
6	UTYP MEMN ESU	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST
		15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	14
		14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	15
7	UTYP MEMN ESU	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST
		16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	15
		14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	15
8	UTYP MEMN ESU	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST
		17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	16
		14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	15
9	UTYP MEMN ESU	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST
		18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	17
		14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	15
10	UTYP MEMN ESU	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST
		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	18
		14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	15

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word		BIT POSITION															
		15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
1	UTYP MEMN ESU	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST
		20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	19
		14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	15
2	UTYP MEMN ESU	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST
		21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	20
		14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	15
3	UTYP MEMN ESU	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST
		22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	21
		14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	15
4	UTYP MEMN ESU	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST
		23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	22
		14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	15
5	UTYP MEMN ESU	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST
		24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	23
		14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	15
6	UTYP MEMN ESU	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST
		25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	24
		14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	15
7	UTYP MEMN ESU	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST
		26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	25
		14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	15
8	UTYP MEMN ESU	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST
		27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	26
		14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	15
9	UTYP MEMN ESU	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST
		28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	27
		14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	15
10	UTYP MEMN ESU	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST
		29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	28
		14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	15

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ROW 22

word		BIT POSITION															
		15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
1	UTYP	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST
	MEMN	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	29
	ESU	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	15
2	UTYP	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST
	MEMN	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	30
	ESU	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	15
3	UTYP	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	EST
	MEMN	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	31
	ESU																15
4	UTYP	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF
	MEMN	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15
5	UTYP	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF
	MEMN	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31
6	UTYP	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF
	MEMN	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	47
	VIU	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0	
7	UTYP	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF
	MEMN	3	3	3	3	3	3	3	2	2	2	2	2	2	2	2	1
	VIU	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0	7
8	UTYP	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF
	MEMN	5	5	5	5	5	5	5	4	4	4	4	4	4	4	4	3
	VIU	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0	7
9	UTYP	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF
	MEMN	7	7	7	7	7	7	7	6	6	6	6	6	6	6	6	5
	VIU	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0	7
10	UTYP	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF
	MEMN	11	11	11	11	11	11	11	10	10	10	10	10	10	10	10	7
	VIU	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0	7

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ROW 23

word		BIT POSITION															
		15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
1	UTYP	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF
	MEMN	13	13	13	13	13	13	13	12	12	12	12	12	12	12	12	11
	VIU	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0	7
2	UTYP	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF
	MEMN	15	15	15	15	15	15	15	14	14	14	14	14	14	14	14	13
	VIU	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0	7
3	UTYP	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF
	MEMN	17	17	17	17	17	17	17	16	16	16	16	16	16	16	16	15
	VIU	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0	7
4	UTYP	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF
	MEMN	19	19	19	19	19	19	19	18	18	18	18	18	18	18	18	17
	VIU	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0	7
5	UTYP	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF
	MEMN	21	21	21	21	21	21	21	20	20	20	20	20	20	20	20	19
	VIU	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0	7
6	UTYP	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF
	MEMN	23	23	23	23	23	23	23	22	22	22	22	22	22	22	22	21
	VIU	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0	7
7	UTYP	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF
	MEMN	25	25	25	25	25	25	25	24	24	24	24	24	24	24	24	23
	VIU	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0	7
8	UTYP	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF
	MEMN	27	27	27	27	27	27	27	26	26	26	26	26	26	26	26	25
	VIU	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0	7
9	UTYP	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF
	MEMN	29	29	29	29	29	29	29	28	28	28	28	28	28	28	28	27
	VIU	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0	7
10	UTYP	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF
	MEMN	31	31	31	31	31	31	31	30	30	30	30	30	30	30	30	29
	VIU	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0	7

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ROW 24

word		BIT POSITION															
		15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
1	UTYP	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF
	MEMN	33	33	33	33	33	33	33	32	32	32	32	32	32	32	32	31
	VIU	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0	7
2	UTYP	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF
	MEMN	35	35	35	35	35	35	35	34	34	34	34	34	34	34	34	33
	VIU	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0	7
3	UTYP	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF
	MEMN	37	37	37	37	37	37	37	36	36	36	36	36	36	36	36	35
	VIU	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0	7
4	UTYP	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF
	MEMN	39	39	39	39	39	39	39	38	38	38	38	38	38	38	38	37
	VIU	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0	7
5	UTYP	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF
	MEMN	41	41	41	41	41	41	41	40	40	40	40	40	40	40	40	39
	VIU	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0	7
6	UTYP	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF
	MEMN	43	43	43	43	43	43	43	42	42	42	42	42	42	42	42	41
	VIU	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0	7
7	UTYP	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF
	MEMN	45	45	45	45	45	45	45	44	44	44	44	44	44	44	44	43
	VIU	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0	7
8	UTYP	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF	VIF
	MEMN	47	47	47	47	47	47	47	46	46	46	46	46	46	46	46	45
	VIU	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0	7
9	UTYP																VIF
	MEMN																47
	VIU																7

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ID TEST:SIGLK
WORK CENTER.. MOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

TEST: SIGLK aabb VFL cdddd dd dd ddd ddd e

2. REASON FOR OUTPUT

To respond to a test voice frequency link (VFL) request and report the results of this test.

3. VARIABLE FIELD DEFINITIONS

- a A terminal grouping (TGR) frame number (00-15).
- b A terminal subunit number within the frame (00-15).
- c Traffic number of the VFL tested.
- d Circuit identification number (CIN) with town, state, building, far-building subdivision, and near-building subdivision of VFL tested.
- e Test results:
 - ABORTED — The system aborted the test procedure.
 - COMPLETED VFL FAILED — The VFL failed the transmission error rate requirements test.
 - COMPLETED VFL PASSED — VFL passed the transmission error rate requirements test.
 - FAILED — The VFL failed the transmission error rate requirements test.
 - PASSED — The VFL passed the transmission error rate requirements test.
 - STOPPED — Link failed during test or test cannot be run on VFL for international link.
 - STOPPED, FE REFUSAL — STP did not complete test in one minute.
 - STOPPED LINK FAILED — The link failed while the test was in progress.
 - STOPPED, PRIP — Previous request in progress.
 - STOPPED, RETRY LATER — The link is in a transient state. Test request cannot be handled at this time. Retry after one minute.
 - TEST TIMED OUT — STP did not complete test in 30 seconds.

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4. ACTION TO BE TAKEN

Test and repair the VFL.

5. REFERENCES

PIDENTs
CCISIOPR
CCISMNAC
CCISSLCN

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ID TEST:SSD
WORK CENTER.. MOC
GENERIC 4E21 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

[1] TEST:SSD a b

[2] TEST:SSD a STF
F = c G = d J = e K = f
L = g X = h Y = i Z = j
PROGRAM ADDRESS k
UNIT IDENTIFIER l
TEST OPTIONS/FLAGS m

SUSPECTED FAULTY UNIT n

2. REASON FOR OUTPUT

To report the results of a scan and signal distributor (SSD) deferred fault recognition tests.

3. VARIABLE FIELD DEFINITIONS

a Member number of the SSD tested (0 or 1).

b Disposition of the request:

 ABORTED — The request was aborted due to a maintenance interrupt.

 ATP — The request was completed successfully.

 NOT STARTED – IFB 00S — The interface bus (IFB) to which the SSD is assigned is out of service.

STF A failure was detected. Failure data collected in a failure block consisting of 8 registers at the time of failure.

c F register at time of test failure.

d G register at time of test failure.

e J register at time of test failure.

f K register at time of test failure.

g L register at time of test failure.

h X register at time of test failure.

i Y register at time of test failure.

j Z register at time of test failure.

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k	Program address at failure. This is the same as the contents of the J register.
l	Implicated unit identifier. The contents may be one of the following: • Base address of SSD if the SSD is implicated. • 0 for central control (CC) 0 or 1 for CC 1 if the CC is implicated. • 0 for IFB 0 or 1 for IFB 1 if the IFB is implicated.
m	Test options and flags set at failure. Contains information outlining what tests are run and other test conditions and what unit or SSD implicated as failing. Units refers to CC or IFB.
n	The suspected faulty unit is provided based on the flag set in variable m by the system. Diagnostics should be requested on the indicated unit.

4. ACTION TO BE TAKEN

If the disposition of the remove request is:

NOT STARTED – IFB OOS — Try to restore the corresponding IFB.

STF — Request the SSD diagnostic.

5. REFERENCES

PIDENTs
IFFRTEST
SDFRBASE
SDFRTEST

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ID TEST:TCAPAIN
WORK CENTER.. MAC, MOC, NMOC, TOC
GENERIC 4E24 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

[1] TEST:TCAPAIN;QRYTYPE a[:TSGN b,DATA c,TRNUM d,TOS e,DIG f]
[,ANI g][,SID h][,OLI i | ,IIDIGITS j][,RID k][,RDC l][,TIME m]...
...[LIST][,CD][,AUTHCODE n]

[OPERATION: o
PARAMETERS: p]
[v]

[2] TEST:TCAPAIN;QRYTYPE a[:TSGN b,DATA c,TOS e,ANI g,DIG u]
[,SID h] [,OLI i | ,IIDIGITS j] [,RID k] [,RDC l][,TIME m]...
...[LIST][,CD][,AUTHCODE n]

[OPERATION: o
PARAMETERS: p]
[v]

2. REASON FOR OUTPUT

This output message is in response to the TEST:TCAPAIN input message, which requests either an Info_Analyzed or Info_Collected query.

Format 1 shows information from an Info_Analyzed test query.

Format 2 shows information from an Info_Collected test query.

The variable field o explains the results of the test query (whether successful or not). Variable p gives information to support the results.

3. VARIABLE FIELD DEFINITIONS

a Type of query sent:

1 — Info_Collected query

2 — Info_Analyzed query

b The USERID contains the identity of the originating user which is the Trunk Subgroup Number (TSGN).

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- c The bearer capability of the call that encountered the trigger. The Service Switch Point (SSP) shall include the bearer capability parameter in the message regardless of the originating access type as follows:
- 0 — Speech
 - 1 — f31kHz audio
 - 2 — 7kHz audio, (NOT SUPPORTED)
 - 3 — b56kbps
 - 4 — b64kbps
 - 5 — Packet mode data, (NOT SUPPORTED)
- d Trigger criteria type:
- 4 — Numbering Plan Area (NPA), for Info_Analyzed queries.
 - 5 — NPANXX, for Info_Analyzed queries.
 - 6 — Exchange Number (NXX), for Info_Analyzed queries.
 - 7 — NXXxxxx, where x is the final four digits of the number, for Info_Analyzed queries..
 - 8 — NPANXXxxxx, where x is the final four digits of the number, for Info_Analyzed queries.
 - 14 — Shared Inter-Office (IO) trunk, for Info_Collected queries (default).
 - 17 — Off hook delay, for Info_Collected queries.
 - 19 — NPAN, for Info_Analyzed queries.
 - 20 — NPANX, for Info_Analyzed queries.
 - 21 — NPANXXx, where x is a decimal number (0-9), for Info_Analyzed queries.
 - 22 — NPANXXxx, where x is a decimal number (0-9), for Info_Analyzed queries.
 - 23 — NPANXXxxx, where x is a decimal number (0-9), for Info_Analyzed queries.
- e Type Of Service (TOS) indicator is used to obtain the transaction type to use in sending the query.
- f Called party Identification (ID) represents the call's destination address. This parameter includes the nature of number along with the numbering plan, followed by the digits.
- Nature of number (first two digits)
- 00 — Not applicable
 - 01 — Subscriber number

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- 02 — National (significant) number
- 03 — International number
- 04 — Subscriber number, operator requested (0+ call)
- 05 — National number, operator requested (0+ call)
- 06 — International number, operator requested (0+ call)
- 07 — No address present, operator requested (0-, 10XXX+0(0), or 00- call)
- 08 — No address present, cut-through call to carrier
- 09 — 950+ call from local exchange carrier public station or hotel/motel line or non - Equal Access End Office (EAEO)
- 10 — Test line test code

Numbering plan (third digit)

- 0 — Unknown or not applicable
- 1 — Integrated Services Digital Network (ISDN) numbering plan
- 2 — Private

For example:

EX: 0121234567
Nature of number: Subscriber number
Numbering plan: Private
Digits: 1234567

- g Charge number represents the billing number Automatic Number Identification (ANI) of the call's originating party. Range: 3,6,10 digits.
- h Calling party ID represents the call's originating party. This parameter includes the nature of number, numbering plan, presentation restriction, screening indicator, followed by the digits.

Nature of number (first digit)

- 0 — Unknown or not applicable
- 1 — Unique subscriber number
- 2 — Unique national (significant) number
- 3 — Unique international number
- 4 — Non-unique subscriber number

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- 5 — Non-unique national number
- 6 — Non-unique international number
- 7 — Test line test code

Numbering plan (second digit)

- 0 — Unknown or not applicable
- 1 — ISDN numbering plan
- 2 — Private

Presentation Restriction Indicator (PRI) - Screening Indicator (SI) (third digit)

- 0 — Presentation allowed - reserved for user provided, not screened or spare
- 1 — Presentation allowed - user provided, passed network screening
- 2 — Presentation allowed - network provided
- 3 — Presentation restricted - reserved for user provided, not screened or spare
- 4 — Presentation restricted - user provided, passed network screening
- 5 — Presentation restricted - network provided
- 6 — Number unavailable - reserved for user provided, not screened or spare
- 7 — Number unavailable - user provided, passed network screening
- 8 — Number unavailable - network provided

For example:

EX: 1081234567
Nature of number: Unique subscriber number
Numbering plan: Unknown or not applicable
PRI-SI: Number unavailable -
 network provided
Digits: 1234567

- i Charge party station type represents the Originating Line Information (OLI) of the call's originating party. Range: 0...99.

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- j Charge party station type represents the Information Digits (II) of the call's originating party. Range: 0...99.
- k Redirecting party ID represents the dialed number of the last station for which call forwarding was invoked. It is only meaningful if the call has encountered call forwarding (either switched-based, or Signaling Control Point (SCP) initiated via forward_call) before encountering a trigger. This parameter includes the nature of number, numbering plan, presentation restriction, screening indicator, followed by the digits.

Nature of number (first digit)

- 0 — Unknown or not applicable
- 1 — Unique subscriber number
- 2 — Unique national (significant) number
- 3 — Unique international number
- 4 — Non-unique subscriber number
- 5 — Non-unique national number
- 6 — Non-unique international number
- 7 — Test line test code

Numbering plan (second digit)

- 0 — Unknown or not applicable
- 1 — ISDN numbering plan
- 2 — Private

Presentation Restriction Indicator (PRI) - Screening Indicator (SI) (third digit)

- 0 — Presentation allowed - reserved for user provided, not screened or spare
- 3 — Presentation restricted - reserved for user provided, not screened or spare
- 6 — Number unavailable - reserved for user provided, not screened or spare

For example:

EX: 1067081234567
Nature of number: Unique subscriber number
Numbering plan: Unknown or not applicable
PRI-SI: Number unavailable -
reserved for user provided,
not screened or spare
Digits: 7081234567

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l Redirection information reflects the information about the call forwarding which has occurred on the call. It is only meaningful if the call has encountered call forwarding (either switch-based, or SCP initiated via forward_call) before encountering a trigger. The redirection information parameter contains the following fields:

- Original Redirection Reason — Field reflects the reason the first call forwarding action was taken.
- Redirection Reason — Field reflects the reason the most recent call forwarding action was taken.
- Redirection Counter — Keeps count of the number of call forwarding actions which have occurred on the call. It is incremented each time SCP initiated forwarding occurs.

Original redirection reason (first digit)

- 0 — Unknown/ not available
- 1 — User busy
- 2 — No reply
- 3 — Unconditional

Redirection reason (second digit)

- 0 — Unknown/ not available
- 1 — User busy
- 2 — No reply
- 3 — Unconditional

Redirection counter (third and fourth digit). Range: 01-10

m Sets the T1 timer for waiting reply. If not specified the default will be the value normally used for call processing messages.

CD Continue data is used when there is too much data for one line a second test query had to be entered with the remaining data.

LIST Used to dump the message received from the SCP database.

n Original called party ID represents the call's destination address. This parameter remains unchanged, representing the actual original called party number, after it is set by the first forwarding action encountered by the call. It continues to reflect the original destination address of the call, and cannot be overwritten. This parameter includes the nature of number, numbering plan, presentation restrictions, and screening indicator, followed by the digits. Range: 3,6,10-15 digits.

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Nature of number (first digit)

- 0 — Unknown or not applicable
- 1 — Unique subscriber number
- 2 — Unique national (significant) number
- 3 — Unique international number
- 4 — Non-unique subscriber number
- 5 — Non-unique national number
- 6 — Non-unique international number
- 7 — Test line test code

Numbering plan (second digit)

- 0 — Unknown or not applicable
- 1 — ISDN numbering plan
- 2 — Private

Presentation Restriction Indicator (PRI) - Screening Indicator (SI) (third digit)

- 0 — Presentation allowed - reserved for user provided, not screened or spare
- 1 — Presentation allowed - user provided, passed network screening
- 2 — Presentation allowed - network provided
- 3 — Presentation restricted - reserved for user provided, not screened or spare
- 4 — Presentation restricted - user provided, passed network screening
- 5 — Presentation restricted - network provided
- 6 — Number unavailable - reserved for user provided, not screened or spare
- 7 — Number unavailable - user provided, passed network screening
- 8 — Number unavailable - network provided

For example:

EX: 1081234567
Nature of number: Unique subscriber number
Numbering plan: Unknown or not applicable
PRI-SI: Number unavailable -
 network provided
Digits: 1234567

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- o The output from this test query indicates whether the query was successful or not:

ANALYZE ROUTE
CONTINUE
DISCONNECT
SEND TO RESOURCE

- p The following text phrases may appear when the query succeeds:

If variable o is ANALYZE ROUTE then:

CHARGE NUMBER qq qqq qq qq NAT: 0xrr PLAN: 0xs
CALLING PARTY ID qq qqq qq qq NAT: 0xrr PLAN:0xs
CHARGE PARTY STATION TYPE rr
CALLED PARTY ID qq qqq qq qq NAT: 0xrr PLAN: 0xs
PRIMARY CARRIER qq qq
ALTERNATE CARRIER qq qq
SECOND ALTERNATE CARRIER qq qq
REDIRECTING PARTY ID qq qqq qq qq NAT: 0xrr PLAN:0xs
AMA ALTERNATE BILLING NUMBER qq qqq qq qq NAT: 0xrr ...
...PLAN: 0xs
AMA BUSINESS CUSTOMER ID qq qqq qq qq NAT: 0xrr ...
...PLAN: 0xs
AMA LINE NUMBER: qq qqq qq qq NAT: 0xrr PLAN: 0xs
AMA SLP ID qq qq qq qq qq
AMA DIGITS DIALED WC qq qqq qq qq NAT: 0xrr PLAN: 0xs

If variable o is CONTINUE then:

AMA ALTERNATE BILLING NUMBER qq qqq qq qq NAT: 0xrr ...
...PLAN: 0xs
AMA BUSINESS CUSTOMER ID qq qqq qq qq NAT: 0xrr ...
...PLAN: 0xs

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AMA LINE NUMBER: qqq qqq qqqq NAT: 0xrr PLAN: 0xs

AMA SLP ID qqqqqqqqq

AMA DIGITS DIALED WC qqq qqq qqqq NAT: 0xrr PLAN: 0xs

If variable o is DISCONNECT then:

AMA ALTERNATE BILLING NUMBER qqq qqq qqqq NAT: 0xrr ...
...PLAN: 0xs

AMA BUSINESS CUSTOMER ID qqq qqq qqqq NAT: 0xrr ...
...PLAN: 0xs

AMA LINE NUMBER: qqq qqq qqqq NAT: 0xrr PLAN: 0xs

AMA SLP ID qqqqqqqqq

AMA DIGITS DIALED WC qqq qqq qqqq NAT: 0xrr PLAN: 0xs

If variable o is SEND TO RESOURCE then:

RESOURCE TYPE q

STR PARAMETER BLOCK:

ANNOUNCEMENT: 37

MAX DIGITS: t

DISCONNECT FLAG # PRESENT = DISCONNECT LEG
 # ABSENT = DO NOT DISCONNECT LEG

ANSWER INDICATOR # PRESENT = RETURN ANSWER ...
 ...SUPERVISION
 # ABSENT = DO NOT RETURN ANSWER ...
 ...SUPERVISION

AMA ALTERNATE BILLING NUMBER qqq qqq qqqq NAT: 0xrr ...
...PLAN: 0xs

AMA BUSINESS CUSTOMER ID qqq qqq qqqq NAT: 0xrr ...
...PLAN: 0xs

AMA LINE NUMBER: qqq qqq qqqq NAT: 0xrr PLAN: 0xs

AMA SLP ID qqqqqqqqq

AMA DIGITS DIALED WC qqq qqq qqqq NAT: 0xrr PLAN: 0xs

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- q Decimal number (0-9).
- r Nature of number:
For called parameters in hexadecimal:
- 00 — Not applicable
 - 01 — Subscriber number
 - 03 — National (significant) number
 - 04 — International number
 - 71 — Subscriber number, operator requested (0+ call)
 - 72 — National number, operator requested (0+ call)
 - 73 — International number, operator requested (0+ call)
 - 74 — No address present, operator requested (0-,10xxx+0(0), or 00-call), where x is a decimal number (0-9)
 - 75 — No address present, cut-through call to carrier
 - 76 — 950+ call from local exchange carrier public station or hotel/motel line or non-EAEO
 - 77 — Test line test code

For calling parameter in hexadecimal:

- 00 — Unknown or not applicable, default
- 01 — Unique subscriber number
- 03 — Unique national (significant) number
- 04 — Unique international number
- 71 — Non-unique subscriber number
- 73 — Non-unique national number
- 74 — Non-unique international number
- 77 — Test line test code

For charge number parameters in hexadecimal:

- 01 — Ani of the calling party; subscriber number
- 02 — Ani not available or not provided
- 03 — Ani of the calling party; national number
- 05 — Ani of the called party included; subscriber number
- 06 — Ani of the called party not included
- 07 — Ani of the called party included; national number

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- s Numbering plan for calling, called, and charge number parameters:
- 0 — Unknown or not applicable
 - 1 — ISDN numbering plan
 - 5 — Private
- t Collection type indication (MAX DIGITS):
- 0 — Not present
 - 1-32 — Fixed number of digits
 - 253 — Normal number of digits
 - 254 — Any number of digits
- u Collected address information contains the "untranslated" address information collected from the originating trunk. This parameter includes the nature of number along with the numbering plan, followed by the digits.
- Nature of number (first two digits)
- 00 — Not applicable
 - 01 — Subscriber number
 - 02 — National (significant) number
 - 03 — International number
 - 04 — Subscriber number, operator requested (0+ call)
 - 05 — National number, operator requested (0+ call)
 - 06 — International number, operator requested (0+ call)
 - 07 — No address present, operator requested (0-, 10XXX+0(0), or 00- call)
 - 08 — No address present, cut-through call to carrier
 - 09 — 950+ call from local exchange carrier public station or hotel/ motel line or non-EAEO
 - 10 — Test line test code
- Numbering plan (third digit)
- 0 — Unknown or not applicable
 - 1 — ISDN numbering plan
 - 2 — Private

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For example:

EX: 0127081234567
Nature of number: Subscriber number
Numbering plan: Private
Digits: 7081234567

NOTE: The following is a list of parameters:

CALLING PARAMETERS — Calling parameters include: Automatic Message Accounting (AMA) business customer ID, AMA business customer ID, AMA line number, calling party ID, original called party ID, and redirecting party ID.

CALLED PARAMETERS — Called parameters include: access code, AMA digits dialed WC, called party ID, collected address info, collected digits, lata, outpulse number, Traveling Class Mark (TCM), and vertical service code.

CHARGE NUMBER PARAMETERS — Charge number parameters include the AMA alternate billing number and charge number.

v

Exception code:

- 1 — Unrecognized package type in received Transaction Capability Application Part (TCAP) message.
- 2 — Transaction ID not present in package for which a Transaction ID (TID) was expected.
- 3 — Incorrect transaction portion.
- 4 — Badly structured component portion.
- 5 — Unrecognized component type.
- 6 — Unrecognize operation code error.
- 7 — Incorrect component portion error.
- 8 — Badly structured component portion.
- 9 — Missing mandatory parameter detected.
- 10 — Advanced Intelligent Network (AIN) TCAP message returned by Common Network Interface (CNI).
- 11 — AIN TCAP message returned by Direct Link Node (DLN).
- 12 — Unitdata service message received.
- 13 — Received Protocol Abort (PABORT) message with cause indicating unrecognized package type.

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- 14 — Received PABORT message with cause indicating incorrect transaction portion.
- 15 — Received PABORT message indicating unrecognized transaction ID.
- 16 — Received PABORT indicating permanent timeout release.
- 17 — Received PABORT indicating resources unavailable.
- 18 — Received reject message indicating cause general. Unrecognized component.
- 19 — Received reject message indicating cause general. Incorrect component portion.
- 20 — Received reject message indicating cause general. Badly structured component portion.
- 21 — Received reject message indicating cause invoke. Duplicate invoke ID.
- 22 — Received reject message indicating cause invoke. Unrecognized operation code.
- 23 — Received reject message indicating cause invoke. Incorrect parameter.
- 24 — Received reject message indicating cause invoke. Unrecognized correlation ID.
- 25 — Received reject message indicating cause return result. Unrecognized correlation ID.
- 26 — Received reject message indicating cause return result. Unexpected return result.
- 27 — Received reject message indicating cause return result. Incorrect parameter.
- 28 — Received reject message indicating return error. Unrecognized correlation ID.
- 29 — Received reject message indicating return error. Unexpected return error.
- 30 — Received reject message indicating return error. Unrecognized error code.
- 31 — Received reject message indicating return error. Unexpected error.
- 32 — Received reject message indicating return error. Incorrect parameter.
- 33 — Received return result message.
- 34 — Unexpected caller interaction message sequence error.

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- 35 — Unexpected connection control message sequence error.
- 36 — Invalid opcode family detected.
- 37 — Invalid opcode specifier for caller interaction family.
- 38 — Invalid opcode specifier for connection control family.
- 39 — Invalid opcode specifier for information request family.
- 40 — Invalid opcode specifier for network management family.
- 41 — Invalid opcode specifier for send notification family.
- 42 — Invalid opcode specifier for abnormal family.
- 43 — Invalid request for connection control operation after call finaled.
- 44 — Connection control operation received in an invalid package type.
- 45 — Connection control. Continue operation received for call which has not received AIN count.
- 46 — Invalid redirection digits received in connection control operation.
- 47 — Exceeded redirection count of valid redirections.
- 48 — Invalid charge number parameter received in connection control operation.
- 49 — Invalid Calling Party Number (CPN) digits parameter received in connection control operation.
- 50 — Invalid called digits parameter received in connection control operation.
- 51 — Invalid carrier digits parameter received in connection control operation.
- 52 — Invalid cut-through to carrier request in connection control operation.
- 53 — Connection control operation subroutine called but no connection control command found.
- 54 — Invalid request for termination notification data after call has been finaled.
- 55 — Invalid request for termination notification information.
- 56 — Invalid request for caller interaction operation after call has been finaled.

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- 57 — Invalid resource type received in response package.
- 58 — Disconnect flag not received in caller interaction in response package.
- 59 — Announcement type received in response package was invalid.
- 60 — Announcement received in response package not provisioned.
- 61 — No circuit condition detected when circuit hunt attempted for Caller Interaction (CI) in response package.
- 62 — Invalid resource type received in conversation package.
- 63 — Invalid disconnect flag detected for play collect in conversation package.
- 64 — Invalid send to resource type detected in conversation package.
- 65 — Invalid value of MAX DIGITS in caller interaction operation.
- 66 — No announcement received in conversation package for caller interaction command.
- 67 — Announcement received not provisioned.
- 68 — Disconnect flag received in play resource type in conversation package.
- 69 — No circuit condition detected when circuit hunt attempted for CI in conversation package.
- 70 — Monitor for change operation received in invalid package type.
- 71 — Update request received in invalid package type.
- 72 — Caller abandon condition occurred.
- 73 — Timeout while waiting for response from AIN SCP.
- 74 — Invalid transaction ID detected.
- 75 — Invalid AIN state condition detected.
- 76 — Mandatory parameter not received.
- 77 — Parameter received out of sequence.
- 78 — Invalid action detected in parse table.
- 79 — Default error in operation of abnormal. Report error.

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- 80 — Error of erroneous data in operation of abnormal. Report error.
- 81 — Error of missing conditional parameter in operation of abnormal. Report error.
- 82 — Error of response message timer expired in operation of abnormal. Report error.
- 83 — Error of unexpected communication in operation of abnormal. Report error.
- 84 — Error of unexpected message in operation of abnormal. Report error.
- 85 — Error of unexpected message sequence in operation of abnormal. Report error.
- 86 — Error of unexpected parameter sequence in operation of abnormal. Report error.
- 87 — Unrecognized problem type detected in reject component.
- 88 — Unrecognized problem code in type general.
- 89 — Unrecognized problem code in type invoke.
- 90 — Unrecognized problem code in type return result.
- 91 — Unrecognized problem code in type transaction portion.
- 92 — Problem code in reject indicates unrecognized package type.
- 93 — Problem code in reject indicates incorrect transaction portion.
- 94 — Problem code in reject indicates badly structured transaction portion.
- 95 — Problem code in reject indicates unrecognized transaction ID.
- 96 — Unexpected message application error detected.
- 97 — Default error in return error.
- 98 — Error of erroneous data in return error.
- 99 — Error of missing conditional parameter in return error.
- 100 — Error of response message timer expired in return error.
- 101 — Error of unexpected communication in return error.

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- 102 — Error of unexpected message in return error.
- 103 — Error of unexpected message sequence in return error.
- 104 — Error of unexpected parameter sequence in return error.
- 105 — Return result component received.
- 106 — Too many digits received in digits parameter.
- 107 — Invalid number of digits detected in charge number.
- 108 — Invalid number of digits detected in calling party ID parameter.
- 109 — Invalid nature detected in called number parameter.
- 110 — Invalid digit count detected in received national number.
- 111 — Invalid called digit count.
- 112 — Invalid AMA digits detected.
- 113 — Request for cancel after call has been final handled.
- 114 — Request for cancel operation received in invalid package type.
- 115 — Request to cancel received while playing final announcement.
- 116 — Request to cancel received in an invalid state.
- 117 — While connected to Service Circuit System (SCS) frame the SCS reported an exception.
- 118 — No disconnect flag received in play resource type in conversation package.
- 119 — Announcement type received in play collect resource type was invalid.
- 120 — Network management message received in an invalid package type.
- 121 — Request for caller interaction received in an invalid package type.
- 122 — While attempting to send a resource clear message to the database encountered a send message failure.
- 123 — Connection control message received out of sequence.
- 124 — Caller interaction message received out of sequence.
- 125 — Call failure while waiting for SCP response.

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- 126 — Call failure while playing non-interruptible announcement.
- 127 — Call failure while playing final announcement.
- 128 — Call failure while playing interruptible announcement.
- 129 — Call failure while playing announcement. Invalid substate.
- 130 — Call failure while waiting for outcomplete event.
- 131 — Nature indicates an operator type. Invalid routing indicated.
- 132 — While trying to play and collect. No circuit condition detected.
- 133 — Received reject message indicating cause invoke. Missing mandatory parameter.
- 134 — Received reject message indicating cause return result. Missing mandatory_parameter.
- 135 — Received reject message indicating return error. Missing mandatory parameter.

4. ACTION TO BE TAKEN

If the test query is successful, no action is required if the expected operations were received as a result of the query to the database.

If the test query is not successful, the failure results indicate the trouble.

5. REFERENCES

PIDENT
AINTMESH
AINTTEST
IOCPIMC4
TMAD0005

Input Message
TEST : TCAPAIN

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ID TEST:TCAPDSD
WORK CENTER.. MAC, MOC, NMOC, TOC
GENERIC 4E20 Rel. 2 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] TEST:TCAPDSD:QRYTYPE a:DIG b,ANI c [,APN][,AUTHCODE d]...
[,RATE e][,SGD f][,LIST]
g
- [2] TEST:TCAPDSD:QRYTYPE a:DIG b [,ANI c|,ANI c, APN][,RATE e] ...
[,LIST]
g
- [3] TEST:TCAPDSD;QRYTYPE a:{ANI c |ANI c, APN} [,SD]
g
- [4] TEST:TCAPDSD;QRYTYPE 5:DIG b,ANI c [,RATE e] ...
[,IIDIGITS h|,OLI i|,CID j|,OLI i,CID j]
k

2. REASON FOR OUTPUT

This output message is in response to the TEST:TCAPDSD input message. Format 1-3 requests either a dialed number-based query or an automatic number identification (ANI)-based query. Format [4] requests a network access interruption (NAI) test query.

Variable field g explains the results of the test query (whether successful or not), and gives information to support the results.

3. VARIABLE FIELD DEFINITIONS

- a The type of query sent:
- 1 — ANI-based query
 - 2 — Non-call associated temporary signaling connection (NCAT) ANI-based query
 - 3 — Dialed number-based query
 - 4 — NCAT dialed number-based query
 - 5 — NAI query
 - 6 — Universal global title translation (UGTT) query
 - 7 — NCAT UGTT query
 - 9 — EasyReach query
- b Customer specific digits that are required for the particular type of direct services dialing (DSD) call. These digits for the ANI-based queries can be either 7 digits or 10 digits. For the dialed number-based query, 10 digits would be specified.

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- c A required parameter for the ANI-based queries. This should be the customer's 10-digit automatic number identification.
- APN If this keyword was used in the input message to define the ANI parameter, then the ANI must be an action point numbering plan (APN) ANI.
- If this keyword was not used in the input message to define the ANI parameter, then the ANI must be a North American numbering plan (NANP) ANI.
- d A customer's authorization code number. An optional parameter with a maximum of 12 digits. For EasyReach query type this is the echo data that should be sent in the requery to the quantum routing data system (QRDS). This can be a maximum of 10 bytes (20 digits).
- e An optional parameter used to specify a data rate for a DSD call. The possible values are:
- 0 = Non data (voice call)
 - 1 = 1.536Mbps clear
 - 2 = 1.536Mbps restricted
 - 3 = 384Kbps clear
 - 4 = 384Kbps restricted
 - 5 = 64Kbps clear
 - 6 = 56Kbps
 - 7 = 64Kbps restricted
- f An optional parameter for ANI-based queries. It is the station group designator number. The value specified as input depends on the individual customer.
- LIST If this keyword was used in the input message, the dump of the message received from the network control point (NCP) database is printed.
- g The output from this test query will indicate whether the query was successful or not. (See the example.) If the query is successful, the output will show what operations were requested by the customer record at the NCP database along with the routing digits and domain value. If the query is not successful, the output will indicate the final handling code and reason for failure.

EXAMPLE: SUCCESS ...

The following text phrases may appear when the query succeeds:

ANI — ANI digits from NCP.

CUSTOMIZED ANNOUNCEMENT RECEIVED — One or more customized announcements have been received.

DOMAIN — The routing domain associated with the digits.

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FAI DIGIT — The digit returned from the NCP to determine the foreign administration identification for the carrier.

RATE — Data rate for this call.

RECEIVED ACG

RECEIVED CALL TAG

RECEIVED CHECK APPLICATION STATUS

RECEIVED REFRESH

RECEIVED REQUEST TO CANCEL ANNOUNCEMENT

RECEIVED REQUEST TO PERFORM AN ASSIST

RECEIVED REQUEST TO PERFORM NCP TRANSFER

RECEIVED REQUEST TO QUEUE CALL

RECEIVED SEND TERMINATION

ROUTING DIGITS — The digits returned from the NCP to route this call.

SGD — Semi global data (SGD) digit for this call.

STANDARD ANNOUNCEMENT RECEIVED

SUPPLEMENTAL ROUTING INFO — The supplemental routing information specifies the service.

VALID CUSTOMER ID: 888-000-1234 — UGTT query.

PRIMARY SPC: 254 31 6 3

PRIMARY SSN: 252

SECONDARY SPC: 254 31 6 3

SECONDARY SSN: 252

The following text phrases may appear when the query fails.

EXCEPTION CODE — A number from 0-127 that defines the error.

FAILURE

FINAL HANDLING CODE — FHCODE.

PROTOCOL ERROR

RECEIVED P-ABORT

RECEIVED U-ABORT

TIMEOUT

SD

Only valid with a UGTT query. If present then the secondary UGTT database will be queried. Default is to query the primary database.

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h	Information digits, also called the originating station type. Identifies characteristics of the calling station (0-99).
i	Originating line identity, also called the originating station type (0-99).
j	Carrier selection information: 1 — Presubscribed, no input. 2 — Presubscribed, input. 3 — Presubscribed, input or not. 4 — Not presubscribed, input.
k	The output from the test query when successful: ALLOW CALL COMPLETED-SUCCESS ELAPSED TIME ## SECONDS

4. ACTION TO BE TAKEN

If the test query is successful, no action is required if the expected operations were received as a result of the query to the database.

If the test query is not successful, the failure results indicate the trouble.

5. REFERENCES

PIDENTs
DSDCMESS
TCAPTEST

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ID TEST:TRK
WORK CENTER.. TOC
GENERIC 4E23 Rel. 4 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

TEST:TRK, {OTAN a|TAN b|CIN c|TSN d|CCISTERM e, BAND f};g [h],i

2. REASON FOR OUTPUT

To reply to a TEST:TRK input message request for a 4ESSTM switch controlled test on a trunk.

3. VARIABLE FIELD DEFINITIONS

- a The octal Trunk Appearance Number (TAN).
- b TSI-SP-PORT-CHANNEL TAN of the trunk:
- TSI — A two-digit decimal number indicating the Time Slot Interchange (TSI) member number (00-63).
- SP — A one-digit decimal number indicating Signaling Processor (SP) of TSI (0-1).
- PORT — A one-digit decimal number indicating port of TSI (0-6).
- CHANNEL — A three-digit decimal number indicating channel (0-127).
- c The traffic number and Circuit Identification Number (CIN) of the trunk.
- d SP-ROW-POINT Trunk Scanner Number (TSN) of the trunk:
- SP — A two-digit decimal indicating the SP member number (00-31).
- ROW — A three-digit decimal number indicating the row in the SP (000-255).
- POINT — A two-digit decimal number indicating the point in the row (00-15).
- e A three-digit decimal number indicating a CCIS6 terminal (000 - 255).
- f A three-digit decimal number indicating a CCIS6 band (000 - 511).
- g Type of test executed:
- ATMB — ATME B test for common channel signaling system number 5 CCITT5 and CCITT6 trunks.
- ATMC — ATME C test for CCITT5 trunks.
- CCK — Continuity check test.

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- CCK - INH — No loopback CCK test.
- CTX2 — Centrex 2 test.
- CTX3 — Centrex 3 test.
- OPR — Prestored operational test.
- SVC — Service circuit test.
- SXS — Step-by-step test.
- SYN — Synchronous test.
- T103 — Code 103.
- TIC — Translation integrity check.
- Integrated Services Digital Network (ISDN) User Part (ISUP) circuit validation check.
- TIC CCS7CONV — Translation integrity check during CCS6 to ISUP conversion.
- TQU — Demand trunk query.
- ISUP circuit query check.
- TURNUPC — Turn-up for control office trunk.
- TURNUPN — Turn-up for noncontrol office trunks.
- h (blank) — For SVC tests, or if the test passed.

OR

- Trouble number, in the form xxyy, indicating one of the following: For TURNUPC or TURNUPN tests, the number of trunks successfully turned up.
- For all other test types and conditions, the phase of the test in which the failure occurred and the type of failure if a failing operational test. See Heading 3.1 for a list of these numbers and phase diagrams.
- i Additional information regarding the test, in text format. In the case of a failed SVC test, this variable will display the failing row data from that test. Headings 3.2 through 3.5 describe the various formats in which this variable will be displayed and provide examples.

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3.1 Trouble Number: Phase and Failure Data - Variable Field h

For failing operational tests, variable h has the format xyy where:

- x — The phase number. Tables 2, 3, and 4 list the phase numbers and their descriptions for:
 - ATME C Tests (CCITT5 only)
 - ATME B Tests (CCITT5)
 - ATME B Tests (CCITT6)
- y — The number indicating the type of failure. Table 1 is a list of the failure numbers and their descriptions.

3.2 Disposition of Message - Variable Field i

Variable field i contains text regarding the disposition or outcome of the test:

ATP — The trunk test passed.

CCIS SIGNALING ATTEMPT FAILURE — Trunk-query signal/circuit query could not be sent to the far end.

CORRECTIVE ACTION(S) REQUESTED — This message results when a demand for trunk query found that the near-end and far-end states of a trunk were not in sync. The possible near-end or far-end trunk-query states are:

ACT-ICT	Active, incoming.
ACT-IDLE	Active, idle.
ACT-OGT	Active, outgoing.
BLK-ICT	Blocked, incoming.
BLK-IDLE	Blocked, idle.
BLK-OGT	Blocked, outgoing.
LK0/DSA-ICT	Locked out or disabled, incoming.
LK0/DSA-IDLE	Locked out or disabled, idle.
LK0/DSA-OGT	Locked out or disabled, outgoing.
LK0/DSA-BLK-ICT	Locked out or disabled, blocked, incoming.
LK0/DSA-BLK-IDLE	Locked out or disabled, blocked, idle.
LK0/DSA-BLK-OGT	Locked out or disabled, blocked, outgoing.
TRANSIENT	Transient.
UNEQ	Unequipped.

FAILED TURNUPC — A controlling office turn up non-loopback Voice Path Assurance (VPA) test that has failed.

PRE-TEST LOOPBACK IN EFFECT, FHCODE = xxx
where xxx is the final handling code.

FAL — The operational trunk test failed. If the test failed because of an

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outputting failure then the following is output:

OUTPULSING FAIL, FHCODE = xxx

where xxx is the final handling code which describes the error. See FH4FHIDIDEN item encodings on COMPOOL.

A no loopback CCK test failed due to the presence of a pre-test loopback at the far-end.

PRE-TEST LOOPBACK IN EFFECT, FHCODE = xxx

where xxx is the final handling code.

INVALID NE TURN-UP STATE — Trunk for which turn-up was requested is not in near-end state CAD.DSA<MAN> or CAD.LKO<MAN>.

NOT STARTED, CAD.DSA TRUNK INVALID — Trunk test on a CAD.DSA trunk is not accepted because trunk may be on a nonoperational unit. Use CAD.LKO state for testing.

NOT STARTED, CAMP-ON FAILURE — The camp-on list is full for a trunk which needs to be camped-on. Repeat later.

NOT STARTED, CIRCUIT BUSY This printout occurs if Skip Busy (SKPBY) and Print No Test (PNT) or Print All (PALL) where specified on input and a busy trunk was encountered.

NOT STARTED, NO TEST CKT AVAILABLE — The test could not be run because all of the test circuits required for this type of test are maintenance busy:

TEST	TEST CKT
OPR	CLN*TND*
SVC-CCISXCVR	SVC*XCVT
SVC-MFR	SVC*MFRT
SVC-MFX	SVC*MFXT

NOT STARTED, TEST TIMEOUT — The trunk has been in the test queue for at least 8 minutes without being tested. The test request is aborted. The trunk is probably busy.

REJECTED INVALID TEST FOR 2-WIRE TRUNK — The CCK-INH test is not allowed on 2-wire trunks.

REJECTED INVALID TEST FOR CKT TYPE — The test requested cannot be run on the specified trunk.

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REJECTED NO TEST AVAILABLE — There is no automatic test available for the specified trunk.

REJECTED UNA — Trunk is unassigned.

RETRY LATER — TIC test should be retried because no response after 6 seconds for CCIS6 circuit or 10 seconds for ISUP circuit, following previous test; a test is already in progress on the signaling link; or signaling link is not operational.

3.3 Group Trunk Test Completed Messages - Variable Field i

3.3.1 Variable i Description

When a group trunk test request completes, variable i identifies:

- Trunk or group type that was input on the test trunk request message
- Trunk Subgroup (TSG) or Status (STAT) options that were requested
- Information about why the group test finished.

The user should be aware that TOPT0000 runs the optional tests on the trunks in a TSG if no STAT option is input. TOPT0000 tests these trunks according to which trunks are idle at the time a test is ready to be run, resulting in a somewhat random order of testing. TMAD0006 runs all other group tests. It tests the trunks in the group sequentially, waiting for each trunk to become idle if necessary.

3.3.2 Variable i - Test Finished Data

i	ATC—	All tests complete. Output when a TSG test run by the TOPT0000 program has completed.
	ABDN—	TSG test has been abandoned because of three consecutive tests failing. This only occurs for TOPT0000 run tests; TMAD0006 will continue to run tests regardless of test results.
	COMPLETED—	Processing of test request for all trunks in the group completed normally. Group test run by TMAD0006.
	STOPPED DISK READ FAILURE—	A failure return from a disk read has occurred.
	STOPPED DISK READ TIMEOUT—	A disk read request was submitted, but no return was made.
	STOPPED FUNCTION UNAVAILABLE—	The options requested are currently not available.
	STOPPED MAN—	Group test request has been stopped because of a manual request.
	STOPPED TEST COMPLETION TIMEOUT—	A test of a trunk in the group has exceeded 10 minutes. This is an invalid condition; the group test is terminated.

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STOPPED TEST Q REQUEST FAILED— A test request for a single trunk in the group has repeatedly encountered a full test queue. The program has tried to load the Q request every 5 seconds for three tries, then has given up.

3.4 SVC - Service Circuit Tests - Variable Field i

When SVC tests are requested, variable i may present the following test data in addition to All Tests Passed (ATP) and Some Tests Failed (STF) specified previously:

CATP	TIMING INACCURACY SYSTEM CLOCK OUT-OF-SERVICE TONE DETECTOR NOT AVAILABLE
EARLY TERMINATION	PULSE POINT OUT-OF-SERVICE (OOS) SYSTEM CLOCK OOS FAILED CKT HUNT TONE OR ANN OOS
STOPPED	NETWORK CONN FAILED

Conditional All Tests Passed (CATP) cases imply no actual failing results were obtained but the circuit tested may not meet requirements (i.e., possibility of marginal fault exists).

EARLY TERMINATION implies that some tests were performed. If this test is preceded by Some Tests Failed (STF), it means that one (or more) test(s) ran and failed. If STF does not appear, it means that all tests performed have passed. Whenever STF appears, the failure data is printed:

RESULT NUMBER FAILING RESULT

x	y
.	.
.	.
.	.

x	—	The result number.
y	—	The RAW result data. Use Practice 234-180-246 for raw result interpretation.

STOPPED tests are those which did not proceed far enough to obtain any results.

In EARLY TERMINATION or STOPPED cases, a special result number (0) is used to indicate that the failing result data is the octal (absolute) address of the location in the PIDENT of the procedure whose failure prohibited test continuation.

SEE PROPRIETARY NOTICE ON COVER PAGE

The resulting number corresponds to a symbol in the PIDENT data table used to control the test (e.g., if result number is 17, the symbol RESULT_17 is defined in the PIDENT where additional documentation is provided). See Table 5.

3.5 Examples - Variable Field i

3.5.1 Continuity Check (CCK) Test output

- A. Failed to output test call:

TEST:TRK,CIN 4 INDH IL 02 DEL LAB;CCK, OUTPUTSING FAIL,
FHCODE=166.

- B. Continuity check test failed:

TEST:TRK,CIN 7 INDH IL 02 DEL LAB;CCK ,FAL

- C. Continuity check test passed:

TEST:TRK,CIN 9 INDH IL 02 DEL LAB;CCK ,ATP

3.5.2 CCIS6 Translation Integrity Check (TIC) or ISUP Circuit Validation Check Output

- A. CCIS6 CIN mismatch

TEST:TRK,CIN 800 BLIS IL TA HRV LAB; TIC FAIL TRANSLATION
FAILURE IN S0 ON TERMINAL 0 BANK 500 CKT 0 CIN 0800 HRVY
IL TB BLI INDH IL DE LAB

- B. CCS7 CIN mismatch

TEST:TRK,CIN 800 BLIS IL TA HRV LAB; TIC XLATE FAIL AT
FAR END CIN a

- a The incorrect CIN value received from far end.

- C. CCIS6 Signaling Transfer Point (STP) failure

TEST:TRK,CIN 800 BLIS IL TA HRV LAB; TIC FAIL TRANSLATION
FAILURE C-LINK PROBLEM IN STP ON TERMINAL 0 BANK 500 CKT
0 PBC PROBLEM CLLI IPLS IN DT STP

NOTE: C-link and Peripheral Bus Computer (PBC) problem refers to
unique situations that can occur in a 4A office.

- D. CCIS6 Switching office failure

TEST:TRK,CIN 800 BLIS IL TA HRV LAB; TIC FAIL TRANSLATION
FAILURE IN SC ON TERMINAL 0 BANK 500 CKT 0 CLLI INDH IL
DE LAB

SEE PROPRIETARY NOTICE ON COVER PAGE

- E. CCS7 circuit group characteristics indicator mismatch.

TEST:TRK,CIN 800BLISILTAHRVLAB; TIC FAIL IN CIRCUIT GROUP
CHARACTERISTICS INDICATOR

NE GLARE: a
FE GLARE: a
NE ALARM: b
FE ALARM: b

- | | |
|---|---------------------------|
| a | ALL CIC CONTROL |
| | EVEN CIC CONTROL |
| | NONE CIC CONTROL |
| | ODD CIC CONTROL |
| b | HARDWARE CARRIER HANDLING |
| | SOFTWARE CARRIER HANDLING |
| | UNKNOWN |

- F. CCIS6 message to CMS

TEST:TRK,CTAN 23272; TAG171338...;TIC FAIL,
a b TERM 0000 BAND 6 CT1 c

- G. CCS7 message to CMS

TEST:TRK,CTAN 23272; TAG 171338...;TIC FAIL,
a b c

- | | |
|---|--|
| a | LINK PROBLEM —(CCIS6 only) The STP receiving the
TIC request cannot forward the signal because either
a signaling link is down or the STP's CNI Ring is
down or overloaded. |
| | PBC PROBLEM —(CCIS6 only) The STP or 4A office
receiving the request has peripheral bus computer
problems. |
| | REPEAT LATER —TMR time out occurred while waiting
for reply from far end. The test has been aborted. |
| | XLATE FAIL —Translation data for the trunk are
incorrect or unassigned. |
| b | S0 —(CCIS6 only) The failure occurred in a switching
office. |
| | STP —(CCIS6 only) The failure occurred in an STP office. |

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- C CIN followed by the identity of the trunk which has translation problems in this office.
- CLLI followed by the identity of the failure office. Some offices with TOLL CCIS features will not return a CLLI type code but will return: CODE=NPANxx

H. CCS7 circuit validation test message returned

TEST:TRK, CIN 800 BLIS IL TA HRV LAB; TIC RETURN
REASON FOR RETURN: a

- a The reason the message was returned.

3.5.3 Demand CCIS6 Trunk Query (TQU) and ISUP Circuit Query Output

A. Near-end and far-end states of trunk found not to be in sync:

TEST:TRK,CIN 6 PARS IL BL MAI LAB;TQU ,FAILED NE ACT-IDLE
FE LK0/DSA-IDLE CORRECTIVE ACTIONS(S) REQUESTED

B. Two ends of trunk are in sync:

TEST:TRK,CIN 7 PARS IL BL MAI LAB;TQU ,ATP NE ACT-OGT FE ACT-ICT

3.5.4 TURNUPC Request Output

A. Trunk not in valid near-end state to be turned up:

TEST:TRK,CIN 2 PARS IL BL MAI LAB;TURNUPC 0, FAILED
INVALID NE TURN-UP STATE

B. Trunk query test, which is part of the turn-up sequence, could not send the TQU signal:

TEST:TRK,CIN 3 PARS IL BL MAI LAB;TQU ,FAILED TURNUPC
CCIS SIGNALING ATTEMPT FAILURE

C. Trunk query test; which is part of the turn-up sequence, found far-end trunk not ready for turn-up:

TEST:TRK,CIN 5 PARS IL BL MAI LAB;TQU ,FAILED TURNUPC NE
LK0/DSA-BLK-IDLE FE LK0/DSA-BLK-IDLE

D. Continuity check test, which is part of the turn-up sequence, failed:

TEST:TRK,CIN 8 PARS IL BL MAI LAB;CCK ,FAL

E. Group request successfully turned up 50 trunks in trunk subgroup:

TEST:TRK,CIN 1 PARS IL BL MAI LAB;TURNUPC 50,TSG
COMPLETED

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

This output message is informational. Any action taken must be based on the specific information printed and the technical impact of that data.

5. REFERENCES

PIDENTs
ATMECNLT
ATMEINT
ATMEINTX
ATMERESA
IOCPOM4
TMAD0002
TMAD0003
TMAD0005
TMAD0006
TMADCIST
TOPT0000
SVCTCSTD
SVCTCTRL
SVCTMFRT
SVCTMFXT
SVCTTASK
SVCTXCUT

Practice 234-180-242, *Service Circuit Test Program (SVCT) - Description*
Practice 234-180-246, *Trunk Testing Programs - Description*

Input Messages
OP: TRKSTAT
SET: TRKSTAT
STOP: TEST - TRK
TEST: TRK

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Table 1
Failure Numbers

Failure Number	Description
1-2	Outpulsing failure - check the Final Handling Code (FHCODE).
3	All tone detectors busy - repeat test later.
4	Failed to get a network path between tone detector and trunk under test.
5	Synchronous (SYNC), CENT, Step by Step (SXS) tests - received an E-lead change before detecting audible ring.
6	Centrex transfer test failed.
7	Pulse received was too short.
8	Pulse received was too long.
9	Disk failure - repeat test later.
10-11	Time-out waiting for next phase action.
12	TD unexpected reply.
13	Invalid E-lead state change.
14	Reorder tone detected.
15	Busy tone detected.
16	Trunk Scanner Number (TSN) translates to invalid Trunk Subgroup Number (TSGN); possible translation error.
17	Disk translation data does not yield a type of test that is an operational test; possible translation error.
18	SYNC, CENT - trip ringing failure.
19	Failed to receive the first synchronizing pulse.
20	Glare - repeat test later.
21-23	Outpulse failures.
24	Recorded announcement or noise detected.
25	Disk duplex failure.
26	SYNC, CENT - pretrip test failure.
27	Unexpected F1 on CCITT5.
28	Unexpected F1F2 on CCITT5.
29	Unexpected F2 (clear back or busy flash) on CCITT5.
30	Unexpected CCITT6 message.
31	Failed to send CCITT5 message.

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Table 2
ATME C Test - CCITT5 Only

Phase Number	Description
5	Wait for busy flash (40 seconds).
6	Wait for end of busy flash (6 seconds).
13	Delay before sending Clear Forward (CLF) (300 ms).
14	Waiting start of Release Guard (RLG) (10 seconds).
15	Waiting end of RLG (6 seconds).

Table 3
ATME B Test - CCITT5

Phase Number	Description
5	Wait for answer (40 seconds).
6	Wait for end of answer (6 seconds).
7	Delay before sending FQT (500 ms).
8	Sending FQT (840 ms).
9	Wait start of clear back (10 seconds).
10	Wait end of clear back (6 seconds).
11	Wait for start of reanswer (10 seconds).
12	Wait end of reanswer (6 seconds).
13	Delay before sending CLF (300 ms).
14	Wait start of RLG (10 seconds).
15	Wait end of RLG (6 seconds).

Table 4
ATME B TEST - CCITT6

Phase Number	Description
5	Wait for answer (40 seconds).
7	Delay before sending FQI (500 ms).
9	Wait clear back (10 seconds).
11	Wait reanswer (10 seconds).
13	Wait clear back if reanswer received out of sequence
	(6 seconds).

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Table 5 is provided as an aid in locating PIDENTs in the data table:

Table 5
Service Circuit (CKT) Tested / PIDENTs

Service CKT Tested	PIDENT
Multi-Frequency (MF) receiver	SVCTMFRT
MF transmitter	SVCTMFXT
Tone detector	SVCTCSTD
CCIS continuity check transceiver	SVCTXCVT
Transceiver test circuit	SVCTXCVT

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SEE PROPRIETARY NOTICE ON COVER PAGE

ID TRC:TRK
WORK CENTER.. TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

TRC:TRK, a; b: c, d, e, f

2. REASON FOR OUTPUT

To respond to a TRC:TRK input message request for a trunk trace, trace and hold network connection, or release of a trunk on hold. The action taken (trace, hold, release) is given. The identity of both circuits in the connection is also given if the input request is a trace, or trace and hold.

3. VARIABLE FIELD DEFINITIONS

- a Identity of the original trunk requested to be traced, held, or released:
- CIN — With the circuit identification number (CIN).
 - OTAN — With the 6-digit octal trunk appearance number (TAN).
 - TAN — TSI-SP-PORT-CHANNEL TAN of trunk to be connected.
 - TSI — A 2-digit decimal number indicating the time slot interchange (TSI) member number, range 00-63.
 - SP — A 1-digit decimal number indicating signaling processor (SP) of TSI, range 0-1.
 - PORT — A 1-digit decimal number indicating port of TSI, range 0-6.
 - CHANNEL — A 3-digit decimal number indicating channel, range 0-127.
 - TSN — SP-ROW-POINT trunk scanner number (TSN) of trunk to be connected.
 - SP — A 2-digit decimal number indicating the SP member number, range 00-31.
 - ROW — A 3-digit decimal number indicating the row in the SP, range 000-255.
 - POINT — A 2-digit decimal number indicating the point in the row, range 00-15.

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- b Action requested to be taken:
- HLD — Trace trunk and hold connection.
 - RLS — Release trunk from hold.
 - TRC — Trace trunk.
- c Identity of the connected trunk (optional output only on trace or trace and hold):
- CIN — With the circuit identification number of connected trunk.
 - OTAN — Of connected trunk with the 6-digit octal TAN.
 - TAN — TSI-SP-PORT-CHANNEL TAN of connected trunk.
 - TSI — A 2-digit decimal number indicating the TSI member number, range 00-63.
 - SP — A 1-digit decimal number indicating SP of TSI, range 0-1.
 - PORT — A 1-digit decimal number indicating port of TSI, range 0-6.
 - CHANNEL — A 3-digit decimal number indicating channel, range 0-127.
 - TSN — SP-ROW-POINT TSN of connected trunk.
 - SP — A 2-digit decimal number indicating the SP member number, range 00-31.
 - ROW — A 3-digit decimal number indicating the row in the SP, range 000-255.
 - POINT — A 2-digit decimal number indicating the point in the row, range 00-15.
- d Disposition of the request:
- ATP — Original and connected trunks are connected via the AT&T trigger platform (ATP) (see variables e and f).
 - BSYHLD — Trunk already on hold.
 - CIRCUITS ON HOLD — Trunks successfully placed on hold.
 - CIRCUIT RELEASED — Trunk released from hold.
 - CIRCUITS TRACED — Trunks traced successfully, connected trunk identified.
 - HLDFUL — Hold denied, limit reached, and hold table full.
 - INVHLD — Trunk state code not valid for hold (i.e., network connection does not exist, or ATP connection).
 - STATE — Trunk is not in a state which can be traced. Therefore, an abbreviated text describing trunk status and the raw TR code data is returned (see variables e and f).

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- e Text describing the trunk register (TR) state code:
- 2WOPR — 2-way operator trunk in busy to operator state.
 - AUDLIST — Audit list.
 - AUDST — Audit state, trunk would not fit on audit list.
 - CTRA — Connected to recorded announcement or tone.
 - HWT — High and wet timing.
 - HWL — High and wet.
 - *ICT* — Incoming trunk, trunk is associated with the incoming side of a call.
 - IDLE — Idle.
 - *MISC* — Miscellaneous trunk state.
 - *OGT* — Outgoing trunk, trunk is associated with the outgoing side of a call.
 - 00SI — Trunk is in an out-of-service ignore state (MTC.DSA or CAD.DSA).
 - *TEST* — Trunk is involved in some kind of a test.
 - UNA — Unassigned trunk.
 - *UNDEF* — Undefined, trunk is in an illegal state.
- f The raw TR state code value in decimal. See TR4CODE item assignments on COMPOOL for definitions of decimal values.

4. ACTION TO BE TAKEN

Only one trunk in a network connection which has been placed on hold may be released from hold. Therefore, to release both trunks from a hold state, a TRC:TRK;RLS input message must be issued for each trunk in the connection placed on hold.

5. REFERENCES

PIDENT
TACCADMN

Input Message
TRC:TRK

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1. FORMAT

2. REASON FOR OUTPUT

3. VARIABLE FIELD DEFINITIONS

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- 62 — Map errors detected with non-allocating tape.
- 63 — Load mode invalid for given tape type.
- 64 — Invalid HS HDTBL index detected during load.
- 70 — Tape unit secure rejected.
- 71 — Tape unit not in proper mode.
- 72 — Read header request rejected.
- 73 — Read data record request rejected.
- 74 — Tape operation failed.
- 75 — Unexpected end-of-tape-passed detected.
- 76 — Open file request rejected.
- 78 — Advance to End Of File (EOF) request rejected.
- 79 — Request for additional Maintenance Control Program (MACP) memory failed.
- 81 — Request for status on the MACP memory request failed.
- 83 — Failed to find File System (FS) backup address for Hash table.
- 84 — Hash update failure.
- 85 — Timed out while waiting for additional MACP memory.
- 86 — Failed to covert core offset to MCODE and MCODE offset.
- 87 — Failed to rebuild XS2FS map.
- 88 — SEGPTRS error with core back entry/entries, System Audit Of Stores Using Tape (SAST) cannot correct this error - seek technical assistance.
- 91 — Disk or tape operation failure.
- 92 — Maintenance interrupt, System Audit Of Stores Using Tape (SAST) not active.
- 93 — MACP holding time exceeded.
- 94 — Paging supervisor aborted.
- 95 — Open General Buffer Table (GBT) failed.
- 96 — Maintenance interrupt, SAST active.
- 97 — Manual request.

4. ACTION TO BE TAKEN

If an error condition exists, correct the error and repeat the process.

If the message is Awaiting Instructions, enter UPD:GEN;UCL! to proceed and allow automatic 1B file access duplex failure.

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5. REFERENCES

PIDENTs
SASR
SAST

Input Message
UPD: GEN

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If the disposition of the request is COMPLETED:

TO NORM FILE — Commit completed to NORM FILE.

TO UPD FILE — Commit completed to UPD FILE.

If the disposition of the request is NOT STARTED:

SELECT NORMAL KEY — Commit awaiting selection of NORM FILE
on the master control complex (MCC).

4. ACTION TO BE TAKEN

If the disposition of the request is:

ABORTED, try again.

COMPLETED, take no action.

NOT STARTED, select NORM FILE on the MCC.

5. REFERENCES

PIDENT
SYUR

Practice 254-280-270, *System Update Program Description*

Input Messages
STOP:UPD-CORE
UPD:FS-GEN

Output Message
UPD:FS

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ID UPD:CORE
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

UPD:CORE a CODE b

2. REASON FOR OUTPUT

To report the results of the request to merge all system maps and update core with the new issue of data.

3. VARIABLE FIELD DEFINITIONS

- a Disposition of the request:
- ABORTED — Update terminated. UPD FILE may be corrupted.
 - COMPLETED — Update procedure completed successfully.
 - IN PROGRESS — Update procedure is continuing.
- b Error code number information:
- 72 System audit of writable stores (SAWS) lockout failure
 - 100 NORMAL key selection removed
 - 101 Unable to transfer unlock message
 - 102 3B unable to unlock update file
 - 103 Unable to SUB file switch command
 - 104 Submit unlock message failure
 - 105 Active attached processor interface (API) check failure
 - 110 Writes stopped message SUB failure
 - 111 Writes stopped message transfer failure
 - 112 Unable to stop writes
 - 113 Update file already unlocked
 - 114 Update file is logical normal
 - 122 Unlock message completion timeout
 - 123 Write stop message completion timeout
 - 124 Attached processor system (APS) file too large for buffer
 - 125 Open file request failed submit

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- 126 Timed out waiting for open file request
- 127 Bad API status on file open
- 128 Bad file manager interface (FMI) status on file open
- 129 Read file request failed submit
- 130 Timed out waiting for read file request
- 131 Bad API status on read file
- 132 Bad FMI status on read file
- 133 Active code file too large for buffer
- 134 Found zero in WORDCT field in buffer
- 135 No data in non-active code file
- 136 GEN keyword not in input message
- 137 PARTIAL keyword not in input message
- 138 Hash error in data read from APS
- 139 No match on hash id for non-active file
- 140 No match on hash id for active file

4. ACTION TO BE TAKEN

Action to be taken depends upon the error received.

5. REFERENCES

PIDENTs
SYUP
SYUR

Practice 234-160-001, *Generic Retrofit and Update*
Practice 254-280-270, *System Update Program Description*

Input Message
STOP:UPD-CORE

SEE PROPRIETARY NOTICE ON COVER PAGE

ID UPD:ERAP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

UPD:ERAP FSDATA COMPLETED

2. REASON FOR OUTPUT

To indicate that the error analysis file store data base has been repacked. It is the normal response to the UPD:ERAP FSDATA input message. It may also appear following an AUD:ERAPDATA output message or a REPT:ERAP output message.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
ERAP
ERIF

Practice 254-200-215, *Error Analysis Program Application*
Practice 254-280-320, *Error Analysis Program*

Input Messages
AUD:ERAPDATA
CLR:ERAPDATA
UPD:ERAP

Output Messages
AUD:ERAPDATA
REPT:ERAP

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ID UPD:FS
WORK CENTER.. MOC
GENERIC 4E21 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

- [1] UPD:FS a. CODE b
- [2] UPD:FS a. DO NXT TAPE OR START CORE UPD
- [4] UPD:FS a. MOUNT TAPE
- [5] UPD:FS a. NO FS SELECTED
- [6] UPD:FS a. SELECT FS TO BE UPD
- [7] UPD:FS a. TAPE FMT NG d
- [8] UPD:FS a. TAPE HDR MM
- [9] UPD:FS a. TIMEOUT
- [10] UPD:FS a. UNEXPECTED DATA IN MEMORY
 eeeeeeee eeeeeeee eeeeeeee eeeeeeee

2. REASON FOR OUTPUT

To report the results of the request to update a File Store (FS) with a new system data base.

For Format [2], current tape has been processed. Any additional tapes to be included in the update should be mounted and the corresponding message input. OR The merge or test merge phase should be started. A total of 30 minutes from the first occurrence of this message is allowed for some input to be received.

NOTE: If this message follows a **CODE 73** message, the addresses indicate the start addresses of the patch space blocks that do not contain FILL.

For Format [3], indicates which file stores will receive the update data.

For Format [4], tape must be mounted, and tape unit must be assigned to update function.

For Format [5], after waiting 1 minute, a recheck of file store bus selection keys indicates that no bus has been selected for update.

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For Format [6], a bus selection key has not been depressed on the Master Control Complex (MCC). Key DFC 0&2 or DFC 1&3 must be depressed within 1 minute to avoid termination.

For Format [7], tape organization does not match expected format.

For Format [8], information in tape header does not match information input in message.

For Format [9], no instruction was received within 240 minutes of the first request.

For Format [10], during partial update, hash sum mismatches occurred due to unexpected data in each of the listed 1024-word blocks.

3. VARIABLE FIELD DEFINITIONS

- a Disposition of the update request.
- ABORTED — Update terminated. File stores and tape unit may need to be cleaned up manually.
 - LAST REQUEST — Last of three requests for action.
 - NOT STARTED — Update not yet begun.
 - STARTED — Update procedure has begun.
 - TAPE DONE — Input tape has been completely read in.
- b Error code:
- 19 — System Update Library Program (SUPL) loaded in non-file store office (SUPL)
 - 35 — Disk backup of core address not located (SUPL SUFA SUAP)
 - 36 — Required Program Store (PS) KCODE not supplied in PS KTRANS (SUPL SUFA SUAP)
 - 37 — Required Call Store (CS) KCODE not supplied in CS KTRANS (SUPL SUFA SUAP)
 - 38 — PS in KTRANS not operational in new MTRANS (SUPL SUFA SUAP)
 - 39 — PS in KTRANS not operational or special grow in current MTRANS (SUPL SUFA SUAP)
 - 48 — CS in KTRANS not operational in new MTRANS (SUPL SUFA SUAP)
 - 49 — CS in KTRANS not operational or special grow in current MTRANS (SUPL SUFA SUAP)
 - 55 — Previous update still in progress (SUPL SUFA SUAP)
 - 56 — Hash failure in tape data (SUPL)
 - 57 — Merge file missing End-Of-File (EOF) mark (SUPL)

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- 59 — New hash table size over buffer limit (SUPL)
- 60 — Mapping configuration failed (SUPL SUFA SUAP)
- 61 — Disk request rejected (SYUP SUPL SUFA SUAP)
- 62 — Disk queue full (SYUP SUPL SUFA SUAP)
- 63 — Tape request rejected (SYUP SUPL SUFA SUAP)
- 64 — Tape operation failed (SYUP SUPL SUFA SUAP)
- 65 — Hash sum head table pointer is out of range (SYUP SUPL SUFA SUAP)
- 66 — Auxiliary Unit Bus (AUB) selection changed during tape processing (SYUP SUPL)
- 67 — Too many hash sum block 0 entries input on tapes (SYUP SUPL SUFA SUAP)
- 68 — File store mapping failed (SUPL SUFA SUAP)
- 69 — Core mapping failed (SUPL SUFA SUAP)
- 70 — Invalid hash sum index in system head table (SYUP SUPL SUFA SUAP)
- 71 — Disk taken out-of-service after update was requested (SYUP)
- 72 — SAWS lockout due to generic overwrite, recent change (SYUP SUPL SUFA SUAP)
- 73 — Patch space does not contain 'FILL'; followed by an UNEXPECTED DATA IN MEMORY message (SYUP)
- 74 — Disk unit type-member number to KCODE conversion failed (SYUP SUPL)
- 75 — File to be updated is not equipped (SYUP SUPL)
- 76 — SAWS hash routine input failure (SYUP SUPL SUFA SUAP)
- 77 — Timeout waiting for disk writes to be canceled (SYUP SUPL SUFA)
- 78 — Timeout waiting for all disk requests to be canceled (SYUP SUPL SUFA)
- 79 — File Store (FS) data mapping timeout (SUPL SUFA SUAP)
- 80 — Core data mapping timeout (SUPL SUFA SUAP)
- 81 — Unable to calculate disk address of hash sums (SYUP SUPL SUFA SUAP)
- 82 — Disk write is not a sector boundary (SYUP SUPL)
- 83 — Tape is not partial update tape (SYUP)
- 84 — Update buffer overflow (SYUP)

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- 85 — Partial update must be done with SYUP (SUFA SUAP)
- 86 — Check of CS2FS map failed (SUFA SUAP)
- 87 — ID2FS map overlaps found (SUFA SUAP)
- 88 — Holes found in ID2FS map (SUFA SUAP)
- 90 — Disk request rejected or queue full (SYUP SUPL SUFA SUAP)
- 91 — Disk operation failure (SYUP SUPL SUFA SUAP)
- 92 — Interrupt occurred while program not in progress (SYUP SUPL SUFA SUAP)
- 93 — Maintenance Control Program (MACP) holding time exceeded (SYUP SUPL SUFA SUAP)
- 94 — Paging supervisor abort (SYUP SUFA SUAP)
- 95 — Open General Buffer Table (GBT) failure (SYUP SUPL SUFA SUAP)
- 96 — Interrupt occurred while program was in progress (SYUP SUPL SUFA SUAP)
- 97 — PLI terminated by request (SYUP SUPL SUFA SUAP)
- 100 — (Attached Processor System [APS] only.) Normal key selection removed (SYUP SUFA SUAP)
- 101 — (APS only) Unable to go transfer unlock message (SYUP SUFA SUAP)
- 102 — (APS only) Update file locked - expected to be unlocked (SYUP) or 3B unable to unlock update file (SUFA SUAP)
- 103 — (APS only) Unable to submit file access switch command (SYUP SUFA SUAP)
- 104 — (APS only) Unable to submit message to unlock update file (SYUP SUFA SUAP)
- 105 — (APS only) Unable to get KCODE of active Attached Processor Interface (API) (SYUP SUFA SUAP)
- 106 — Current system not FS system (SUFA) or current system not APS system (SUAP)
- 107 — New generic is not APS load (SUFA SUAP)
- 108 — API 0 restore failure (SUFA)
- 109 — Data mapping table overflow (SUPL SUFA SUAP)
- 110 — (APS only) Unable to submit message to stop writes to 1A file (SYUP SUAP)
- 111 — (APS only) Unable to transfer message to stop writes (SYUP SUAP)

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- 112 — (APS only) 3B unable to stop writes (SYUP SUAP)
- 113 — (APS only) Update file already unlocked - use the
UPD:COMMIT;NORMFILE — input message to lock the update
file (SYUP SUAP)
- 114 — (APS only) Update file is logical normal file (SYUP SUAP)
- 115 — Current translators fail check (SUFA)
- 116 — PCRVUMP initialization read failure (SUFA)
- 117 — PCRVUMP initialization write failure (SUFA)
- 118 — PCRVUMP initialization SR_REQ command failure (SUFA)
- 119 — Message error from DKADILIB (SUFA)
- 120 — Disk error from DKADILIB (SUFA)
- 121 — Unable to put File Manager Interface (FMI) in normal state
(SUFA)
- 122 — (APS only) Timeout waiting for unlock of update file
acknowledgment (SYUP SUAP)
- 123 — (APS only) Timeout waiting for stop writes message
completion (SYUP SUAP)
- 124 — Generic and office data tapes must be input (SUFA) or hash
failure in tape data (SUAP)
- 125 — FS 0&2 not out-of-service (SUFA) or merge file missing End Of
File (EOF) mark (SUAP)
- 126 — API 0 not in special grow state (SUFA)
- 127 — Merge file missing EOF mark (SUFA)
- 128 — Hash failure in tape data (SUFA)
- c File stores to receive the update data:
 - 0&2
 - 1&3
- d Error found:
 - 20 No tape type specified in tape header
 - 21 Tape header expected, EOF encountered
 - 22 Tape header expected, Identification (ID) mismatch occurred
 - 23 Merge data file expected, EOF encountered
 - 24 Merge data file expected, ID mismatch occurred
 - 25 CS2FS map expected, EOF encountered
 - 26 CS2FS map expected, ID mismatch occurred

SEE PROPRIETARY NOTICE ON COVER PAGE

- | | | |
|--|----|--|
| | 27 | ID2FS map expected, EOF encountered |
| | 30 | ID2FS map expected, ID mismatch occurred |
| | 31 | Hash sum head table expected, EOF encountered |
| | 32 | Hash sum head table expected, ID mismatch occurred |
| | 33 | File header expected, EOF encountered |
| | 34 | File header expected, ID mismatch occurred |
- e The start addresses of the blocks.

4. ACTION TO BE TAKEN

If additional information is:

CODE b — Determine action from error code given.

DO NXT TAPE OR START CORE UPD — Enter next input message (UPD: CORE).

FS c WILL BE UPD — None.

MOUNT TAPE — Mount tape and assign Tape Unit Controller (TUC) to Update (UPD) function.

NO FS SELECTED — None.

SELECT FS TO BE UPD — Select FS key on MCC.

TAPE FMT NG None.

TAPE HDR MM — Check tape header to assure correct tape is mounted - reenter request.

TIMEOUT — Remove all unofficial overwrites from BINKS listed.

UNEXPECTED DATA IN MEMORY — None.

5. REFERENCES

PIDENTs
IOCPOMC1
SUAP
SUFA
SUPL
SYUP
SYUR
SYURPS2O

Practice 234-160-001, *Generic Retrofit and Update*

Practice 254-280-270, *System Update Program Description*

Input Messages
STOP:UPD-FS
UPD:COMMIT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID UPD:FS-BACKUP
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

UPD:FS BACKUP OF HASH COMPLETE

2. REASON FOR OUTPUT

To indicate that a mismatch between the special hash word (hash over the hash table) and its file store backup was detected. The core copies of the hash table and the special hash word were consistent and assumed correct. These data were written to file store in the appropriate backup locations.

3. VARIABLE FIELD DEFINITIONS

None.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
SAWS
SAWSBASE
SAWSCMMN
SAWSSUBR

Practice 254-280-260, *Audit Programs Description*

SEE PROPRIETARY NOTICE ON COVER PAGE

ID UPD:LIBSYS
WORK CENTER.. MOC
GENERIC 4E19 through 4E21
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

UPD:LIBSYS a

2. REASON FOR OUTPUT

To report the disposition of the requested action in an UPD:LIBSYS input message.

3. VARIABLE FIELD DEFINITIONS

a Disposition of the requested action:

ABORTED — An interrupt occurred while processing, causing the request to be aborted.

COMPLETED — The library file store area has been packed.

STOPPED — The update was terminated by manual request.

STOPPED ERROR ON FS OPERATION — A read or write of the library file store area failed.

STOPPED FS AREA NOT DEFINED — There is no library file store area defined for storing library packages.

STOPPED SAWS INHIBIT ERROR — The system audit of writable stores (SAWS) could not be interrupted at this time to perform a write into the library file store area.

STOPPED SOFT ERROR — The library control status words were zeroed before maintenance control program (MACP) began the execution of the update (UPD) program.

4. ACTION TO BE TAKEN

Take action depending on the system response to the requested action. If disposition of the request was:

ABORTED — Resubmit the UPD:LIBSYS input message.

COMPLETED — No action required.

STOPPED — Resubmit the UPD:LIBSYS input message.

STOPPED ERROR ON FS OPERATION — Resubmit the UPD:LIBSYS input message; if failures continue, verify ID2FS map for 1DKLIBRARY.

STOPPED FS AREA NOT DEFINED — No further action required.

For STOPPED output messages not listed, resubmit the UPD:LIBSYS input message.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENT
LIBRLOAD

Input Message
UPD:LIBSYS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID UPD:SCS
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

UPD:SCS a b
[CALCULATED cccc dddd]
[EXPECTED eeee ffff]

2. REASON FOR OUTPUT

To respond to a UPD:SCS input message requesting that the Service Circuit System (SCS) controllers be updated to a new generic program. This message identifies invalid configurations of the controllers and Service Circuit Units (SCUs), identifies problems detected during the generic update, and provides benchmarks during the generic update procedure.

3. VARIABLE FIELD DEFINITIONS

- a SCS member number.
- b The following messages can be printed by an SCS controller generic update:
- CONTR x COMPLETED— The generic update has completed. Only one of the SCS controllers is running on the new generic. Translations still point to the old generic.
 - CONTR x PUMP IN PROGRESS— This progress message indicates that the new generic is being pumped into the Out-Of-Service (OOS) controller.
 - CONTR x RESTORE FAILED— The active controller is running on the new generic. The OOS controller, containing the old generic, could not be restored.
 - CONTR x SWITCH IN PROGRESS— This progress message indicates when the actual switch of the SCS controller is started.
 - CONTR UPDATE COMPLETED— The generic update has completed. Both of the SCS controllers are running on the new generic. Translations still point to the old generic.
 - CONTR UPDATE STARTED— This progress message indicates that the generic update procedure has been started in the specified SCS.
 - STOPPED ANNOUNCEMENT UPDATE IN PROGRESS— An announcement update is in progress in one or more SCUs in the SCS frame. A generic update will not be attempted while an announcement update is in progress.

SEE PROPRIETARY NOTICE ON COVER PAGE

	STOPPED CONTR x HASH SUMS FAILED —The hash sums calculated over the new generic in the OOS controller do not agree with the expected hash sums. The calculated hash sums and the expected hash sums are printed as a part of this message.
	STOPPED CONTR x PUMP FAILED —A failure was detected while attempting to pump the new generic into the OOS controller.
	STOPPED CONTR x RMV FAILED —A problem was detected while attempting to remove the SCS controller that is going to be updated to the new generic.
	STOPPED CONTR BREAK POINTS SET —Break points are currently set in one or both of the SCS controllers. A controller generic update will not be performed while there are break points set in either of the controllers.
	STOPPED NO AVAILABLE SCU —The program could not find an in-service SCU to use to pump the new generic program into the OOS controller.
	STOPPED SCS NOT OPERATIONAL —The SCS in which the generic update was to be performed is not marked operational in the translations.
	STOPPED SCU x IS UNEQ OR OOS —The SCU that was specified to be used to pump the OOS controller is either unequipped or OOS. The SCU used to pump the OOS controller must be in-service.
	STOPPED SCU DISK IN USE —An SCS controller generic update is not performed if any type of disk copy or a disk format is active in any SCU in the SCS to be updated.
	STOPPED SIMPLEX WITH SUBJECT IN SERVICE OR DUPLEX FAILED — An entry requirement for a generic update is that both SCS controllers must be in service, or simplex with the subject OOS.
	UNKNOWN SYSTEM ERROR —An output message was requested. The message index was outside the range of output messages defined for this procedure.
cccc	The upper 16 bits (in hexadecimal) of the 32 bit hash sum calculated by the OOS SCS controller.
dddd	The lower 16 bits (in hexadecimal) of the 32 bit hash sum calculated by the OOS SCS controller.
eeee	The upper 16 bits (in hexadecimal) of the 32 bit hash sum contained in the file header of the new generic.
ffff	The lower 16 bits (in hexadecimal) of the 32 bit hash sum contained in the file header of the new generic.

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4. ACTION TO BE TAKEN

The following actions should be taken depending on the system response to the requested action in variable b. If variable b is:

- CONTR x COMPLETED— Try to restore the OOS controller manually.
- CONTR x PUMP IN PROGRESS— No action required.
- CONTR x RESTORE FAILED— Try to restore the OOS controller manually after the generic update has completed.
- CONTR x SWITCH IN PROGRESS— No action required.
- CONTR UPDATE COMPLETED— No action required.
- CONTR UPDATE STARTED— No action required.
- STOPPED ANNOUNCEMENT UPDATE IN PROGRESS— Wait until the announcement update has completed and re-enter the input message.
- STOPPED CONTR x HASH SUMS FAILED— Re-copy the new generic file from the APS to the SCUs, duplex the controllers, and re-enter the input message.
- STOPPED CONTR x PUMP FAILED— Restore the controllers to duplex and re-enter the input message using a different SCU. If necessary re-copy the new generic file from the APS to the SCU.
- STOPPED CONTR x RMV FAILED— Diagnose both controllers, restore them to service, and re-enter the input message.
- STOPPED CONTR BREAK POINTS SET— Remove all break points from both controllers and re-enter the input message.
- STOPPED NO AVAILABLE SCU— Restore at least one SCU to service, duplex the controllers, and re-enter the input message being sure to specify an in-service SCU.
- STOPPED SCS NOT OPERATIONAL— Check the SCS number in the input message. If the input message is correct, check the translations for the SCS frame. The SCS must be in the OPER state before attempting a controller generic update.
- STOPPED SCU x IS UNEQ OR OOS— Restore the specified SCU to service, or specify a different SCU in the input message, or do not specify an SCU in the input message and let the program find one.
- STOPPED SCU DISK IN USE— Wait until all disk copy and/or disk format jobs in the SCS frame have completed and re-enter the input message.
- STOPPED SIMPLEX WITH SUBJECT IN SERVICE OR DUPLEX FAILED—
Restore to duplex configuration or if system must be simplex specify the OOS controller in the UPD:SCS input message. Re-enter the UPD:SCS input message. Both controllers should have passed diagnostics before starting a controller update.

SEE PROPRIETARY NOTICE ON COVER PAGE

UNKNOWN SYSTEM ERROR—Ignore this message if the generic update completes successfully. If the generic update fails, run the System Audit of Writable Stores (SAWS) audit, restore both controllers, and re-enter the input message.

5. REFERENCES

PIDENT
SCSCFSCU

Input Messages
COPY:SCS
UPD:SCS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID UPD:UTILDS
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E,1B
TYPE Output

1. FORMAT

UPD:UTILDS a b

2. REASON FOR OUTPUT

To report the results of the request to edit an utility data set (UTILDS).

3. VARIABLE FIELD DEFINITIONS

a Data set name.

b Status of the request:

 ABORTED — Edit was stopped.

 COMPLETED — Edit was successful.

 STOPPED CODE 019 — Invalid line number was input.

 STOPPED TIMEOUT — No message was received within 120 seconds of
 receipt of an ADD or REPLACE request.

4. ACTION TO BE TAKEN

If edit was ABORTED or STOPPED, correct and resubmit the input.

5. REFERENCES

PIDENT
GULPDSET

Practice 234-301-003, *1B Processor Generic Utility Program (GULP) Application - Description*

Input Message
UPD:UTILDS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID UPD:XTSI
WORK CENTER.. MOC
GENERIC 4E24 Rel. 2 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] UPD:XTSI a XTC SVN c
d
- [2] UPD:XTSI a XTC SVN c;UCL
d
- [3] UPD:XTSI a D3U b SVN c
d
- [4] UPD:XTSI a SPU e SVN c
d
- [5] UPD:XTSI a IBU 0 SVN c
d

2. REASON FOR OUTPUT

To respond to a UPD:XTSI input message requesting that the Expanded Time Slot Interchange (XTSI) controllers or its subunits be updated to a new generic program. This message identifies invalid configurations of the controllers or its subunits, Digital Signal Level 3 Unit (D3U), Signal Processing Unit (SPU) or In-Band Unit (IBU) identifies problems detected during the generic update, and provides complete message during the generic update procedure.

3. VARIABLE FIELD DEFINITIONS

- a XTSI member number.
- b D3U number.
- c Version number.
- d System response:
 - ABORTED UNABLE TO SCHEDULE PMOS TASK—The generic update is controlled by the Peripheral Maintenance Operating System (PMOS). The program was unable to schedule the PMOS task to remove or to restore D3U or SPU.
 - CONTR x RESTORE FAILED—The active controller is running on the new generic. The Out-Of-Service (OOS) controller, containing the old generic, could not be restored. This error message should co-existed with CONTR x UPDATE COMPLETED message.

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- CONTR x UPDATE COMPLETED—The generic update has completed. Only one of the XTSI controllers is running on the new generic. Translations still point to the old generic.
- D3U x UPDATE COMPLETED—The D3U generic update has completed. The D3U is running on the new generic. However, unit type translator indicating which generic version to use have not been changed.
- DENIED - INV TSI TYPE OR UNEQ—The XTSI number entered is either an invalid XTSI type or an unequipped XTSI frame.
- IBU 0 UPDATE COMPLETED—The IBU generic update has completed. The IBU is running on the new generic. However, unit type translator indicating which generic version to use have not been changed.
- INTERNAL SYSTEM ERROR—An output message was requested. The message index was outside the range of output messages defined for this procedure.
- INTERNAL SYSTEM ERROR—Ignore this message if the generic update completes successfully. If the generic update fails, run the System Audit Of Writable Stores (SAWS) audit, restore both controllers, and re-enter the input message.
- SPU x UPDATE COMPLETED—The SPU generic update has completed. The SPU is running on the new generic. However, unit type translator indicating which generic version to use have not been changed.
- STOPPED BREAK POINT SET—Break points are currently set in one or both of the XTSI controllers, on D3U, or on SPU. A controller generic update will not be performed while there are break points set in either of the controllers.
- STOPPED CONTR x CSP INIT FAILED—A failure was detected while attempting to initialize the new generic in the Controller Signal Processor (CSP) of controller x (original is In-Service, Standby, or OOS).
- STOPPED CONTR x CSP INIT FAILED(CODE: y)—A failure was detected while attempting to initialize the new generic in the CSP of controller x (original is In-Service, Standby, or OOS) due to an error found by the XTSI frame firmware.
- STOPPED CONTR x CSP INIT FAILED(FRAME REJECT)—A failure was detected while attempting to initialize the new generic in the CSP of controller x (original is In-Service, Standby, or OOS) due to frame reject.

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- STOPPED CONTR x CSP INIT FAILED(TIMEOUT)— A failure was detected while attempting to initialize the new generic in the CSP of controller x (original is In-Service, Standby, or OOS) due to timeout while waiting response from the XTSI frame firmware.
- STOPPED CONTR x CSP PUMP FAILED— A failure was detected while attempting to pump the new generic into the CSP of controller x (original is In-Service, Standby, or OOS).
- STOPPED CONTR x CSP PUMP FAILED(CODE: y)— A failure was detected while attempting to pump the new generic into the CSP of controller x (original is In-Service, Standby, or OOS) due to an error found by the XTSI frame firmware.
- STOPPED CONTR x CSP PUMP FAILED(FRAME REJECT)— A failure was detected while attempting to pump the new generic into the CSP of controller x (original is In-Service, Standby, or OOS) due to frame reject.
- STOPPED CONTR x CSP PUMP FAILED(TIMEOUT)— A failure was detected while attempting to pump the new generic into the CSP of controller x (original is In-Service, Standby, or OOS) due to timeout while waiting response from the XTSI frame firmware.
- STOPPED CONTR x PUMP FAILED— A failure was detected while attempting to pump the new generic into the controller x (original is in-service Standby or OOS).
- STOPPED CONTR x PUMP FAILED(CODE: y)— A failure was detected while attempting to pump the new generic into the controller x (original is in-service Standby or OOS) due to an error found by the XTSI frame firmware.
- STOPPED CONTR x PUMP FAILED(FRAME REJECT)— A failure was detected while attempting to pump the new generic into the controller x (original is in-service Standby or OOS) due to frame reject.
- STOPPED CONTR x PUMP FAILED(TIMEOUT)— A failure was detected while attempting to pump the new generic into the controller x (original is in-service Standby or OOS) due to timeout while waiting response from the XTSI frame firmware.
- STOPPED CONTR x UPDATE FILE HEADER FAILED— A failure was detected while attempting to update the new generic header into the controller x (original is in-service Standby or OOS).

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STOPPED CONTR x UPDATE FILE HEADER FAILED(CODE: y)—
A failure was detected while attempting to update the new generic header into the controller x (original is in-service Standby or OOS) due to an error found by the XTSI frame firmware.

STOPPED CONTR x UPDATE FILE HEADER FAILED(FRAME REJECT)— A failure was detected while attempting to update the new generic header into the controller x (original is in-service Standby or OOS) due to frame reject.

STOPPED CONTR x UPDATE FILE HEADER FAILED(TIMEOUT)—
A failure was detected while attempting to update the new generic header into the controller x (original is in-service Standby or OOS) due to timeout while waiting response from the XTSI frame firmware.

STOPPED CONTROLLER NOT DUPLEX— An entry requirement for a generic update is that both XTSI controllers must be in service.

STOPPED D3U x REMOVE FAILED— A problem was detected while attempting to remove the D3U x that is going to be updated to the new generic.

STOPPED D3U x RESTORE FAILED— A problem was detected while attempting to restore the D3U x that is going to be updated to the new generic.

STOPPED IBU 0 NOT EQUIPPED— A check of the Office Data Assembler (ODA) shows no equipage of an IBU subunit for this XTSI frame.

STOPPED IBU 0 REMOVE FAILED— A problem was detected while attempting to remove the IBU 0 that is going to be updated to the new generic.

STOPPED IBU 0 RESTORE FAILED— A problem was detected while attempting to restore the IBU 0 that is going to be updated to the new generic.

STOPPED SPU x REMOVE FAILED— A problem was detected while attempting to remove the SPU x that is going to be updated to the new generic.

STOPPED SPU x RESTORE FAILED— A problem was detected while attempting to restore the SPU x that is going to be updated to the new generic.

STOPPED XTC NOT OPERATIONAL— The XTSI in which the generic update was to be performed is not marked operational in the translations.

XTC UPDATE COMPLETED— The generic update has completed. Both of the XTSI controllers are running on the new generic. Translations still point to the old generic.

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e SPU number.

4. ACTION TO BE TAKEN

The following actions should be taken depending on the system response:

ABORTED UNABLE TO SCHEDULE PMOS TASK— Re-enter the input message.

CONTR x UPDATE COMPLETED— Try to restore the OOS controller manually.

CONTR x RESTORE FAILED— Try to restore the OOS controller manually after the generic update has completed.

D3U x UPDATE COMPLETED— No action required.

DENIED - INV TSI TYPE OR UNEQ— Re-enter the input message by entering another XTSI number or valid XTSI number.

IBU 0 UPDATE COMPLETED— No action required.

SPU x UPDATE COMPLETED— No action required.

STOPPED BREAK POINT SET— Remove all break points from both controllers and D3Us or SPU's and re-enter the input message.

STOPPED CONTR x CSP INIT FAILED— Restore the controllers to duplex and re-enter the input message using a different active controller. If necessary re-copy the new generic file from the Attached Processor System (APS) to the controllers.

STOPPED CONTR x CSP INIT FAILED(CODE: y)— Restore the controllers to duplex and re-enter the input message using a different active controller. If necessary re-copy the new generic file from the APS to the controllers.

STOPPED CONTR x CSP INIT FAILED(FRAME REJECT)— Restore the controllers to duplex and re-enter the input message using a different active controller. If necessary re-copy the new generic file from the APS to the controllers.

STOPPED CONTR x CSP INIT FAILED(TIMEOUT)— Restore the controllers to duplex and re-enter the input message using a different active controller. If necessary re-copy the new generic file from the APS to the controllers.

STOPPED CONTR x CSP PUMP FAILED— Restore the controllers to duplex and re-enter the input message using a different active controller. If necessary re-copy the new generic file from the APS to the controllers.

STOPPED CONTR x CSP PUMP FAILED(CODE: y)— Restore the controllers to duplex and re-enter the input message using a different active controller. If necessary re-copy the new generic file from the APS to the controllers.

STOPPED CONTR x CSP PUMP FAILED(FRAME REJECT)— Restore the controllers to duplex and re-enter the input message using a different active controller. If necessary re-copy the new generic file from the APS to the controllers.

STOPPED CONTR x CSP PUMP FAILED(TIMEOUT)— Restore the controllers to duplex and re-enter the input message using a different active controller. If necessary re-copy the new generic file from the APS to the controllers.

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- STOPPED CONTR x PUMP FAILED— Restore the controllers to duplex and re-enter the input message using a different active controller. If necessary re-copy the new generic file from the APS to the controllers.
- STOPPED CONTR x PUMP FAILED(CODE: y)— Restore the controllers to duplex and re-enter the input message using a different active controller. If necessary re-copy the new generic file from the APS to the controllers.
- STOPPED CONTR x PUMP FAILED(FRAME REJECT)— Restore the controllers to duplex and re-enter the input message using a different active controller. If necessary re-copy the new generic file from the APS to the controllers.
- STOPPED CONTR x PUMP FAILED(TIMEOUT)— Restore the controllers to duplex and re-enter the input message using a different active controller. If necessary re-copy the new generic file from the APS to the controllers.
- STOPPED CONTR x UPDATE FILE HEADER FAILED— Restore the controllers to duplex and re-enter the input message using a different active controller. If necessary re-copy the new generic file from the APS to the controllers.
- STOPPED CONTR x UPDATE FILE HEADER FAILED(CODE: y)— Restore the controllers to duplex and re-enter the input message using a different active controller. If necessary re-copy the new generic file from the APS to the controllers.
- STOPPED CONTR x UPDATE FILE HEADER FAILED(FRAME REJECT)— Restore the controllers to duplex and re-enter the input message using a different active controller. If necessary re-copy the new generic file from the APS to the controllers.
- STOPPED CONTR x UPDATE FILE HEADER FAILED(TIMEOUT)— Restore the controllers to duplex and re-enter the input message using a different active controller. If necessary re-copy the new generic file from the APS to the controllers.
- STOPPED CONTROLLER NOT DUPLEX— Restore the controllers to duplex and re-enter the input message. An entry requirement for a generic update is that both XTSI controllers must be in service.
- STOPPED D3U x REMOVE FAILED— It is possible no spare D3U is available. Re-enter the input message after the spare D3U is available to be protection switched.
- STOPPED D3U x RESTORE FAILED— Dump IREG Internal Register (IREG) Configuration Status (CNFGSTAT) in the software D3USTATUS word to find out the type of restoral failure. Manually restore the subject D3U. The subject D3U will be brought up with the original generic version. Analyze the causes of failure, clean up and then re-enter the input message.
- STOPPED IBU 0 NOT EQUIPPED— Complete the installation of IBU 0 and re-enter the input message.
- STOPPED IBU 0 REMOVE FAILED— It is possible the office service circuit threshold has been exceeded. Re-enter the input message after correcting the threshold condition.

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STOPPED IBU 0 RESTORE FAILED— Dump IREG Configuration Status (CNFGSTAT) in the software IBUSTATUS word to find out the type of restoral failure. Manually restore the subject IBU. The subject IBU will be brought up with the original generic version. Analyze the causes of failure, clean up and then re-enter the input message.

STOPPED SPU x REMOVE FAILED— It is possible no spare SPU is available. Re-enter the input message after the spare SPU is available to be protection switched.

STOPPED SPU x RESTORE FAILED— Dump IREG Configuration Status (CNFGSTAT) in the software SPUSTATUS word to find out the type of restoral failure. Manually restore the subject SPU. The subject SPU will be brought up with the original generic version. Analyze the causes of failure, clean up and then re-enter the input message.

STOPPED XTC NOT OPERATIONAL— Check the XTSI number in the input message. If the input message is correct, check the translations for the XTSI frame. The XTSI must be in the OPER state before attempting a controller generic update.

XTC UPDATE COMPLETED— No action required.

5. REFERENCES

PIDENT
XTSGNUPD

Input Message
UPD:XTSI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:ABSOLUTE
WORK CENTER.. MAC, MOC
GENERIC 4E21 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:ABSOLUTE, OPT(a):
ADDRESS CONTENTS
bbbbbbbb cccccccc

 .
 .
 .

2. REASON FOR OUTPUT

Displays the contents of office data memory in response to a VER:ABSOLUTE input message.

3. VARIABLE FIELD DEFINITIONS

- a Memory type:
 FS — Disk memory.
 CORE — Main call store memory.
 XS — Extended call store memory.
- b Address being displayed.
- c Contents of address being displayed (octal).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYMISC
VRFYOUT

Translation Guide, 4ESSTM, TG-4, Division 8, Section 8a

Input Message
VER:ABSOLUTE

SEE PROPRIETARY NOTICE ON COVER PAGE

1. FORMAT

2. REASON FOR OUTPUT

Variables g-j show the Destination Point Code (DPC) (Not applicable for Individual Per Call Control [iPCC]):

3. VARIABLE FIELD DEFINITIONS

- #### 4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
VRFYINPT
VRFYMISC
VRFYOUT

Translation Guide, 4ESSTM, Division 8, Section 6ad

Input Message
VER:ADSLINK

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:AIN-LIST
WORK CENTER.. MAC, MOC
GENERIC 4E22 Rel. 2 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:AIN,OPT(LIST):

TRIGGER

NUMBER	TTY	LTOS	TOS	FH	SCSANN	DRCC	DFRN
a,	b,	[c],	d,	[e],	[f],	[g],	[h],
	DOM i,	AC [j],	ABC k,	DEF l,	GHI m,	J n,	
a,	b,	[c],	d,	[e],	[f],	[g],	[h],
	DOM i,	AC [j],	ABC k,	DEF l,	GHI m,	J n,	
a,	b,	[c],	d,	[e],	[f],	[g],	[h],
	DOM i,	AC [j],	ABC k,	DEF l,	GHI m,	J n,	
•							
•							
•							

2. REASON FOR OUTPUT

To display the code group domain, area code indicator, and type of service index associated with the Advanced Intelligent Network (AIN) trigger(s).

3. VARIABLE FIELD DEFINITIONS

- a AIN trigger number (1-8191).
- b Trigger type:
A — AIN.
B — Both AIN and Local Number Portability (LNP).
L — LNP.
- c Local number portability of type of service (0-31).
- d Type of service index (0-31).
- e AIN fault handling:
DR
FT — Default.

SEE PROPRIETARY NOTICE ON COVER PAGE

f	Service Circuit System (SCS) number for default routing voice announcement (0-65535).
g	Default Routing Control Code (DRCC): CPN DRN TRM
h	Ten digit default routing number.
i	Domain: POTS — Plain old telephone service. n — A decimal number (20-69).
j	Area code indicator: N — Indicates the ABC digits are office codes, test codes or another non-area codes. Y — Indicates the 3-digit codes (ABC) are area codes.
k	ABC digits (000-999).
l	DEF digits. The fourth, fifth, and sixth digits of a series (0-999).
m	GHI digits. The seventh, eighth, and ninth digits of a series (0-999).
n	J digit. The tenth digit of a series (0-9).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPPVR4
VRFYCNTL
VRFYINPT
VRFYOUT
VRFYRTNG

Translation Guide, 4ESSTM, TG-4, Division 8, Section 3AJ

Input Message
VER:AIN-LIST

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:ALLRDB
WORK CENTER.. MAC, MOC
GENERIC 4E22 Rel. 4 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] VER:ALLRDB;OPT(DIG3): RDBI a,
DOM b, NTD 3, AC [c],
ABC ABC ABC ABC ABC ABC ABC ABC
d, d, d, d, d, d, d, d,
•
•
•
- [2] VER:ALLRDB;OPT(DIG6): RDBI a,
DOM b, NTD e, AC [c], ABC d,
DEF DEF DEF DEF DEF DEF DEF DEF
f, f, f, f, f, f, f, f,
•
•
•
- [3] VER:ALLRDB;OPT(DIG9): RDBI a,
DOM b, NTD e, AC [c], ABC d, DEF f,
GHI GHI GHI GHI GHI GHI GHI GHI
g, g, g, g, g, g, g, g,
•
•
•
- [4] VER:ALLRDB;OPT(DIG12): RDBI a,
DOM b, NTD e, AC [c], ABC d, DEF f, GHI g,
JKL JKL JKL JKL JKL JKL JKL JKL
h, h, h, h, h, h, h, h,
•
•
•

SEE PROPRIETARY NOTICE ON COVER PAGE

- [5] VER:ALLRDB;OPT(PLU): RDBI a,
DOM b, ABC d, DEF f,

GHIJ GHIJ GHIJ GHIJ GHIJ GHIJ GHIJ GHIJ
MIN MAX MIN MAX MIN MAX MIN MAX
i, i, i, i, i, i, i, i,
•
•
•
- [6] VER:ALLRDB;OPT(CPA): RDBI a,

ALA ALA ALA ALA ALA ALA ALA ALA
j, j, j, j, j, j, j, j,
•
•
•
- [7] VER:ALLRDB;OPT(ALAOSN): RDBI a,

ALA OSN ALA OSN ALA OSN ALA OSN
j, k, j, k, j, k, j, k,
•
•
•
- [8] VER:ALLRDB;OPT(ADG): RDBI a,

ADG l,

RECENT CHANGE SOURCE - VARIOUS RC:CODEGRP
RECENT CHANGE SOURCE - FORM # 521/522/523
RECENT CHANGE SOURCE - FORM # 524/525
RECENT CHANGE SOURCE - FORM # 652
RECENT CHANGE SOURCE - FORM # 656
RECENT CHANGE SOURCE - FORM # 500

2. REASON FOR OUTPUT

Verifies all data structures which reference the input Routing Data Block Index (RDBI).

3. VARIABLE FIELD DEFINITIONS

- a Routing Data Block Index (RDBI) number (1-8191).
b Domain.

SEE PROPRIETARY NOTICE ON COVER PAGE

c	Area Code (AC): N — No Y — Yes
d	ABC digits (000-999).
e	Number of Translatable Digits (NTD) (4-12).
f	DEF digits (0-999).
g	GHI digits (0-999).
h	JKL digits (0-999).
i	Minimum or maximum line number (0000-9999).
j	Adjunct Logical Address (ALA) (0-15).
k	Originating Switch Number (OSN) (0-167).
l	Automatic Distribution Group (ADG) (0-3).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPPVR4
VRFYCNTL
VRFYRTNG
VRFYOUT

Input Message
VER:CODELIST

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:CAMASCRN
WORK CENTER.. MAC, MOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:CAMASCRN;OPT(LCIBPAT),aaa: OLCIGI b,
TNPA ccc, BLOCK d

TOFC	TOFC	TOFC	TOFC	TOFC	TOFC	TOFC	TOFC
eee,	eee,	eee,	eee,	eee,	eee,	eee,	eee,
	•						
	•						
	•						

2. REASON FOR OUTPUT

To list the Terminating Office Codes (TOFCs) blocked on a given Centralized Automatic Message Accounting (CAMA) originating Local Call Intercept (LCI) group index and terminating Numbering Plan Area (NPA) in response to a VER:CAMASCRN input message.

3. VARIABLE FIELD DEFINITIONS

- a Indicator:
- CUR — Current, data currently resides in the translation area.
- INA — Inactive, data exists in the test state of the recent change system.
- b Originating LCI group index (1-255) .
- c Terminating NPA (TNPA) (200-999) .
- d Block:
- N — No
- Y — Yes
- e Terminating office codes for a CAMA profile (000-999) .

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYCAMA
VRFYOUT

SEE PROPRIETARY NOTICE ON COVER PAGE

Translation Guide, 4ESSTM, Division 8, Section 4b

Input Message
VER:CAMASCRN

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:CAMASCRN-A
WORK CENTER.. MAC, MOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:CAMASCRN;OPT(UNAREA),aaa: BLKFCTN UNAREA,

	BLOCK b						
TNPA	TNPA	TNPA	TNPA	TNPA	TNPA	TNPA	TNPA
CCC,	CCC,	CCC,	CCC,	CCC,	CCC,	CCC,	CCC,
	•						
	•						
	•						

2. REASON FOR OUTPUT

To print a list of unauthorized area codes in response to a VER:CAMASCRN input message.

3. VARIABLE FIELD DEFINITIONS

a	Indicator:
	CUR — Current
	INA — Inactive
b	Block:
	N — No
	Y — Yes
c	Terminating Numbering Plan Area (NPA) numbers (200-999).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYCAMA
VRFYOUT

Translation Guide, 4ESSTM, Division 8, Section 4c

Input Message
VER:CAMASCRN

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:CAMASCRN-C
WORK CENTER.. MAC, MOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:CAMASCRN,OPT(OLCIGI)CUR:
OLCIGI TNPA TNPA TNPA TNPA
a, bbb, bbb, bbb, bbb,
•
•
•

2. REASON FOR OUTPUT

To list the terminating Numbering Plan Areas (NPAs) in a Centralized Automatic Message Accounting (CAMA) Originating Local Call Intercept Group Index (OLCIGI) in response to a VER:CAMASCRN input message.

3. VARIABLE FIELD DEFINITIONS

- a CAMA originating Local Call Intercept (LCI) group index (1-255).
b List of terminating NPAs (200-999).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
VRFYOUT

Translation Guide, 4ESSTM, Division 8, Section 4e

Input Message
VER:CAMASCRN

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:CAMASCRN-F
WORK CENTER.. MAC, MOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:CAMASCRN;OPT(UNAOFC),aaa: BLKFCTN UNAOFC,

TOFC	BLOCK b	TOFC	TOFC	TOFC	TOFC	TOFC	TOFC
CCC,	TOFC	TOFC	TOFC	TOFC	TOFC	TOFC	TOFC
	CCC,	CCC,	CCC,	CCC,	CCC,	CCC,	CCC,
	•						
	•						
	•						

2. REASON FOR OUTPUT

To print a list of unauthorized office codes in response to a VER:CAMASCRN input message.

This message prints the terminating offices codes for a Centralized Automatic Message Accounting (CAMA) originating local call intercept (LCI) group index.

3. VARIABLE FIELD DEFINITIONS

- a Data indication:
- CUR — Current
- INA — Inactive
- b Block:
- N — No
- Y — Yes
- c Terminating office codes (000-999).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYCAMA
VRFYOUT

Translation Guide, 4ESSTM, Division 8, Section 4d

SEE PROPRIETARY NOTICE ON COVER PAGE

4ESS
OM-4B000-01

VER:CAMASCRN;OPT(UNAOFC)

Input Message
VER:CAMASCRN

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VER:CAMASCRN-F-2

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ID VER:CAMASCRN-G
WORK CENTER.. MAC, MOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:CAMASCRN;OPT(OOFCG),aaa: TOWN ST BL FBS NBS
TG bbbb cc dd eee fff,

00FC	OLCIGI	POVC
ggg,	h,	i,
•		
•		
•		

2. REASON FOR OUTPUT

To list the office codes and Originating Local Call Intercept Group Index (OLCIGI) allowed on a given trunk group and list the office codes with POVC bit set in response to a VER:CAMASCRN input message.

This message prints office codes for a Centralized Automatic Message Accounting (CAMA) originating Local Call Intercept (LCI) group index.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | Indicator:
CUR — Current
INA — Inactive |
| b | The Town (TOWN), city, or location for the far end of the Trunk Subgroup (TSG) (4 characters). |
| c | The far end State (ST), province, or foreign country (2 characters). |
| d | The Building (BL) or office identity for the far end of the TSG (2 characters). |
| e | The Far Building Subdivision (FBS) code for internal building identification (3 characters). |
| f | The Internal Building Subdivision (NBS) for the near end of the TSG (3 characters). |
| g | Originating Office Code (00FC) (000-999). |
| h | Originating LCI Group Index (OLCIGI) (1-255). |

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i POVC bit indicator:
N — No
Y — Yes

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYCAMA
VRFYOUT

Translation Guide, 4ESSTM, Division 8, Section 4a

Input Message
VER:CAMASCRN

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:CDB
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:CDB: CDBI a
BN bbbbbbbbbb BNPT [c] DEL d

2. REASON FOR OUTPUT

To display the contents of a Customer Data Block (CDB) indexed by a Customer Data Block Index (CDBI).

3. VARIABLE FIELD DEFINITIONS

- a Customer data block index (1-4095).
- b Billing number (10 digit number).
- c Billing number plan type:
 APN — Action point numbering.
 NANP — North American numbering plan.
- d Delete digits field (0-15).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPPVR4
VRFYCNTL
VRFYCRD
VRFYINPT
VRFYOUT

Translation Guide, 4ESSTM, TG-4, Division 8, Section 6y

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:CDB-ANI
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:CDB: ANI aaaaaaaaaa,

CDBI
bbbb,
.
.
.

2. REASON FOR OUTPUT

To display all customer data block indices (CDBIs) that are assigned to the input automatic number identification (ANI) number.

3. VARIABLE FIELD DEFINITIONS

- a Ten digit number.
- b Customer data block indices (0-4095).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPPVR4
VRFYCNTL
VRFYCRD
VRFYINPT
VRFYOUT

Translation Guide, 4ESSTM, TG-4, Division 8, Section 6v

Input Message
VER:CDB-ANI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:CDB-UNA
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:CDB;OPT(UNA):

CDBI	QTY	SUBTST
a,	b,	[UNA,]

2. REASON FOR OUTPUT

This message verifies Customer Data Blocks (CDBs) that are unassigned and thus available for use.

3. VARIABLE FIELD DEFINITIONS

a	Customer Data Block Index (CDBI). Lists the first CDB that is unassigned (1-4095).
b	Quantity, specifies the number of successive CDBs that are unassigned including and following the CDBI (1-128) .
UNA	Subtranslator status, indicates if the entire subtranslator is unassigned for the CDBI and quantity. If the subtranslator is unassigned, UNA will appear in the field, otherwise the field will be blank.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPPVR4
VRFYCNTL
VRFYINPT
VRFYOUT
VRFYCRD

Translation Guide, 4ESSTM, TG-4, Division 8

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:CDGRP-CCDCON
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:CODEGRP; LIST (OPT, INTL): DOM a,

CALLTYP	CALLDATA	DESEP	GN	GNSC
b,	c,	d,	e,	f,
CCD	LD	NN1	NN2	DCNT
g,	h,	i,	j,	k,

2. REASON FOR OUTPUT

Lists all international codes that point to a specific routing treatment.

3. VARIABLE FIELD DEFINITIONS

- a Domain:
- INTO — International originating call.
- INTT — International transit call.
- b The treatment that these codes have been assigned in translations. See input message APP:CALLTYPE.
- c The treatment given to the group of codes as requested in the input message. See input message APP:CALLTYPE.
- d Destination separation as requested from the assigned classes (1-63).
- e Go/no go. This field is used if the CALLTYP is Go/No Go Screening (GNS). Variables are:
- G — Go.
- N — No go.
- f Go/no go screening class (0-3).
- g Country code. A one- to three-digit entry with each digit having a value of 0-9.
- h Language Digit (LD). Value can be 0-9, B, or C.
- i National Number Part 1 (NN1). One- to 6-digit value, with each character being 0-9, B, or C.

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- j National Number Part 2 (NN2). One- to six-digit value, with each digit being 0-9, B, or C.
- k Acceptable Digit Count (DCNT) (2-14), if applicable.

4. ACTION TO BE TAKEN

- PF Printout follows.
- RL Repeat later.

5. REFERENCES

PIDENT
VRFYOUT

Translation Guide, 4ESSTM, TG-4, Division 8, Section 3n

Input Messages
APP:CALLTYPE
VER:CCDCONV

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:CODEGRP-03
WORK CENTER.. MAC, MOC
GENERIC 4E23 Rel. 3 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

```
VER:CODEGRP;OPT(DIG3),CUR:          DOM aaaa, NTD 3, AC b,

ST1 [cccc,] IDX1 [dddd,] ST2 [eeee,] IDX2 [ffff,]

ABC    CALLTYP      CALLDATA      AD1      AD2    SC    CHI    DESEP    DNST

ggg,   hhh, iiii, jjjj, kkkkkk, llll, mmmm,   nnn, oooooo,
      AD3 pppppppp, ADC   (qq,qq,qq,qq,qq,qq,qq,qq,qq,qq,qq,qq,qq,qq),
                        {r[,r][,r...]|FEATURES ALLOWED: {ICC|PDA}{[, {ICC|PDA}}]}
                        .
                        .
                        .
ggg,   hhh, iiii, jjjj, kkkkkk, llll, mmmm,   nnn, oooooo,
      AD3 pppppppp, ADC   (qq,qq,qq,qq,qq,qq,qq,qq,qq,qq,qq,qq,qq,qq),
                        {r[,r][,r...]|FEATURES ALLOWED: {ICC|PDA}{[, {ICC|PDA}}]}
```

2. REASON FOR OUTPUT

To list the type of routine treatment an ABC code grouping received in response to a verify input message. (This message is a LEC specific version.)

3. VARIABLE FIELD DEFINITIONS

- a Domain identifies a community of interest for this three-digit translation. See input message APP:CALLTYPE.
- b Area code indicator:
 - N — Indicates the ABC digits are office codes, test codes or another non-area codes.
 - Y — Indicates the 3-digit codes (ABC) are area codes.
- c Subsequent digit index type. This is the value associated with the ST1 keyword in the input message. This field is blank if no subsequent digit type was requested with the input message. See input message APP:CALLTYPE.
- d Index value for the subsequent digit type in the ST1 field. The valid range is 0-1022 and it corresponds to the index associated with the IDX1 keyword in the input message. The field is blank if no subsequent digit type and index was requested. See input message APP:CALLTYPE.

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e	Subsequent digit index type. This is the value associated with the ST2 keyword in the input message. This field is blank if no subsequent digit type was requested with the input message. See input message APP:CALLTYPE.
f	Index value for the subsequent digit type in the ST2 field. The valid range is 0-1022 and it corresponds to the index associated with the IDX2 keyword in the input message. The field is blank if no subsequent digit type and index was requested. See input message APP:CALLTYPE.
g	ABC digits. If area code is Y, 200-999; if area code is N, 000-999.
h	Call type. The major category for the disposition of the codes listed in the message. See input message APP:CALLTYPE.
i	Call data. For each CALLTYP, this field identifies the specific code group treatment. See input message APP:CALLTYPE.
j	Additional Data Field 1 (AD1). See input message APP:CALLTYPE.
k	Additional Data Field 2 (AD2). See input message APP:CALLTYPE.
l	Service categories field. See input message APP:CALLTYPE.
m	Call handling instruction field. See input message APP:CALLTYPE.
n	Destination separation. Identifies the destination for traffic flow purposes. See input message APP:CALLTYPE.
o	Dialed number service type. See input message APP:CALLTYPE.
p	Additional Data Field 3 (AD3), used to set feature bit indicator. See input message APP:CALLTYPE.
q	ADC - Acceptable digit counts for the code.
r	Phrases describing any special routing situations for the code: AIN TRIGGER - s AIN/LNP TRIGGER - s LNP TRIGGER - s PROTECTED TO NPA t
s	Decimal number (1-8191).
t	Numbering plan area.
ICC	Interchangeable code.
PDA	Permissive dialing allowed.

4. ACTION TO BE TAKEN

None.

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5. REFERENCES

PIDENTs
VRFYIRTG
VRFYOUT
VRFYRTNG

Translation Guide, 4ESSTM, TG-4, Division 8, Section 3a

Input Messages
APP:CALLTYPE
VER:CODEGRP

SEE PROPRIETARY NOTICE ON COVER PAGE

1. FORMAT

2. REASON FOR OUTPUT

3. VARIABLE FIELD DEFINITIONS

- SEE PROPRIETARY NOTICE ON COVER PAGE

e	Index value for the subsequent digit type in the ST1 field. The valid range is 0-1022 and it corresponds to the index associated with the IDX1 keyword in the input message. The field is blank if no subsequent digit type and index was requested. See input message APP:CALLTYPE.
f	Subsequent digit index type. This is the value associated with the ST2 keyword in the input message. This field is blank if no subsequent digit type was requested with the input message. See input message APP:CALLTYPE.
g	Index value for the subsequent digit type in the ST2 field. The valid range is 0-1022 and it corresponds to the index associated with the IDX2 keyword in the input message. The field is blank if no subsequent digit type and index was requested. See input message APP:CALLTYPE.
h	ABC digits. If area code is Y, 200-999; if area code is N, 000-999.
i	DEF digits. The fourth, fifth, and sixth digits of a series. The number of digits in this field plus the ABC digits equals the number entered in the NTD field.
j	Call type. The major category for the disposition of the codes listed in the message. See input message APP:CALLTYPE.
k	Call data. For each CALLTYP, this field identifies the specific code group treatment. See input message APP:CALLTYPE.
l	Additional Data Field 1 (AD1). See input message APP:CALLTYPE.
m	Additional Data Field 2 (AD2). See input message APP:CALLTYPE.
n	Service categories field. See input message APP:CALLTYPE.
o	Call handling instruction field. See input message APP:CALLTYPE.
p	Destination separation. Identifies the destination for traffic flow purposes. See input message APP:CALLTYPE.
q	Dialed number service type. See input message APP:CALLTYPE.
r	Additional Data Field 3 (AD3), used to set feature bit indicator. See input message APP:CALLTYPE.
s	ADC - Acceptable digit counts for the code.
t	Phrases describing any special routing situations for the code: AIN TRIGGER - u AIN/LNP TRIGGER - u LNP TRIGGER - u PROTECTED TO NPA v
u	Decimal number (1-8191).

SEE PROPRIETARY NOTICE ON COVER PAGE

v	Numbering plan area.
ICC	Interchangeable code.
PDA	Permissive dialing allowed.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYIRTG
VRFYOUT
VRFYRTNG

Translation Guide, 4ESSTM, TG-4, Division 8, Section 3c

Input Messages
APP:CALLTYPE
VER:CODEGRP

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ID VER:CODEGRP-09
WORK CENTER.. MAC, MOC
GENERIC 4E23 Rel. 3 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:CODEGRP;OPT(DIG9),CUR: DOM aaaa, NTD b, AC c,

ST1 [dddd,] IDX1 [eeee,] ST2 [ffff,] IDX2 [gggg,]

ABC hhh, DEF iii,

GHI CALLTYP CALldata AD1 AD2 SC CHI DESEP DNST

jjj, kkk, llllllllllllllllll, mmmm, nnnnnn, oooo, pppp, qqq, rrrrrr,
AD3 ssssssss, ADC (tt,tt,tt,tt,tt,tt,tt,tt,tt,tt,tt,tt,tt,tt,tt),
{u[,u][,u...]|FEATURES ALLOWED: {ICC|PDA}[,{ICC|PDA}]]
.
.
.
jjj, kkk, llllllllllllllllll, mmmm, nnnnnn, oooo, pppp, qqq, rrrrrr,
AD3 ssssssss, ADC (tt,tt,tt,tt,tt,tt,tt,tt,tt,tt,tt,tt,tt,tt,tt),
{u[,u][,u...]|FEATURES ALLOWED: {ICC|PDA}[,{ICC|PDA}]]

2. REASON FOR OUTPUT

To list the type of routing treatment for a seven-, eight-, or nine-digit code grouping in response to a verify input message. (This message is a LEC specific version.)

3. VARIABLE FIELD DEFINITIONS

- a Identifies a community of interest for this 3-digit translation. See input message APP:CALLTYPE.
- b Number of translatable digits.
- c Area code indicator:
 - N — Indicates the ABC digits are office codes, test codes or another non-area codes.
 - Y — Indicates the 3-digit codes (ABC) are area codes.
- d Subsequent digit index type. This is the value associated with the ST1 keyword in the input message. This field is blank if no subsequent digit type was requested with the input message. See input message APP:CALLTYPE.

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- e Index value for the subsequent digit type in the ST1 field. The valid range is 0-1022 and it corresponds to the index associated with the IDX1 keyword in the input message. The field is blank if no subsequent digit type and index was requested. See input message APP:CALLTYPE.
- f Subsequent digit index type. This is the value associated with the ST2 keyword in the input message. This field is blank if no subsequent digit type was requested with the input message. See input message APP:CALLTYPE.
- g Index value for the subsequent digit type in the ST2 field. The valid range is 0-1022 and it corresponds to the index associated with the IDX2 keyword in the input message. The field is blank if no subsequent digit type and index was requested. See input message APP:CALLTYPE.
- h ABC digits. If area code is Y, 200-999; if area code is N, 000-999.
- i DEF digits. The fourth, fifth, and sixth digits of a series.
- j GHI digits. The seventh, eighth, and ninth digits that complete the code group definition (0-999). The number of digits in the ABC, DEF, GHI fields must equal the number entered in the NTD field.
- k Call type. The major category for the disposition of the codes listed in the message. See input message APP:CALLTYPE.
- l Call data. For each CALLTYP this field identifies the specific code group treatment. See input message APP:CALLTYPE.
- m Additional Data Field 1 (AD1). See input message APP:CALLTYPE.
- n Additional Data Field 2 (AD2). See input message APP:CALLTYPE.
- o Service categories field. See input message APP:CALLTYPE.
- p Call handling instruction field. See input message APP:CALLTYPE.
- q Destination separation. Identifies the destination for traffic flow purposes. See input message APP:CALLTYPE.
- r Dialed number service type. See input message APP:CALLTYPE.
- s Additional Data Field 3 (AD3), used to set feature bit indicator. See input message APP:CALLTYPE.
- t ADC - Acceptable digit counts for the code.
- u Phrases describing any special routing situations for the code:
 - AIN TRIGGER - v
 - AIN/LNP TRIGGER - v
 - LNP TRIGGER - v
 - PROTECTED TO NPA w

SEE PROPRIETARY NOTICE ON COVER PAGE

v	Decimal number (1-8191).
w	Numbering plan area.
ICC	Interchangeable code.
PDA	Permissive dialing allowed.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYIRTG
VRFYOUT
VRFYRTNG

Translation Guide, 4ESSTM, TG-4, Division 8, Section 3e

Input Messages
APP:CALLTYPE
VER:CODEGRP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:CODEGRP-12
WORK CENTER.. MAC, MOC
GENERIC 4E23 Rel. 3 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:CODEGRP;OPT(DIG12),CUR: DOM aaaa, NTD bb, AC c,

ST1 [dddd,] IDX1 [eeee,] ST2 [ffff,] IDX2 [gggg,]

ABC hhh, DEF iii, GHI jjj,

JKL CALLTYP CALldata AD1 AD2 SC CHI DESEP DNST

kkk, lll, mmmmmmmmmmmmmmmmmmm, nnnn, oooooo, pppp, qqqq, rrr, ssssss,
AD3 tttttttt, ADC (uu,uu,uu,uu,uu,uu,uu,uu,uu,uu,uu,uu,uu,uu,uu,uu),
{v[,v][,v...]|FEATURES ALLOWED: {ICC|PDA}[,{ICC|PDA}]]
. . .
kkk, lll, mmmmmmmmmmmmmmmmmmm, nnnn, oooooo, pppp, qqqq, rrr, ssssss,
AD3 tttttttt, ADC (uu,uu,uu,uu,uu,uu,uu,uu,uu,uu,uu,uu,uu,uu,uu,uu),
{v[,v][,v...]|FEATURES ALLOWED: {ICC|PDA}[,{ICC|PDA}]]

2. REASON FOR OUTPUT

To list the type of routing treatment for a ten-, eleven-, or twelve-digit code grouping in response to a verify input message. (This message is a LEC specific version.)

3. VARIABLE FIELD DEFINITIONS

- a Identifies a community of interest for this three-digit translation. See input message APP:CALLTYPE.
- b Number of translatable digits.
- c Area code indicator:
 - N — Indicates the ABC digits are office codes, test codes or another non-area codes.
 - Y — Indicates the 3-digit codes (ABC) are area codes.
- d Subsequent digit index type. This is the value associated with the ST1 keyword in the input message. This field is blank if no subsequent digit type was requested with the input message. See input message APP:CALLTYPE.

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e	Index value for the subsequent digit type in the ST1 field. The valid range is 0-1022 and it corresponds to the index associated with the IDX1 keyword in the input message. The field is blank if no subsequent digit type and index was requested. See input message APP:CALLTYPE.
f	Subsequent digit index type. This is the value associated with the ST2 keyword in the input message. This field is blank if no subsequent digit type was requested with the input message. See input message APP:CALLTYPE.
g	Index value for the subsequent digit type in the ST2 field. The valid range is 0-1022 and it corresponds to the index associated with the IDX2 keyword in the input message. The field is blank if no subsequent digit type and index was requested. See input message APP:CALLTYPE.
h	ABC digits. If area code is Y, 200-999; if area code is N, 000-999.
i	DEF digits. The fourth, fifth, and sixth digits of a series.
j	GHI digits. The seventh, eighth, and ninth digits that complete the code group definition (0-999).
k	JKL digits. The tenth, eleventh, and twelfth digits of a series.
l	Call type. The major category for the disposition of the codes listed in the message. See input message APP:CALLTYPE.
m	Call data. For each CALLTYP this field identifies the specific code group treatment. See input message APP:CALLTYPE.
n	Additional Data Field 1 (AD1). See input message APP:CALLTYPE.
o	Additional Data Field 2 (AD2). See input message APP:CALLTYPE.
p	Service categories field. See input message APP:CALLTYPE.
q	Call handling instruction field. See input message APP:CALLTYPE.
r	Destination separation. Identifies the destination for traffic flow purposes. See input message APP:CALLTYPE.
s	Dialed number service type. See input message APP:CALLTYPE.
t	Additional Data Field 3 (AD3), used to set feature bit indicator. See input message APP:CALLTYPE.
u	ADC - Acceptable digit counts for the code.

SEE PROPRIETARY NOTICE ON COVER PAGE

v	Phrases describing any special routing situations for the code: AIN TRIGGER - w AIN/LNP TRIGGER - w LNP TRIGGER - w PROTECTED TO NPA x
w	Decimal number (1-8191).
x	Numbering plan area.
ICC	Interchangeable code.
PDA	Permissive dialing allowed.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYIRTG
VRFYOUT
VRFYRTNG

Translation Guide, 4ESSTM, TG-4, Division 8, Section 3v

Input Messages
APP:CALLTYPE
VER:CODEGRP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:CODEGRP-ALL
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

```
VER:CODEGRP;LIST;OPT(ALL):      DOM aaaa,  AC b,

CALLTYP      CALLDATA  AD1      AD2      SC      CHI      DESEP      DNST
ccc,         dddddddddd, eeee,   ffffff,   gggg,   hhhh,   iii,      jjjjjj,

AD3 kkkkkkkk,
ABC      DEF      GHI      JKL      SDX TYPE AND INDEX
lll,     mmm,     nnn,     ooo,     ([pppp qqqq] . . . [pppp qqqq])
.
.
.
lll,     mmm,     nnn,     ooo,     ([pppp qqqq] . . . [pppp qqqq])
```

2. REASON FOR OUTPUT

To list the full routing and index values for a requested codelist message with the ALL keyword.

3. VARIABLE FIELD DEFINITIONS

- a Domain field. See input message APP:CALLTYPE.
- b Area code indicator:
 - N — Indicates the ABC digits are office codes, test codes or another non-area codes.
 - Y — Indicates the 3-digit codes (ABC) are area codes.
- c Call type field. See input message APP:CALLTYPE.
- d Call data field. See input message APP:CALLTYPE.
- e Additional Data Field 1 (AD1). See input message APP:CALLTYPE.
- f Additional Data Field 2 (AD2). See input message APP:CALLTYPE.
- g Service categories field. See input message APP:CALLTYPE.
- h Call handling instruction field. See input message APP:CALLTYPE.
- i Destination separation field. See input message APP:CALLTYPE.
- j Dialed number service type. See input message APP:CALLTYPE.
- k Additional Data Field 3 (AD3), used to set feature bit indicator. See input message APP:CALLTYPE.

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l	ABC digits.
m	DEF digits.
n	GHI digits.
o	JKL digits.
p	Subsequent Digit Index (SDX) type (MTSC, RSI, etc.). See input message APP:CALLTYPE.
q	SDX index (numeric). See input message APP:CALLTYPE.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYINPT
VRFYOUT
VRFYRTNG

Translation Guide, 4ESSTM, TG-4, Division 8, Section 3ab

Input Messages
APP:CALLTYPE
VER:CODELIST

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:CODEGRP-CC
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:CODEGRP;OPT(CCD),CUR: DOM aaaa, NTD bb,

ST1 c, IDX1 ddd, ST2 e, IDX2 fff, DCNT gg,

CCD CALLTYP CALldata AD1 AD2 SC CHI DESEP
hhh, iiii, jjjj, kkkk, lll, mmmm, nnnn, ooo,
AD3 pppppppp, ADC (qq, . . . qq),
. . .
hhh, iiii, jjjj, kkkk, lll, mmmm, nnnn, ooo,
AD3 pppppppp, ADC (qq, . . . qq),

2. REASON FOR OUTPUT

To display the routing treatment for the country code digits specified on the input message.

3. VARIABLE FIELD DEFINITIONS

- a Translation domain:
INTO — Originating international call.
INTT — Transit call through the Incoming Signaling Characteristics (ISC).
- b Number of translatable digits (1-3).
- c Subsequent Digit Index (SDX) type (MTSC, RSI, etc.) of ST1 field of input message. See input message APP:CALLTYPE.
- d Index of IDX1 field of input message. See input message APP:CALLTYPE.
- e SDX type (MTSC, RSI, etc.) of ST2 field of input message. See input message APP:CALLTYPE.
- f Index of IDX2 field of input message. See input message APP:CALLTYPE.
- g DCNT - Digit count (2-14).
- h Country code digits (1-3 digits).
- i Call type. The major category for the disposition of the codes listed in the message. See input message APP:CALLTYPE.

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j	Call data. For each CALLTYP, this field identifies the specific code group treatment. See input message APP:CALLTYPE.
k	Additional Data Field 1 (AD1). See input message APP:CALLTYPE.
l	Additional Data Field 2 (AD2). See input message APP:CALLTYPE.
m	Service categories field. See input message APP:CALLTYPE.
n	Call handling instruction field. See input message APP:CALLTYPE.
o	Destination separation. Identifies the destination for traffic flow purposes. See input message APP:CALLTYPE.
p	Additional Data Field 3 (AD3), used to set feature bit indicator. See input message APP:CALLTYPE.
q	Acceptable Digit Count (ADC) field (2-14).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYIRTG
VRFYOUT
VRFYRTNG

Translation Guide, 4ESSTM, Division 8, Section 3i

Input Messages
APP:CALLTYPE
VER:CODEGRP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:CODEGRP-CCD
WORK CENTER.. MAC, MOC
GENERIC 4E24 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:CODEGRP;OPT(CCDCONV);a:
ABC CCD LD CBONLY FAXPR CCID CCCNT SCLB RESELL CCRF
b c d e f g h i j k

2. REASON FOR OUTPUT

To list the entries in table HT4CCONV that are indexed by the specified ABC digits. This message also displays data for the assigned country code or pseudo country code digits.

3. VARIABLE FIELD DEFINITIONS

- a Status of ABC digit:
CUR — Current.
INA — Inactive.
- b ABC digit entry (000-999).
- c One, two, or three-digit number (1-999). A one or two-digit number will contain leading zeroes.
- d Language digit (0-9).
- e Routing restriction:
N — Not cable only.
Y — Cable only.
- f Foreign Auxiliary Parameter (FAXPR) indicator:
N — Network Routing Number (NRN) Database transition is not complete.
Y — NRN Database transition is complete.
- g Type of country code:
CCD — Country code.
PCCD — Pseudo-country code.
- h Country code count 1, 2, or 3.
- i Suppress clear-back indicator:
N — Does not suppress clear-back.
Y — Suppress clear-back.

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- j Circuit Identification Code (CIC) resell indicator:
- N — Not allowed.
- Y — Allowed.
- k Carrier Completion Rate Feature (CCRF) indicator:
- N — CCRF is inactive.
- Y — CCRF is active.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
VRFYOUT

Translation Guide, 4ESSTM, TG-4, Division 8, Section 3m

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:CODEGRP-CCDA
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:CODEGRP;OPT(CCDADC):CUR, CCD aaa,
ADC bb,bb,bb,bb,bb,bb,bb,bb,bb,bb,bb,bb,bb,

2. REASON FOR OUTPUT

To display the acceptable digit count for the input country code digit.

3. VARIABLE FIELD DEFINITIONS

a Country code digit.
b Acceptable digit count (2-14).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPIMC4
IOCPMCP4
IOCPPVR4
VRFYCNTL
VRFYINPT
VRFYIRTG
VRFYOUT

Translation Guide, 4ESSTM, TG-4, Division 8, Section 3p

Input Message
VER:CCDADC

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:CODEGRP-D03
 WORK CENTER.. MAC, MOC
 GENERIC 4E19 and later
 APPLICATION .. 4E
 TYPE Output

1. FORMAT

VER:CODEGRP;LIST;OPT(DIG3): DOM a, NTD 3, AC b,

CALLTYP	CALLDATA	AD1	AD2	SC	CHI	DESEP	DNST
c,	d,	e,	f,	g,	h,	i,	j,
AD3 k,							
ABC	ABC	ABC	ABC	ABC	ABC	ABC	ABC
l,	l,	l,	l,	l,	l,	l,	l,

2. REASON FOR OUTPUT

To verify all three-digit code groups that use the same treatment that is specified on the input message.

3. VARIABLE FIELD DEFINITIONS

- | | |
|-------|---|
| a | Domains. See input message APP:CALLTYPE. |
| NTD 3 | Number of translated digits - This message will always indicate 3. |
| b | Area code indicator: |
| | N — Indicates the ABC digits are office codes, test codes or another non-area codes. |
| | Y — Indicates the 3-digit codes (ABC) are area codes. |
| c | The call type defines the treatment that these codes have been assigned in translations. See input message APP:CALLTYPE. |
| d | The CALldata further defines the treatment given to the group of codes as requested in the input message. See input message APP:CALLTYPE. |
| e | Additional Data Field 1 (AD1). See input message APP:CALLTYPE. |
| f | Additional Data Field 2 (AD2). See input message APP:CALLTYPE. |
| g | Service category. See input message APP:CALLTYPE. |
| h | Call handling instruction. See input message APP:CALLTYPE. |
| i | Destination separation as requested from the assigned classes(1-255). See input message APP:CALLTYPE. |
| j | Dialed number service type. See input message APP:CALLTYPE. |
| k | Additional Data Field 3 (AD3), used to set feature bit indicator. See input message APP:CALLTYPE. |

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1 These are the first three digits in a set of digits. This code group may consist of three-digit combinations (000-999).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPPVR4
VRFYIRTG
VRFYOUT
VRFYRTNG

Translation Guide, 4ESSTM, TG-4, Division 8, Section 3b

Input Message
APP:CALLTYPE

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:CODEGRP-D06
 WORK CENTER.. MAC, MOC
 GENERIC 4E19 and later
 APPLICATION .. 4E
 TYPE Output

1. FORMAT

VER:CODEGRP;LIST;OPT(DIG6): DOM a, NTD b, AC c,
 ABC d,

CALLTYP	CALLDATA	AD1	AD2	SC	CHI	DESEP	DNST
e,	f,	g,	h,	i,	j,	k,	l,

AD3 m,
 DEF DEF DEF DEF DEF DEF DEF DEF
 n, n, n, n, n, n, n, n,

2. REASON FOR OUTPUT

To verify all four-, five- or six-digit code groups that use the same treatment specified in the input message.

3. VARIABLE FIELD DEFINITIONS

- a Domains. See input message APP:CALLTYPE.
- b Number of translated digits. This field specifies the number of digits translated. This number may be 4, 5 or 6. The first 3 digits of the dialed address are listed under the ABC field.
- c Area code indicator:
 N — Indicates the ABC digits are office codes, test codes or another non-area codes.
 Y — Indicates the 3-digit codes (ABC) are area codes.
- d These are the first three digits in a set of digits. This code group may consist of three digit combinations (000-999).
- e The CALLTYP lists the treatment assigned to these calls as assigned in translations. See input message APP:CALLTYPE.
- f This field further defines the treatment given to this group of codes. See input message APP:CALLTYPE.
- g Additional Data Field 1 (AD1). See input message APP:CALLTYPE.
- h Additional Data Field 2 (AD2). See input message APP:CALLTYPE.
- i Service category. See input message APP:CALLTYPE.
- j Call handling instruction. See input message APP:CALLTYPE.

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k	Destination separation, as requested, from the assigned classes (1-255). See input message APP:CALLTYPE.
l	Dialed number service type. See input message APP:CALLTYPE.
m	Additional Data Field 3 (AD3), used to set feature bit indicator. See input message APP:CALLTYPE.
n	These fields list the 4, 5 and 6 (DEF) digits that complete the code group definition (0-999). This field can contain one, two, or three digits.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPPVR4
VRFYIRTG
VRFYOUT
VRFYRTNG

Translation Guide, 4ESSTM, TG-4, Division 8, Section 3d

Input Message
APP:CALLTYPE

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:CODEGRP-D09
 WORK CENTER.. MAC, MOC
 GENERIC 4E19 and later
 APPLICATION .. 4E
 TYPE Output

1. FORMAT

VER:CODEGRP;LIST;OPT(DIG9): DOM a, NTD b, AC c,
 ABC d, DEF e,

CALLTYP	CALLDATA	AD1	AD2	SC	CHI	DESEP	DNST
f,	g,	h,	i,	j,	k,	l,	m,

AD3 n,
 GHI GHI GHI GHI GHI GHI GHI GHI
 o, o, o, o, o, o, o, o,

2. REASON FOR OUTPUT

To verify all seven-, eight- or nine-digit code groups that use the same treatment specified in the input message.

3. VARIABLE FIELD DEFINITIONS

- a Domains. See input message APP:CALLTYPE.
- b This field specifies the number of digits translated. This number may be 7, 8 or 9. The first six digits are listed under ABC and DEF.
- c Area code indicator:
 N — Indicates the ABC digits are office codes, test codes or another non-area codes.
 Y — Indicates the 3-digit codes (ABC) are area codes.
- d These are the first three digits in a set of digits. This code group may consist of three digit combinations (000-999).
- e This field indicates the fourth (D), fifth (E) and sixth (F) digit of the series of digits for this code group.
- f The CALLTYP lists the treatment assigned to these codes in translation. See input message APP:CALLTYPE.
- g This field further defines the treatment given to the group of codes requested in the input message. See input message APP:CALLTYPE.
- h Additional Data Field 1 (AD1). See input message APP:CALLTYPE.
- i Additional Data Field 2 (AD2). See input message APP:CALLTYPE.
- j Service category. See input message APP:CALLTYPE.

SEE PROPRIETARY NOTICE ON COVER PAGE

k	Call handling instruction. See input message APP:CALLTYPE.
l	Destination separation, as requested, from the assigned classes (1-255). See input message APP:CALLTYPE.
m	Dialed number service type. See input message APP:CALLTYPE.
n	Additional Data Field 3 (AD3), used to set feature bit indicator. See input message APP:CALLTYPE.
o	These fields list the 7, 8 and 9 (GHI) digits that complete the code group definition (0-999). Field can contain one, two, or three digits.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPPVR4
VRFYIRTG
VRFYOUT
VRFYRTNG

Translation Guide, 4ESSTM, Division 8, Section 3f

Input Message
APP:CALLTYPE

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:CODEGRP-D12
 WORK CENTER.. MAC, MOC
 GENERIC 4E19 and later
 APPLICATION .. 4E
 TYPE Output

1. FORMAT

VER:CODEGRP;LIST;OPT(DIG12): DOM a, NTD b, AC c,
 ABC d, DEF e, GHI f,

CALLTYP	CALLDATA	AD1	AD2	SC	CHI	DESEP	DNST
g,	h,	i,	j,	k,	l,	m,	n,
AD3 o,							
JKL	JKL	JKL	JKL	JKL	JKL	JKL	JKL
p,	p,	p,	p,	p,	p,	p,	p,

2. REASON FOR OUTPUT

To verify all 10, 11, or 12-digit code groups that use the same treatment specified on the input message.

3. VARIABLE FIELD DEFINITIONS

- a Domains. See input message APP:CALLTYPE.
- b Number of translatable digits. May be 10, 11 or 12. The first 9 digits are listed under ABC, DEF and GHI.
- c Area code indicator:
 N — Indicates the ABC digits are office codes, test codes or another non-area codes.
 Y — Indicates the 3-digit codes (ABC) are area codes.
- d ABC digits (000-999).
- e DEF digits (000-999).
- f GHI digits (000-999).
- g Call type. Lists the treatment assigned to the codes in translation. See input message APP:CALLTYPE.
- h Call data. Further defines the treatment assigned to the codes in translation. See input message APP:CALLTYPE.
- i Additional Data Field 1 (AD1). See input message APP:CALLTYPE.
- j Additional Data Field 2 (AD2). See input message APP:CALLTYPE.
- k Service Categories (SC). See input message APP:CALLTYPE.
- l Call Handling Instruction (CHI). See input message APP:CALLTYPE.

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m	Destination separation (1 - 255). See input message APP:CALLTYPE.
n	Dialed number service type. See input message APP:CALLTYPE.
o	Additional Data Field 3 (AD3), used to set feature bit indicator. See input message APP:CALLTYPE.
p	Digits that complete the code group definition (0-999). One, two or three digits.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPPVR4
VRFYIRTG
VRFYOUT
VRFYRTNG

Translation Guide, 4ESSTM, TG-4, Division 8, Section 3w

Input Messages
APP:CALLTYPE
VER:CODELIST

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:CODEGRP-DIGT
WORK CENTER.. MAC, MOC
GENERIC 4E21 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:CODEGRP;OPT(DIGTYP), [CUR]

DIGTYP a, RDIG [b],
DIG DIG DIG DIG DIG DIG DIG DIG

CCC, CCC, CCC, CCC, CCC, CCC, CCC, CCC,
•
•
•

2. REASON FOR OUTPUT

Displays the 3-digit-type translator.

3. VARIABLE FIELD DEFINITIONS

CUR	Indicates the data currently resides in the translation area.
a	Three digit type: BNPA, DEF1, DEF2, DEF3, DEF4, DP3, DP6, DT1-DT17, FCID, I809, IIA, IIC, IN0, INT, IRS, ITS, IWZ1, NPAG, NRA, NRN, NRNX, SSSG, UTC, WZ1A.
b	01R Digit (0-9).
c	3 Digit Codes (000-999).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPMCP4
IOCPPVR4
VRFYINPT
VRFYORTG
VRFYRTNG

Translation Guide, 4ESSTM, TG-4, Division 8, Section 3h

Input Message
VER:CODEGRP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:CODEGRP-EAR
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:CODEGRP;OPT(EAR):

PRIMNUM	PRIMDOM	ALTNUM	AC/DEAC
aaaaaaaaaa,	bbbb,	cccccccccc,	dddd,
.			
.			

2. REASON FOR OUTPUT

To request verification of the Emergency Alternate Routings (EARs) contained in the translators.

3. VARIABLE FIELD DEFINITIONS

- a Primary number, a 7 or 10-digit number.
- b Primary domain: DEC0, DEC1, DEC6, DED, DER0, DER1, DER6, DEV, INCD, N64C, N64R, NH0C, NH1C, NONPOTS (20-80,82,83), POTS, SDNA, SF00-SF39.
- c Alternate number, a 7 or 10-digit number.
- d Status:
 - AC — Active.
 - DEAC — Deactive.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPIMC4
IOCPMCP4
IOCPPVR4
VRFYCNTL
VRFYINPT
VRFYOUT
VRFYRTNG

Translation Guide, 4ESSTM, TG-4, Division 8, Section 3q

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4ESS
OM-4B000-01

VER:CODEGRP;OPT(EAR)

Input Message
VER:CODEGRP-[unit]

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VER:CODEGRP-EAR-2

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ID VER:CODEGRP-INTL
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:CODEGRP;LIST;OPT(INTL): DOM a,

CALLTYP CALLDATA AD1 AD2 SC CHI DESEP
 b, c, d, e, f, g, h,

AD3 i,
CCD LD NN1 NN2 DIGIT COUNT/SDX TYPE AND INDEX
 j, [k], l, m, ([n 000] . . . [n 000])

2. REASON FOR OUTPUT

To verify all International (INTL) CODEGROUPs that use the same treatment that was specified in the input message.

3. VARIABLE FIELD DEFINITIONS

- a Direct Distance Dialing (DDD) domains are represented by INTL or International Originating Call (INTO).
- b The CALLTYP lists the treatment assigned to these calls as assigned in translations. See input message APP:CALLTYPE.
- c This field defines the treatment given to this group of codes. See input message APP:CALLTYPE.
- d Additional Data Field 1 (AD1). See input message APP:CALLTYPE.
- e Additional Data Field 2 (AD2). See input message APP:CALLTYPE.
- f Service category. See input message APP:CALLTYPE.
- g Call handling instruction. See input message APP:CALLTYPE.
- h Destination separation. See input message APP:CALLTYPE.
- i Additional Data Field 3 (AD3), used to set feature bit indicator. See input message APP:CALLTYPE.
- j Country Code Digit (CCD) field (0-999).
- k Language Digit (LD) field (blank or 0-9).
- l National Number Part 1 (NN1) field, 1 to 6-digits (0-9, B, C).
- m National Number Part 2 (NN2) field, 1 to 6-digits (0-9, B, C).
- n Digit Count (DCNT) or Subsequent Digit Index (SDX) type (MTSC, RSI, etc.). See input message APP:CALLTYPE.

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0 Digit count or SDX index (numeric). See input message
APP:CALLTYPE.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYIRTG
VRFYOUT
VRFYRTNG

Translation Guide, 4ESSTM, TG-4, Division 8, Section 3n

Input Message
APP:CALLTYPE

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:CODEGRP-LD
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

```
VER:CODEGRP;OPT(LD),CUR:    DOM aaaa, NTD bb,

ST1 c, IDX1 ddd, ST2 e, IDX2 fff, DCNT gg, CCD hhh,

LD    CALLTYP  CALLDATA  AD1   AD2   SC    CHI    DESEP
i,    jjjj,    kkkk,    llll,  mmm,  nnnn,  oooo,    ppp,
      AD3 qqqqqqqq, ADC      ([r, . . . r]),
.
.
.
i,    jjjj,    kkkk,    llll,  mmm,  nnnn,  oooo,    ppp,
      AD3 qqqqqqqq, ADC      ([r, . . . r]),
```

2. REASON FOR OUTPUT

To display the routing treatment for an international call for the country code and language digits specified in the input message.

3. VARIABLE FIELD DEFINITIONS

- a Translation domain, transit call through the Incoming Signaling Characteristics (ISC):
INTO
INTT
- b Number of translatable digits (2-4).
- c Subsequent Digit Index (SDX) type (MTSC, RSI, etc.) of ST1 field of input message.
- d Index of IDX1 field of input message.
- e SDX type (MTSC, RSI, etc.) of ST2 field of input message.
- f Index of IDX2 field of input message.
- g Digit Count (DCNT).
- h Country code digits (0-999).
- i Language digit (0-9) indicating the type of call, 1 digit.
- j Call type. The major category for the disposition of the codes listed in the message. See input message APP:CALLTYPE.

SEE PROPRIETARY NOTICE ON COVER PAGE

k	Call data. For each CALLTYP, this field identifies the specific code group treatment. See input message APP:CALLTYPE.
l	Additional Data Field 1 (AD1). See input message APP:CALLTYPE.
m	Additional Data Field 2 (AD2). See input message APP:CALLTYPE.
n	Service categories field. See input message APP:CALLTYPE.
o	Call handling instruction field. See input message APP:CALLTYPE.
p	Destination separation. Identifies the destination for traffic flow purposes. See input message APP:CALLTYPE.
q	Additional Data Field 3 (AD3), used to set feature bit indicator. See input message APP:CALLTYPE.
r	Acceptable Digit Count (ADC) field (blank or 2-15).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYIRTG
VRFYOUT
VRFYRTNG

Translation Guide, 4ESSTM, Division 8, Section 3j

Input Messages
APP:CALLTYPE
VER:CODEGRP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:CODEGRP-LPLU
WORK CENTER.. MAC, MOC
GENERIC 4E19 Rel. 2 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:CODEGRP;LIST;OPT(PLU): DOM a, AC b,
SHARED c, ABC d, DEF [e],

CALLTYP	CALLDATA	AD1	AD2	SC	CHI	DESEP	DNST
f,	g,	h,	i,	j,	k,	l,	m,

AD3 n,

DEFG	DEFG	DEFG	DEFG	DEFG	DEFG	DEFG	DEFG
GHIJ	GHIJ	GHIJ	GHIJ	GHIJ	GHIJ	GHIJ	GHIJ
MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
o,	p,	o,	p,	o,	p,	o,	p,

2. REASON FOR OUTPUT

To verify all seven or ten digit Positive Look Up (PLU) numbers that use the same treatment specified in the input message.

3. VARIABLE FIELD DEFINITIONS

- a Domains. See input message APP:CALLTYPE.
- b Area code indicator:
 - N — Indicates the ABC digits are office codes, test codes or another non-area codes.
 - Y — Indicates the 3-digit codes (ABC) are area codes.
- c Indicates if ABC digits (7-digit PLU) or ABC DEF digits (10-digit PLU) are shared:
 - N — Not shared.
 - Y — Shared.
- d These are the first three digits in a set of digits (000-999).
- e This field contains the fourth (D), fifth (E) and sixth (F) digits of the series of digits for a 10-digit PLU number. Left blank if a 7-digit PLU number (000-999).
- f The CALLTYP lists the treatment assigned to these codes in translation. See input message APP:CALLTYPE.
- g This field further defines the treatment given to the group of codes requested in the input message. See input message APP:CALLTYPE.

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h	Additional Data Field 1 (AD1). See input message APP:CALLTYPE.
i	Additional Data Field 2 (AD2). See input message APP:CALLTYPE.
j	Service category. See input message APP:CALLTYPE.
k	Call handling instruction. See input message APP:CALLTYPE.
l	Destination separation, as requested, from the assigned classes (1-255). See input message APP:CALLTYPE.
m	Dialed number service type. See input message APP:CALLTYPE.
n	Additional Data Field 3 (AD3), used to set feature bit indicator. See input message APP:CALLTYPE.
o, p	A given set of variable o and p gives the minimum and maximum, respectively, values for a range of PLU line numbers. For 7-digit PLU numbers, these are the DEFG digits (the DEF field in the message heading is left blank). For 10-digit PLU numbers, these are the GHIJ digits (0000-9999).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPPVR4
VRFYIRTG
VRFYOUT
VRFYRTNG

Translation Guide, 4ESSTM, Division 8, Section 3al

Input Message
APP:CALLTYPE

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:CODEGRP-LSDX
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:CODEGRP;LIST;OPT(SDX):

CALLTYP	CALLDATA	AD1	AD2	SC	CHI	DESEP	DNST
aaa,	bbbbbbbbbbbbbbbbbb,	cccc,	ddd,	eeee,	ffff,	ggg,	hhhhh,

AD3 iiiiii,		
SDINDEX	SIZE	ORIGIN
jjjjj,	k,	llll,
.	.	.
.	.	.
.	.	.

2. REASON FOR OUTPUT

To display subsequent digit indexes that contain a particular treatment.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | Call type. Lists the treatment assigned to the subsequent digit indexes in translations. See input message APP:CALLTYPE. |
| b | This field further defines the treatment given to the subsequent digit indexes in the input message. See input message APP:CALLTYPE. |
| c | Additional Data Field 1 (AD1). See input message APP:CALLTYPE. |
| d | Additional Data Field 2 (AD2). See input message APP:CALLTYPE. |
| e | Service category. See input message APP:CALLTYPE. |
| f | Call handling instruction. See input message APP:CALLTYPE. |
| g | Destination separation. See input message APP:CALLTYPE. |
| h | Dialed number service type. See input message APP:CALLTYPE. |
| i | Additional Data Field 3 (AD3), used to set feature bit indicator. See input message APP:CALLTYPE. |
| j | Subsequent digit routing index. Identifies a subsequent digit entry which contains the specified treatment (0-16383). |
| k | The SIZE of the subsequent digit entry (1-3). |

SEE PROPRIETARY NOTICE ON COVER PAGE

l Identifies whether the subsequent digit entry was created automatically by the system, or manually via form input:

AUTO — Automatic

MAN — Manual

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPIMC4
IOCPMCP4
IOCPPVR4
VRFYCNTL
VRFYINPT
VRFYOUT
VRFYRTNG

Translation Guide, 4ESSTM, TG-4, Division 8, Section 3z

Input Messages
APP:CALLTYPE
VER:SDLIST

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:CODEGRP-MCT
WORK CENTER.. MAC, MOC
GENERIC 4E24 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:CODEGRP;OPT(MCT):

MCTI a, DOMCLASS b,

FAI	MCT PERCENT	CALL TYP	CALLDATA	AD1	AD2	OFAI
c,	d.d,	e,	f,	[g],	h,	[i[,i][,i][,i][,i][,i]]
.	.	.	.	.	.	.
.	.	.	.	.	.	.
.	.	.	.	.	.	.

2. REASON FOR OUTPUT

To display the characteristics of Multiple Carrier Treatment (MCT).

3. VARIABLE FIELD DEFINITIONS

- a Multiple carrier treatment index (1-255).
- b Domain class: APN, DOM, GSDN, INTL, ITRP.
- c Foreign Administration Identification (FAI) (1-31). Each carrier is assigned a FAI.
- d Multiple carrier treatment percent (0.0-100.0).
- e Call type: DSN, MRT, PRT, RDB.
- f Call data:
DSN — 1-167
MRT — 1-8191
PRT — 1-127
RDB — 1-8191
- g Additional Data Field 1 (AD1):
blank
0-7
INH
- h Additional Data Field 2 (AD2): OP0-OP7
- i Overflow foreign administration Identification (ID) (1-31).

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPIMC4
IOCPPVR4
VRFYCNTL
VRFYINPT
VRFYOUT
VRFYRTNG

Translation Guide, 4ESSTM, TG-4, Division 8, Section 3ac

Input Message
VER:CODEGRP-MCTI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:CODEGRP-MRT
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:CODEGRP;OPT(MRT): MRTI aaaa, DOMCLASS bbbb, MRTFHT [cccc]

PERCENT	ERC	CALLTYP	CALLDATA	AD1	AD2
ddd,	e,	fff,	ggggggggggggggggggggg,	[hhhh],	iii,
.	.	.	.	.	.
.	.	.	.	.	.
.	.	.	.	.	.

2. REASON FOR OUTPUT

To output a multiple routing treatment block.

3. VARIABLE FIELD DEFINITIONS

- a Multiple treatment index (0-8191).
- b Domain class: APN, DOM, INTL, ITRP.
- c Final handling treatment: blank, AR, BT, DNN, D00, E01-E20, EA1-EA7, HW, I01-I30, IFF, INC, INF, ISB, IVC, LDV, LOB, LSA, MCA, NCA, NCB, NCC, NCD, NWC, NWN, OOA, OOB, OTS, R01-R10, ROA, S01-S19, SNA, SP1, SP2, ST0, T, TDN, UNN, VCA, VMA, WAT.
- d Percent: 0-100.
- e Egress routing class (1-3).
- f Call type: DSN, PRT, RDB, RNR, SSP.
- g Call data. See input message APP:CALLTYPE.
- h Additional Data Field 1 (AD1): blank or 0-31.
- i Additional Data Field 2 (AD2): 0P0-0P7.

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
IOCPMCP4
IOCPPVR4
VRFYINPT
VRFYOUT
VRFYRTNG

Translation Guide, 4ESSTM, TG-4, Division 8, Section 3o

Input Messages
APP:CALLTYPE
VER:CODEGRP-MRTI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:CODEGRP-N1
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:CODEGRP;OPT(NN1),CUR: DOM aaaa, NTD bb,

ST1 c, IDX1 ddd, ST2 e, IDX2 fff, DCNT gg,
CCD hhh, LD i,

NN1 CALLTYP CALLDATA AD1 AD2 SC CHI DESEP
jjjjjj, kkk, llll, mmmm, nnn, oooo, pppp, qqq,
 AD3 rrrrrrrr, ADC ([ss,ss]),
.
.
.
jjjjjj, kkk, llll, mmmm, nnn, oooo, pppp, qqq,
 AD3 rrrrrrrr, ADC ([ss,ss]),

2. REASON FOR OUTPUT

To display the routing treatment for the country code, language digit, and national number part 1 digits specified on the input message.

3. VARIABLE FIELD DEFINITIONS

- a Translation domain:
 INTO — Originating international call.
 INTT — Transit call through the Incoming Signaling Characteristics (ISC).
- b Number of translatable digits (2-10).
- c Subsequent Digit Index (SDX) type (MTSC, RSI, etc.) of ST1 field of input message. See input message APP:CALLTYPE.
- d Index of IDX1 field of input message. See input message APP:CALLTYPE.
- e SDX type (MTSC, RSI, etc.) of ST2 field of input message. See input message APP:CALLTYPE.
- f Index of IDX2 field of input message. See input message APP:CALLTYPE.
- g Digit Count (DCNT) (2-15).
- h One to three-digit country code (0-9).

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i	Language digit (0-9).
j	One- to six-digit national number part 1 (0-9, B, C).
k	Call type. The major category for the disposition of the codes listed in the message. See input message APP:CALLTYPE.
l	Call data. For each CALLTYP, this field identifies the specific code group treatment. See input message APP:CALLTYPE.
m	Additional Data Field 1 (AD1). See input message APP:CALLTYPE.
n	Additional Data Field 2 (AD2). See input message APP:CALLTYPE.
o	Service categories field. See input message APP:CALLTYPE.
p	Call handling instruction field. See input message APP:CALLTYPE.
q	Destination separation. Identifies the destination for traffic flow purposes. See input message APP:CALLTYPE.
r	Additional Data Field 3 (AD3), used to set feature bit indicator. See input message APP:CALLTYPE.
s	Acceptable Digit Count (ADC) field (blank or 2-15).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYIRTG
VRFYOUT
VRFYRTNG

Translation Guide, 4ESSTM, Division 8, Section 3k

Input Messages
APP:CALLTYPE
VER:CODEGRP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:CODEGRP-N2
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:CODEGRP;OPT(NN2),CUR: DOM aaaa, NTD [bb],

ST1 c, IDX1 ddd, ST2 e, IDX2 fff, DCNT gg,
CCD hhh, LD i, NN1 jjjjjj,

NN2 CALLTYP CALLDATA AD1 AD2 SC CHI DESEP
kkkkkk, lll, mmmm, nnnn, ooo, pppp, qqqq, rrr,
AD3 tttttttt, ADC ([tt, . . . tt]),
.
.
kkkkkk, lll, mmmm, nnnn, ooo, pppp, qqqq, rrr,
AD3 tttttttt, ADC ([tt, . . . tt]),

2. REASON FOR OUTPUT

To display the routing treatment for the country code, language digit, national number part 1, and the national number part 2 digits specified in the input message.

3. VARIABLE FIELD DEFINITIONS

- a Translation domain:
INTO — Originating international call.
INTT — Transit call through the Incoming Signaling Characteristic (ISC).
- b Number of translatable digits (blank or 3-14).
- c Subsequent Digit Index (SDX) type (MTSC, RSI, etc.) of ST1 field of input message. See input message APP:CALLTYPE.
- d Index of IDX1 field of input message. See input message APP:CALLTYPE.
- e SDX type (MTSC, RSI, etc.) of ST2 field of input message. See input message APP:CALLTYPE.
- f Index of IDX2 field of input message. See input message APP:CALLTYPE.
- g Digit Count (DCNT) (3-15).
- h One to three-digit country code (0-9).
- i Language digit (0-9).

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j	One- to six-digit national number part 1 digits (0-9, B, C).
k	One- to six-digit national number part 2 digits (0-9, B, C).
l	Call type. The major category for the disposition of the codes listed in the message. See input message APP:CALLTYPE.
m	Call data. For each CALLTYP, this field identifies the specific code group treatment. See input message APP:CALLTYPE.
n	Additional Data Field 1 (AD1). See input message APP:CALLTYPE.
o	Additional Data Field 2 (AD2). See input message APP:CALLTYPE.
p	Service categories field. See input message APP:CALLTYPE.
q	Call handling instruction field. See input message APP:CALLTYPE.
r	Destination separation. Identifies the destination for traffic flow purposes. See input message APP:CALLTYPE.
s	Additional Data Field 3 (AD3), used to set feature bit indicator. See input message APP:CALLTYPE.
t	Acceptable Digit Count (ADC) field (blank or 3-15).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYIRTG
VRFYOUT
VRFYRTNG

Translation Guide, 4ESSTM, Division 8, Section 3l

Input Messages
APP:CALLTYPE
VER:CODEGRP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:CODEGRP-PLU
WORK CENTER.. MAC, MOC
GENERIC 4E19 Rel. 2 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:CODEGRP;OPT(PLU): DOM aaaa, AC b,

ST1 [cccc,] IDX1 [dddd,] ST2 [eeee,] IDX2 [ffff,]

SHARED g, ABC hhh, DEF [iii,]

DEFG DEFG
GHIJ GHIJ CALLTYP CALLDATA AD1 AD2 SC CHI DESEP DNST
MIN MAX

jjjj, kkkk, lll, mmmmmmmmmmmmmmmmmmm, nnnn, oooooo, pppp, qqqq, rrr, sss,
AD3 tttttttt,
.
.
.
jjjj, kkkk, lll, mmmmmmmmmmmmmmmmmmm, nnnn, oooooo, pppp, qqqq, rrr, sss,
AD3 tttttttt,

2. REASON FOR OUTPUT

To list the type of routine treatment an ABC code grouping received in response to a verify input message.

3. VARIABLE FIELD DEFINITIONS

- a Domain identifies a community of interest for this three-digit translation. See input message APP:CALLTYPE.
- b Area code indicator:
 - N — Indicates the ABC digits are office codes, test codes or another non-area codes.
 - Y — Indicates the 3-digit codes (ABC) are area codes.
- c Subsequent digit index type. This is the value associated with the ST1 keyword in the input message. This field is blank if no subsequent digit type was requested with the input message. See input message APP:CALLTYPE.
- d Index value for the subsequent digit type in the ST1 field. The valid range is 0-1022 and it corresponds to the index associated with the IDX1 keyword in the input message. The field is blank if no subsequent digit type and index was requested. See input message APP:CALLTYPE.

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e	Subsequent digit index type. This is the value associated with the ST2 keyword in the input message. This field is blank if no subsequent digit type was requested with the input message. See input message APP:CALLTYPE.
f	Index value for the subsequent digit type in the ST2 field. The valid range is 0-1022 and it corresponds to the index associated with the IDX2 keyword in the input message. The field is blank if no subsequent digit type and index was requested. See input message APP:CALLTYPE.
g	Shared indicator: N — Indicates that the ABC-DEF (or ABC) is not shared. Y — Indicates that the ABC-DEF (or ABC) is shared.
h	ABC digits. If area code is Y, a number between 200 and 999; if area code is N, a number between 000 and 999.
i	DEF digits. The fourth, fifth, and sixth digits of a series.
j	Start of range (0000-9999).
k	End of range (0000-9999).
l	Call type. The major category for the disposition of the codes listed in the message. See input message APP:CALLTYPE.
m	Call data. For each CALLTYP, this field identifies the specific code group treatment. See input message APP:CALLTYPE.
n	Additional Data Field 1 (AD1). See input message APP:CALLTYPE.
o	Additional Data Field 2 (AD2). See input message APP:CALLTYPE.
p	Service categories field. See input message APP:CALLTYPE.
q	Call handling instruction field. See input message APP:CALLTYPE.
r	Destination separation. Identifies the destination for traffic flow purposes. See input message APP:CALLTYPE.
s	Dialed number service type. See input message APP:CALLTYPE.
t	Additional Data Field 3 (AD3), used to set feature bit indicator. See input message APP:CALLTYPE.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPPUR4
VRFYINPT
VRFYOUT
VRFYRTNG

SEE PROPRIETARY NOTICE ON COVER PAGE

Translation Guide, 4ESSTM, TG-4, Division 8, Section 3ak

Input Messages
APP:CALLTYPE
VER:CODEGRP

SEE PROPRIETARY NOTICE ON COVER PAGE

1. FORMAT

2. REASON FOR OUTPUT

3. VARIABLE FIELD DEFINITIONS

- #### 4. ACTION TO BE TAKEN

5. REFERENCES

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:CODEGRP-SDX
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:CODEGRP:OPT(SDX): SDINDEX aaaa, SIZE b, ORIGIN cccc, DOMCLASS dddd,

INDEX CALLTYP CALldata AD1 AD2 SC CHI DESEP DNST

eeee, fff, gggggggggggg, hhhh, iii, jjjj, kkkk, lll, m,
AD3 [n], ADC ([oo, . . . oo]),

2. REASON FOR OUTPUT

To display data pertaining to the call type information referenced by SDINDEX and/or INDEX values.

3. VARIABLE FIELD DEFINITIONS

- a Subsequent digit routing index (0-16383).
- b Specifies size of subsequent digit entry (1-3).
- c Identifies creation type of subsequent digit entry:
AUTO — Automatic
MAN — Manual
- d Domain class: APN, ATNS, DOM, GSDN, INTL, ITRP, NSR.
- e Index value (0-1022).
- f Call type field. See input message APP:CALLTYPE.
- g Call data field. See input message APP:CALLTYPE.
- h Additional Data Field 1 (AD1). See input message APP:CALLTYPE.
- i Additional Data Field 2 (AD2). See input message APP:CALLTYPE.
- j Service category field. See input message APP:CALLTYPE.
- k Call handling instruction field. See input message APP:CALLTYPE.
- l Destination separation field. See input message APP:CALLTYPE.
- m Dialed number service type. See input message APP:CALLTYPE.
- n Additional Data Field 3 (AD3), used to set feature bit indicator. See input message APP:CALLTYPE.
- o Acceptable digit count field (blank or 2-15).

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYINPT
VRFYOUT
VRFYRTNG

Translation Guide, 4ESSTM, TG-4, Division 8, Section 3g

Input Messages
APP:CALLTYPE
VER:CODEGRP-SDX

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:CODEGRP-SDXU
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:CODEGRP;OPT(SDX,UNA):

SDINDEX	QTY
aaaaa,	bbbbbb,
•	
•	
•	
aaaaa,	bbbbbb,

2. REASON FOR OUTPUT

To display unassigned subsequent digit entries.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | Subsequent Digit Routing Index (SDINDEX). This number specifies the beginning of a range of subsequent digit routing indexes that are unassigned (0-16383). |
| b | Specifies the number of consecutive unassigned subsequent digit indexes starting at SDINDEX. |

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPIMC4
IOCPMCP4
IOCPPVR4
VRFYCNTL
VRFYINPT
VRFYOUT
VRFYRTNG

Translation Guide, 4ESSTM, TG-4, Division 8, Section 3aa

Input Message
VER:CODEGRP-SDXU

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:CODEGRP-STDP
 WORK CENTER.. MAC, MOC
 GENERIC 4E23 Rel. 4 and later
 APPLICATION .. 4E
 TYPE Output

1. FORMAT

```

VER:CODEGRP;LIST;OPT(STDP):          DOM   a,

CALLTYP          CALLDATA      AD1      AD2   SC   CHI  DESEP

      b,          c,      [d,]      [e,] [f,]  [g,]  [h,]
      AD3 [i,]

CCD   LD      NN1      NN2
  j,   [k,]    l,      m,
  .    .      .      .
  .    .      .      .
  .    .      .      .
  
```

2. REASON FOR OUTPUT

Verifies international codes which point at a specific routing treatment. The codes can be printed for either the International Originating (INTO) or International Transit (INTT) domains. If the domain is not specified on the input message then two output messages can be received, one for each domain type.

The message is sent in groups of nine codes at a time. If more than nine codes then more than one message will print out.

3. VARIABLE FIELD DEFINITIONS

a	Domain type.
b	Call type.
c	Call data.
d	Additional data 1.
e	Additional data 2.
f	Service category.
g	Call handling instructions.
h	Destination separation.
i	Additional data 3.
j	Country code.

SEE PROPRIETARY NOTICE ON COVER PAGE

k	Language digit.
l	National number part 1.
m	National number part 2.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYIRTG
VRFYMISC
VRFYOUT
VRFYRTNG

Input Message
VER:INTLCODE

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:CODEGRP-TYPE
WORK CENTER.. MAC, MOC
GENERIC 4E23 Rel. 3 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:CODEGRP;OPT(TYPE): DOMTYPE a,

DOM	DOM	DOM	DOM	DOM
b,	b,	b,	b,	b,
b,	b,	b,	b,	b,
b,	b,	b,	b,	b,
b,	b,	b,	b,	b,

2. REASON FOR OUTPUT

To provide the ability to verify which domains have a specified indicator set.

3. VARIABLE FIELD DEFINITIONS

- a Domain type:
- FCID — Determines whether a call is a carrier call.
- SDAC — Determines whether a domain is allowed for a six digit Called Number Trigger (CNT) for either the Advanced Intelligent Network (AIN) or Local Number Portability (LNP) features.
- TDAC — Determines whether a domain is allowed for AIN 10 digit called number trigger.
- b Domain: 20-83, APN, ATNS, DAVT, DEC0, DEC1, DEC6, DED, DER0 DER1, DER6, DEV, GSDN, I384, I56D, I64C, IH1C, INCD, INTO, INTT, IVT, LSI, N64C, N64R, NH0C, NH1C, NSR, POTS, SDNA, SF00-SF39, STCD, VRFY.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPIMC4
IOCPPVR4
VRFYCNTL
VRFYINPT
VRFYOUT
VRFYRTNG

SEE PROPRIETARY NOTICE ON COVER PAGE

Translation Guide, 4ESSTM, TG-4, Division 8, Section 3ai

Input Message
VER:CODEGRP-TYPE

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:CPA-ALA
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:CPA:

ALA	OSN	RDBI
a,	b,	c,
.	.	.
.	.	.
.	.	.

2. REASON FOR OUTPUT

To display all the adjunct logical address (ALAs), network switch numbers (NSNs) and routing data block indices (RDBIs) in the HT4ALAOSEN structure.

3. VARIABLE FIELD DEFINITIONS

a	Adjunct logical address (0 - 15).
b	Network switching number (0 -167).
c	Routing data block index (1 - 8191).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPPVR4
VRFYCNTL
VRFYINPT
VRFYOUT
VRFYPCP

Translation Guide, 4ESSTM, Division 8, Section 6bc

Input Messages
VER:CPA-ALA
VER:CPA-RDBLIST

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:CPA-CANI
WORK CENTER.. MAC, MOC
GENERIC 4E26 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:CPA:

CANI	TOA	TSVC	NUMPL	ALA	FPDT	FIA
aaaaaaaaaa,	bb,	cccc,	dddd,	ee,	fff,	ggg,
.	.	.	.	.	.	.
.	.	.	.	.	.	.
.	.	.	.	.	.	.

2. REASON FOR OUTPUT

To display information on the Customer Automatic Number Identifications (CANIs) contained in the Common Platform Adjunct (CPA) database.

3. VARIABLE FIELD DEFINITIONS

- a Customer automatic number identification (10 digits).
- b Type of access:
- DC — Direct connect.
 - SA — Switch access.
- c Type of service:
- LDS — Long distance service.
 - OMEG — Outward Wide Area Telephone Service (OUTWATS)/Megacom® Telecommunications Service.
- d Numbering plan:
- APN — Action point numbering.
 - NANP — North American numbering plan.
- e Adjunct logical address (0 to 15).
- f Feature Processing Data Type (FPDT) indicator:
- ALA — Adjunct logical address.
 - FI — Feature indicator.
- g Feature Indicator All (FIA) (0-127).

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
IOCPIMC4
IOCPMCP4
IOCPPVR4
IOCPVRT4
VRFYCNTL
VRFYINPT
VRFYOUT
VRFYPCP

Translation Guide, 4ESSTM, Division 8, Section 6ax

Input Message
VER:CPA-C-OR

SEE PROPRIETARY NOTICE ON COVER PAGE

1. FORMAT

2. REASON FOR OUTPUT

3. VARIABLE FIELD DEFINITIONS

- #### 4. ACTION TO BE TAKEN

5. REFERENCES

SEE PROPRIETARY NOTICE ON COVER PAGE

IOCPPVR4
IOCPVRT4
VRFYCNTL
VRFYINPT
VRFYOUT
VRFYPCP

Translation Guide, 4ESSTM, Division 8, Section 6bj

Input Message
VER:CPA-C-OR

SEE PROPRIETARY NOTICE ON COVER PAGE

1. FORMAT

2. REASON FOR OUTPUT

3. VARIABLE FIELD DEFINITIONS

- #### 4. ACTION TO BE TAKEN

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
IOCPIMC4
IOCPMCP4
IOCPPVR4
VRFYCNTL
VRFYINPT
VRFYOUT
VRFYPCP

Translation Guide, 4ESSTM, Division 8, Section 6be

Input Message
VER:CPA-C-OR

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:CPA-DATA
WORK CENTER.. MAC, MOC
GENERIC 4E26 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:CPA:

ALA	ATYP	AI	AFHT	RDBI	DESEP	MRTI	NSN
a,	b,	c,	[d,]	e,	f,	[g,]	[h]
.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.

2. REASON FOR OUTPUT

To display the information of adjunct common data.

3. VARIABLE FIELD DEFINITIONS

- a Adjunct logical address (0 - 15).
- b Application type:
 - DL
 - PCP
 - TNR1
 - TNR2
 - TNR3
- c Adjunct indicator:
 - OFF
 - ON
- d Adjunct final handling treatment:
 - AR, BT, DNN, D00, E01-E20, EAI-EA7, HW, I01-I30, IFF, INC, INF, ISB, IVC, LDV, LOB, LSA, MCA, NCA, NCB, NCC, NCD, NWC, NWN, OOA, OOB, OTS, R01-R10, ROA, S01-S19, SNA, SP1, SP2, ST0, T, TDN, UNN, VCA, VMA, WAT, or blank.
- e Routing data block index (1 - 8191).
- f Destination separation (1 - 127).
- g Multiple routing treatment index (1 - 8191 or blank).
- h Network switching number (1 - 167 or blank).

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPIMC4
IOCPMCP4
IOCPPVR4
VRFYCNTL
VRFYINPT
VRFYOUT
VRFYPCP

Translation Guide, 4ESSTM, Division 8, Section 6az

Input Message
VER:CPA-DATA

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:CPA-DNUM
WORK CENTER.. MAC, MOC
GENERIC 4E19 - 4E25R4
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:CPA:

DNUM	NUMPL	ALA	X
aaaaaaaaaa,	bbbb,	cc,	d,
.	.	.	.
.	.	.	.
.	.	.	.

2. REASON FOR OUTPUT

To display information on the Destination Numbers (DNUMs) contained in the Common Platform Adjunct (CPA) database.

3. VARIABLE FIELD DEFINITIONS

- a Destination number, 10 digits.
- b Numbering plan:
APN — Action point numbering.
NANP — North American numbering plan.
- c Adjunct logical address, range 0 to 15.
- d X indicator:
N — No.
Y — Yes.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPIMC4
IOCPMCP4
IOCPPVR4
VRFYCNTL
VRFYINPT
VRFYOUT
VRFYPCP

SEE PROPRIETARY NOTICE ON COVER PAGE

4ESS
OM-4B000-01

VER:CPA

Input Message
VER:CPA-DNUM

SEE PROPRIETARY NOTICE ON COVER PAGE

VER:CPA-DNUM-2

Issue 1.8
September 2001

ID VER:CRB
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:CRB:

CRBI	TSI	TAN SPC	LVL	FTS	NCRBI	CDBI
aaaaa	b	c	d	e	[f]	g

2. REASON FOR OUTPUT

To display the contents of a customer routing block indexed by a Customer Data Block Index (CDBI).

3. VARIABLE FIELD DEFINITIONS

- a Customer routing block index.
- b Time Slot Interchange (TSI) frame number (0-63).
- c Switching And Permuting Circuit (SPC) identification (0-1).
- d TSI Level (LVL) (0-6). For Digital Signal Level 3 Unit (D3U) applications (0-7).
- e First Time Slot (FTS), indicating specific appearance of the TAN (1-120). For D3U applications:
 - LVL 0 — 1-127,
 - LVL 1-6 — 0-127,
 - LVL 7 — 0-112.
- f Next customer routing block index (1-32767).
- g Customer data block index (1-4095).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPPVR4
VRFYCNTL
VRFYCRD
VRFYINPT
VRFYOUT

Translation Guide, 4ESSTM, Division 8, Section 6w

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:CRB-CDBI
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:CRB;OPT(CDBI): CDBI a

CRBI CRBI CRBI CRBI
b b b b

2. REASON FOR OUTPUT

To display all Customer Routing Blocks (CRBs) that contain the Customer Data Block Index (CDBI) specified.

3. VARIABLE FIELD DEFINITIONS

a Customer data block index (1-4095).
b Customer routing block index (1-32767).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPPVR4
VRFYCNTL
VRFYCRD
VRFYINPT
VRFYOUT

Translation Guide, 4ESSTM, Division 8, Section 6z

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:CRB-UNA
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:CRB;OPT(UNA):

CRBI	QTY	SUBTST
a,	b,	[UNA,]

2. REASON FOR OUTPUT

This message verifies Customer Routing Blocks (CRBs) that are unassigned and thus available for use.

3. VARIABLE FIELD DEFINITIONS

a	Customer Routing Block Index (CRBI). Lists the first CRB that is unassigned (1-32767).
b	Quantity, specifies the number of successive CRBs that are unassigned including and following the CRBI (1-128).
UNA	Subtranslator status, indicates if the entire subtranslator is unassigned for the CRBI and quantity. If the subtranslator is unassigned, UNA will appear in the field, otherwise the field will be blank.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPPVR4
VRFYCNTL
VRFYINPT
VRFYOUT
VRFYCRD

Translation Guide, 4ESSTM, TG-4, Division 8

Input Message
VER:CRB-CRBI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:CRBLIST-TAN
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:CRB;OPT(LIST):

		TAN			
		TSI	SPC	LVL	FTS
		a	b	c	d
CRBI	NCRBI	CDBI			
e	f	g			

2. REASON FOR OUTPUT

To display all customer routing blocks that contain a specific Trunk Appearance Number (TAN).

3. VARIABLE FIELD DEFINITIONS

- a Time Slot Interchange (TSI) frame number (0-63).
- b Switching And Permuting Circuit (SPC) identification (0-1).
- c TSI Level (LVL) (0-6). For Digital Signal Level 3 Unit (D3U) applications (0-7).
- d First Time Slot (FTS), indicating specific appearance of the TAN (1-120). For D3U applications:
 - LVL 0 — 1-127,
 - LVL 1-6 — 0-127,
 - LVL 7 — 0-112.
- e Customer routing block index (1-32767).
- f Next customer routing block index (1-32767).
- g Customer data block index (1-4095).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPPVR4
VRFYCNTL
VRFYCRD
VRFYINPT
VRFYOUT

SEE PROPRIETARY NOTICE ON COVER PAGE

Translation Guide, 4ESSTM, Division 8, Section 6x

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:DESPLIST-456
WORK CENTER.. MOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:DESPLIST;OPT(DIG456): DOM aaaa, ABC bbb,

DESEP ccc, AC [d,] NTD e,

DEF,	DEF,	DEF,	DEF,	DEF,	DEF,	DEF,	DEF,
fff,	fff,	fff,	fff,	fff,	fff,	fff,	fff
fff,	fff,	fff,	fff,	fff,	fff,	fff,	fff
fff,	fff,	fff,	fff,	fff,	fff,	fff,	fff
fff,	fff,	fff,	fff,	fff,	fff,	fff,	fff

2. REASON FOR OUTPUT

To display all codes associated with the input destination separation (DESEP) class.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | Translation domains are represented by POTS; all other domains by a number from 20-83 or VRFY. |
| b | The first three digits (ABC) in a set of digits (0-999). |
| c | Input DESEP (1-255). |
| d | Area code indicator:

N — Indicates the ABC digits are office codes, test codes or another non-area codes.

Y — Indicates the 3-digit codes (ABC) are area codes. |
| e | Number of translatable digits (4,5,6). |
| f | The 4, 5, and 6 digits (DEF) that complete the DESEP(0-999). |

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
VRFYRTNG

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:DESPLIST-789
WORK CENTER.. MOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:DESPLIST;OPT(DIG789): DOM aaaa, ABC bbb, DEF ccc,

DESEP ddd, AC [e,] NTD f,

GHI, GHI, GHI, GHI, GHI, GHI, GHI, GHI,
ggg, ggg, ggg, ggg, ggg, ggg, ggg, ggg
ggg, ggg, ggg, ggg, ggg, ggg, ggg, ggg
ggg, ggg, ggg, ggg, ggg, ggg, ggg, ggg
ggg, ggg, ggg, ggg, ggg, ggg, ggg, ggg

2. REASON FOR OUTPUT

To display all codes associated with the input destination separation (DESEP) class.

3. VARIABLE FIELD DEFINITIONS

- a Translation domains are represented by POTS; all other domains by a number from 20-83 or VRFY.
- b The first three digits (ABC) in a set of digits (0-999).
- c The 4, 5, and 6 digits (DEF) that complete the DESEP(0-999).
- d Input DESEP (1-255).
- e Area code indicator:
- N — Indicates the ABC digits are office codes, test codes or another non-area codes.
- Y — Indicates the 3-digit codes (ABC) are area codes.
- f Number of translatable digits (7,8,9).
- g The 7,8, and 9 digits (GHI) that complete the DESEP (0-999).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
VRFYRTNG

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:DESPLIST-D3
WORK CENTER.. MOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:DESPLIST;OPT(DIG3): DOM aaaa,

DESEP bbb, AC [c,] NTD d,

ABC	ABC	ABC	ABC	ABC	ABC	ABC	ABC
eee,	eee,	eee,	eee,	eee,	eee,	eee,	eee
eee,	eee,	eee,	eee,	eee,	eee,	eee,	eee
eee,	eee,	eee,	eee,	eee,	eee,	eee,	eee
eee,	eee,	eee,	eee,	eee,	eee,	eee,	eee

2. REASON FOR OUTPUT

To display all codes associated with the input destination separation (DESEP) class.

3. VARIABLE FIELD DEFINITIONS

- a Translation domain.
- b Input DESEP (1-255).
- c Area code indicator:
 - N — Indicates the ABC digits are office codes, test codes or another non-area codes.
 - Y — Indicates the 3-digit codes (ABC) are area codes.
- d Number of translatable digits (3).
- e The first three digits (ABC) in a set of digits (0-999).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
VRFYRTNG

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:DESPLIST-D6
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:DESPLIST;OPT(DIG6): DOM aaaa,
 ABC bbb,

DESEP ccc, AC [d,] NTD e,

DEF	DEF	DEF	DEF	DEF	DEF	DEF	DEF
fff,	fff,	fff,	fff,	fff,	fff,	fff,	fff
fff,	fff,	fff,	fff,	fff,	fff,	fff,	fff
fff,	fff,	fff,	fff,	fff,	fff,	fff,	fff
fff,	fff,	fff,	fff,	fff,	fff,	fff,	fff

2. REASON FOR OUTPUT

To display all codes associated with the input destination separation (DESEP) class.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | Translation domain. |
| b | The first three digits (ABC) in a set of digits (0-999). |
| c | Input DESEP (1-255). |
| d | Area code indicator:

N — Indicates the ABC digits are office codes, test codes or another non-area codes.

Y — Indicates the 3-digit codes (ABC) are area codes. |
| e | Number of translatable digits (4,5,6). |
| f | The 4, 5, and 6 (DEF) digits that complete the DESEP(0-999) |

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPPVR4
VRFYRTNG

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:DESPLIST-D9
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:DESPLIST;OPT(DIG9): DOM aaaa,
 ABC bbb, DEF ccc,

DESEP ddd, AC [e,] NTD f,

GHI, GHI, GHI, GHI, GHI, GHI, GHI, GHI,
ggg, ggg, ggg, ggg, ggg, ggg, ggg, ggg
ggg, ggg, ggg, ggg, ggg, ggg, ggg, ggg
ggg, ggg, ggg, ggg, ggg, ggg, ggg, ggg
ggg, ggg, ggg, ggg, ggg, ggg, ggg, ggg

2. REASON FOR OUTPUT

To display all codes associated with the input destination separation (DESEP) class.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | Translation domain. |
| b | The first three digits (ABC) in a set of digits (0-999). |
| c | The 4, 5, and 6 digits (DEF) that complete the DESEP(0-999). |
| d | Input DESEP (1-255). |
| e | Area code indicator:

N — Indicates the ABC digits are office codes, test codes or another non-area codes.

Y — Indicates the 3-digit codes (ABC) are area codes. |
| f | Number of translatable digits (7,8,9). |
| g | The 7,8, and 9 digits (GHI) that complete the DESEP (0-999). |

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPPVR4
VRFYRTNG

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:DESPLIST-D12
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:DESPLIST;OPT(DIG12): DOM a,
 ABC b, DEF c, GHI d,

DESEP e, AC f, NTD g,
JKL JKL JKL JKL JKL JKL JKL JKL
h, h, h, h, h, h, h, h,

2. REASON FOR OUTPUT

Verify the input destination separation class(es).

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | Direct distance dialing (DDD) domain. |
| b | ABC digits (000-999). |
| c | DEF digits (000-999). |
| d | GHI digits (000-999). |
| e | Destination separation (1-255). |
| f | Area code indicator:

N — Indicates the ABC digits are office codes, test codes or another non-area codes.

Y — Indicates the 3-digit codes (ABC) are area codes. |
| g | Number of translatable digits. May be 10, 11 or 12 digits. The first 9 digits are listed under ABC, DEF and GHI. |
| h | Digits that complete the sequence (0-999), one, two or three digits. |

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPPVR4
VRFYRTNG

Input Message
VER:DESPLIST

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:DIALUP
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:DIALUP;CUR
CTYPE a, DUPID bb , PTCL c, DUPCBN d ,
 •
 •
 •

2. REASON FOR OUTPUT

To print the characteristics of one or more dial-up port clients. A single line or a series of lines of information may be outputted.

3. VARIABLE FIELD DEFINITIONS

a	Client type: TDAS — Traffic Data Administration System (TDAS). TVSP — Televote sponsor.
bb	Dialup port identifier, two alphanumeric characters. (AA-99 for TVSP or TDAS client type.)
c	A — Asynchronous.
d	Callback number (11 digits in Binary Coded Decimal [BCD]).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYCNTL
VRFYINPT
VRFYMISC
VRFYOUT

Translation Guide, 4ESSTM, Division 8, Section 6a

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:DNHRMISC
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:DNHRMISC: CFPBLOCK a

CFPDATE CFPTIME
CFPMONTH b, CFPDAY c, CFPYEAR d, CFPHOUR e,

LSPHOUR

	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
LSPDAY																								
SUN	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,
MON	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,
TUE	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,
WED	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,
THU	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,
FRI	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,
SAT	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,	f,

2. REASON FOR OUTPUT

To verify several dynamic non-hierarchical routing (DNHR) related translators, including HT4FPCD (forecast period change date and time), and HT4LSP (load-set period table).

3. VARIABLE FIELD DEFINITIONS

- a Forecast period active block indicator:
- A
- B
- b The month (01-12) when the forecast period is scheduled to change.
- c The day (01-31) when the forecast period is scheduled to change.
- d The year (00-99) when the forecast period is scheduled to change.
- e The hour (00-23) on the date when the forecast period is scheduled to change.
- f Seven groups of 24 entries corresponding to the 24 hours in the seven days of the week. Each entry corresponds to a one-hour period during which one of the 15 load-set periods is in effect. Load designations range from 1-15.

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYCNTL
VRFYINPT
VRFYMISC
VRFYOUT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:DPC
WORK CENTER.. MOC, TEC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

[1] VER:DPC

TYPE ATT	a b c d
TYPE ANSI	a e d
TYPE ISPC	f g h
TYPE BIN	i
TYPE HEX	j
TG	k
.	.
.	.
.	.

[2] VER:DPC 0, TYPE SEP

OLD DPC	l
NEW DPC	m
OLD TG	n
NEW TG	o

2. REASON FOR OUTPUT

Output the various Destination Point Code (DPC) formats.

3. VARIABLE FIELD DEFINITIONS

a	DPC network indicator (0-255).
b	DPC region (0-31).
c	DPC type (0-7).
d	DPC member (0-255).
e	DPC cluster.
f	DPC world geographical zone.
g	DPC area / network identification.
h	DPC signaling point identification.
i	DPC in binary.
j	DPC in hexadecimal.
k	Common Language Location Identifier (CLLI) code of first Trunk Subgroup (TSG) related to this DPC.

SEE PROPRIETARY NOTICE ON COVER PAGE

l	Old office point code of the rehomed switch.
m	New office point code of the rehomed switch.
n	CLLI code of 1st TSG related to the old point code.
o	CLLI code of 1st TSG related to the new point code.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
TMAD0005
TMAD0006
TMAD0007

Input Message
VER:DPC

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:EA-CID
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:EA;OPT(CID) CID aaaa,

TNSI	TNSTYP
b,	c,
•	
•	
•	

2. REASON FOR OUTPUT

To output the Transit Network Selection (TNS) types for a specified carrier code.

3. VARIABLE FIELD DEFINITIONS

a	Carrier identification (0000-9999).
b	Access tandem transit network selection index (0-15).
c	TNS type: GSDN IDT INV RSEL

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPIMC4
IOCPPVR4
VRFYCNTL
VRFYEA
VRFYINPT
VRFYOUT

Translation Guide, 4ESSTM, Division 8, Section 6ai

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Message
VER:EA-CID

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:EA-CONV
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:EA;OPT(CONV):

II	TO	OLI	AININD1	TOS1	OLI	TO	II	AININD2	TOS2
[aa]		[b]	[c]	[d]	[e]		[ff]	[g]	[h]

2. REASON FOR OUTPUT

To display the Information Digits (IIs) value to Originating Line Identity (OLI) and OLI to II translations.

3. VARIABLE FIELD DEFINITIONS

- a II digits (00-99).
- b OLI value derived from II digits (0-255).
- c Indicates if the II/OLI is an Advanced Intelligent Network (AIN) trigger:
N — No
Y — Yes
- d Type Of Service (TOS) associated with the II/OLI pair (0-31).
- e OLI value (0-255).
- f II value derived from OLI value (00-99).
- g Indicates if the II/OLI is an AIN trigger:
N — No
Y — Yes
- h TOS associated with the II/OLI pair (0-31).

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
IOCPIMC4
VRFYCNTL
VRFYEA
VRFYINPT
VRFYOUT

Translation Guide, 4ESSTM, Division 8, Section 3ae

Input Messages
VER:EA-CONV-IIDI
VER:EA-CONV-OLI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:EA-F-IIDIGIT
WORK CENTER.. MOC
GENERIC 4E23 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:EA;OPT(FUNC,IIDIGITS):

				ANIACTN			
II	SRVCT	DC_3	R_3	DC_4	R_4	DC_5	R_5
aa,	b,	c,	d,	e,	d,	f,	d,
	•						
	•						
	•						
				ANIACTN			
II	SRVCT	DC_7	R_7	DC_8	R_8	DC_9	R_9
aa,	b,	h,	d,	i,	d,	j,	d,
	•						
	•						
	•						

2. REASON FOR OUTPUT

To verify Information Digits (IIs) digits translator.

3. VARIABLE FIELD DEFINITIONS

- a II digits (00-99).
- b Service type: CMC, EAPOTS, HM, LNMGC, LNSDN, OWATS, P5MGC, P5SDN, SDN, T800, TRS.
- c Digit count 3: CANI, IAROA, IAAFA, NONEA.
- d Circuit Identification Code (CIC) resell indicator:
Y — Allowed.
N — Not allowed.
- e Digit count 4: CANI, IAROA, IAAFA, NONEA.
- f Digit count 5: CANI, IAROA, IAAFA, NONEA.
- g Digit count 6: CANI, IAROA, IAAFA, NONEA.
- h Digit count 7: CANI, IAROA, IAAFA, NONEA.
- i Digit count 8: CANI, IAROA, IAAFA, NONEA.

SEE PROPRIETARY NOTICE ON COVER PAGE

j Digit count 9: CANI, IAROA, IAAFA, NONEA.
k Digit count 10: CANI, IAROA, IAAFA, NONEA.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPIMC4
IOCPPVR4
VRFYEA
VRFYINPT
VRFYOUT

Translation Guide, 4ESSTM, Division 8, Section 3af

Input Message
VER:EA-FUNC

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:EA-FUNC-OLI
WORK CENTER.. MOC
GENERIC 4E23 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:EA;OPT(FUNC,OLI):

OLI	SRVCT	DC_0	R_0	DC_3	R_3	DC_10	R_10	DC_X	R_X
a,	b,	c,	d,	e,	d,	f,	d,	g,	d,
	•								
	•								
	•								

2. REASON FOR OUTPUT

To verify Originating Line Identity (OLI) translator.

3. VARIABLE FIELD DEFINITIONS

- a Originating line identifier (0-255).
- b Service type: CMC, EAPOTS, HM, LNMGC, LNSDN, OWATS, P5MGC, P5SDN, SDN, T800, TRS.
- c Digit count 0: CANI, IAROA, IAAFA.
- d Circuit Identification Code (CIC) resell indicator:
Y — Allowed.
N — Not allowed.
- e Digit count 3: CANI, IAROA, IAAFA.
- f Digit count 10: CANI, IAROA, IAAFA.
- g Other digit count: CANI, IAROA, IAAFA.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPIMC4
IOCPPVR4
VRFYEA
VRFYINPT
VRFYOUT

SEE PROPRIETARY NOTICE ON COVER PAGE

Translation Guide, 4ESSTM, Division 8, Section 3ag

Input Message
VER:EA-FUNC

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:EA-IPPD
WORK CENTER.. MOC
GENERIC 4E24 Rel. 3 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:EA;OPT(IPPD):

II PAYPHONE DESIGNATIONS

II	PPD	II	PPD	II	PPD	II	PPD	II	PPD
aa,	b,	aa,	b,	aa,	b,	aa,	b,	aa,	b,
	•								
	•								
	•								

2. REASON FOR OUTPUT

To verify Information Digits (IIs) payphone designations.

3. VARIABLE FIELD DEFINITIONS

a	Information digits.
b	Payphone designation.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPIMC4
IOCPPVR4
VRFYEA
VRFYINPT
VRFYOUT

Translation Guide, 4ESSTM, Division 8, Section 3bf

Input Message
VER:EA-IPPD

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:EA-NX
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:EA;OPT(NX):

NX	TNSI	OPR
aa,	b,	[c],
	•	
	•	
	•	

2. REASON FOR OUTPUT

To verify NX to Transit Network Selection (TNS) translator.

3. VARIABLE FIELD DEFINITIONS

a	NX equal access digits (00-99).
b	Access tandem transit network selection index (0-15).
c	Operator indicator:
	N — No
	Y — Yes

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPIMC4
IOCPPVR4
VRFYEA
VRFYINPT
VRFYOUT

Translation Guide, 4ESSTM, Division 8, Section 3ad

Input Message
VER:EA-NX

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:EA-OPPD
WORK CENTER.. MOC
GENERIC 4E24 Rel. 3 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:EA;OPT(OPPD):

OLI PAYPHONE DESIGNATIONS

OLI	PPD	OLI	PPD	OLI	PPD	OLI	PPD	OLI	PPD
aa,	b,	aa,	b,	aa,	b,	aa,	b,	aa,	b,
•									
•									
•									

2. REASON FOR OUTPUT

To verify Originating Line Identity (OLI) payphone designations.

3. VARIABLE FIELD DEFINITIONS

a Originating Line Identity (OLI).
b Payphone designation.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPIMC4
IOCPPVR4
VRFYEA
VRFYINPT
VRFYOUT

Translation Guide, 4ESSTM, Division 8, Section 3bg

Input Message
VER:EA-OPPD

SEE PROPRIETARY NOTICE ON COVER PAGE

Issue 1.8
September 2001

g

SDS — Switched digital service

UNK — Unknown

Signaling service type:

CLC — 800 Class Of Service (COS) classic

CLCM — 800 COS classic -

CLCP — 800 COS classic +

GOLD — 800 COS gold

GSDN — Global Software Defined Network (SDN)

GSDNK — Global SDN key customer

LITE — 800 COS lite

LDS — Long distance service

MEGK — Megacom® Telecommunications Service key customer

OMEG — Outward Wide Area Telephone Service (OUTWATS) or
Megacom® Telecommunications Service

PLT — 800 COS platinum

REACH — Remote adjunct call handling

RECHK — Remote adjunct call handling key

SDN — Basic software defined network

SDNK — Software defined network key customer

SDS — Switched digital service

SDCSR — Switched digital international Carrier Specific Routing
(CSR)

SST1 — SDN Digital Radio Avoidance Routing (SDN-DRAR) no
key.

SST2 — SDN Digital Radio Avoidance Routing (SDN-DRAR) key.

SST3- SST47 — Spare 3 through spare 47.

h

Circuit Selection Capability Index (CSCI) (1-31).

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
IOCPIMC4
IOCPPVR4
VRFYEA
VRFYINPT
VRFYOUT

Translation Guide, 4ESSTM, TG-4, Division 8, Section 3ah

Input Message
VER:EA-SII

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:EA-ZZ
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:EA;OPT(ZZ):

ZZ TNSI
aa, b,
•
•
•

2. REASON FOR OUTPUT

To verify Equal Access Digits (ZZ) to Transit Network Selection (TNS) translator.

3. VARIABLE FIELD DEFINITIONS

a ZZ equal access digits (00-99).
b Access tandem transit network selection index (0-15).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPIMC4
IOCPPVR4
VRFYEA
VRFYINPT
VRFYOUT

Translation Guide, 4ESSTM, Division 8, Section 3ad

Input Message
VER:EA-ZZ

SEE PROPRIETARY NOTICE ON COVER PAGE

1. FORMAT

2. REASON FOR OUTPUT

3. VARIABLE FIELD DEFINITIONS

- SEE PROPRIETARY NOTICE ON COVER PAGE

- e Clear 64 Kilobits Per Second (KBPS) transport capability:
blank — No.
Y — Yes.
- f Clear 384 KBPS transport capability:
blank — No.
Y — Yes.
- g Clear 1536 KBPS transport capability:
blank — No.
Y — Yes.
- h Specifies the number of digits to be deleted from the dialed address before outpulsing. Up to fifteen digits may be deleted. A value of 0 means no digits are deleted (0-15). A blank indicates that this was not provisioned in the Recent Change (RC) form.
- i Prefix digits, 1 to 6 digits each with 0-9, B (Code 11), or C (Code 12) as valid values. If prefixing is required, the digit or digits that appear in this field will be added to the dialed address after any digit deletion. A blank indicates that this was not provisioned in the RC form.
- j Operator exclusion indicator:
blank — No.
Y — Yes.

NOTE: Table information will only print if TYPE is ORL1 or ORL2.

- k Call gapping rate (0-15).
- l Hard to reach traffic option:
ALL — Both hard to reach and not hard to reach.
HTR — Hard to reach.
NHTR — Not hard to reach.
- m Load set period information:
blank — No.
Y — Yes.

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
IOCPPVR4
VRFYOUT

Input Message
VER:ECOS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:ECOS-AREALIS
 WORK CENTER.. MAC, MOC
 GENERIC 4E20 and later
 APPLICATION .. 4E
 TYPE Output

1. FORMAT

[1] VER:ECOS:OPT(AREALIST);

AREA	STATUS
a,	b,
•	
•	
•	

[2] VER:ECOS:OPT(AREALIST-ALL);

AREA	STATUS	INDEX	AREA ERPISET	AREA ESET_INDEX	AREA INCON
a,	b,	c,	d,	e,	f,
•					
•					
•					

2. REASON FOR OUTPUT

To display the status of End-to-end Class Of Service (ECOS) AREAs.

3. VARIABLE FIELD DEFINITIONS

- a AREA name. (1-12 alphanumeric characters)
- b Status of AREA:
 ACTIVE — Activated.
 DEACT — Deactivated.
- c Index of this AREA (1-1023).
- d Extended Routing Pattern Identity Set (ERPISET) of this AREA:
 COM — AREA is in complete ERPISET.
 DOM — AREA is in domestic ERPISET.
 INT — AREA is in international ERPISET.
- e Index of the AREA within the ERPISET (1-1023).

SEE PROPRIETARY NOTICE ON COVER PAGE

f Inconsistency exists within the AREA:
N — No
Y — Yes

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYECOS
VRFYORTG
VRFYOUT

Translation Guide, 4ESSTM, PTG-4, Division 8, Section 5q

Input Message
VER:ECOS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:ECOS-SIICSC
WORK CENTER.. MAC, MOC
GENERIC 4E20 Rel. 2 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:ECOS;OPT(SIICSC);

SII a,

CSC	P/A	PREF
b,	c,	d,
.	.	.
.	.	.
.	.	.

2. REASON FOR OUTPUT

To display the preference (PREF) levels of circuit selection capabilities (CSC) for an input service identity index (SII).

3. VARIABLE FIELD DEFINITIONS

- a Service identity index (1-255).
- b Circuit selection capability (CSC1 - CSC16).
- c Preference level indicator:
- A — Absence.
- P — Presence.
- d Preference level:
- PF1 — First preference.
- PF2 — Second preference.
- RQ — Required.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPIMC4
IOCPMCP4
IOCPPVR4
VRFYCNTL
VRFYECOS
VRFYINPT
VRFYOUT

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Message
VER:ECOS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:ENG-MEMORY
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:ENG-MEMORY
TSGHC TBS WORDS aaaaa,
DLN TRANSLATION BLOCKS bbb,

2. REASON FOR OUTPUT

To verify spare trunk subgroup head cell trunk block status and spare AT&T communications interface (ACI) disk blocks.

3. VARIABLE FIELD DEFINITIONS

aaaaa Trunk subgroup head cell trunk status.
bbb Spare ACI direct link node (DLN) disk only blocks.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPPVR4
VRFYOUT

Input Message
VER:MEMORY

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:ERROR
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:[ERROR] MESSAGE:
[ERROR] ADDRESS bbbbbbbb, [ERROR] CODE aaa,
c

2. REASON FOR OUTPUT

To print when an error occurs while processing a verify input message.

3. VARIABLE FIELD DEFINITIONS

a Error code.
b Error address.
c Error message.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
VRFYOUT

Translation Guide, 4ESSTM, Division 8

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:FEN
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:FEN CLASS a, FID [b],

AFA [cc],

SERVICE CATEGORY TREATMENT

UNSP d, ATAP e, CUSP f, CARP g, CANP h, HAWP i, NWZ1 j, INW k,

DSD l, DLT m, TC n, DA o, IOP p, TST q, RSYS r, MSC1 s,

MSC2 t, MSC3 u, MSC4 v, INCN w, ALAP x, CUTP y, INCO z, EASC a¹,

ICIN b¹, SC1 c¹, SC2 d¹, SC3 e¹, SC4 f¹, SC5 g¹, SC6 h¹, SC7 i¹,

SC8 j¹, SC9 k¹, SC10 l¹, SC11 m¹, SC12 n¹, SC13 o¹, SC14 p¹, SC15 q¹,

SC16 r¹, SC17 s¹, SC18 t¹, SC19 u¹, SC20 v¹, SC21 w¹, SC22 x¹, SC23 y¹,

SC24 z¹, SC25 a², SC26 b², SC27 c², SC28 d², SC29 e², SC30 f², SC31 g²,

SC32 h², SC33 i², SC34 j², SC35 k², SC36 l², SDN m², LDA n², SSP o²,

SPDI p², MULT q², MCPP r², INET s², SDND t², QTM u²,

SCREENING TREATMENT

DEF1 [v²], DEF2 [w²], DEF3 [x²], DEF4 [y²], DFHT z², z², z²,

2. REASON FOR OUTPUT

To display the characteristics of a Far End Network (FEN).

3. VARIABLE FIELD DEFINITIONS

- a Classification of the FEN: ACCESA, ACCESI ACCESO, CAMA, CMC, INTL, OEO, OWATS, PBX, POTS.
- b The FEN within the particular class of FENs.

SEE PROPRIETARY NOTICE ON COVER PAGE

c	Action that must be taken for equal access signaling: KA — Kill and play announcement. KW — Kill with unexpected wink. RR — Route and record.
d	Unspecified service category: A, B, C, D, I, M, N, Q, R.
e	Access tandem area Plain Old Telephone Service (POTS): A, B, C, D, I, M, N, Q, R.
f	Continental United States POTS: A, B, C, D, I, M, N, Q, R.
g	Caribbean, non-U.S. territories POTS: A, B, C, D, I, M, N, Q, R.
h	Canadian POTS: A, B, C, D, I, M, N, Q, R.
i	Hawaiian POTS: A, B, C, D, I, M, N, Q, R.
j	Non-World Zone 1: A, B, C, D, I, M, N, Q, R.
k	Inward Wide Area Telephone Service (WATS): A, B, C, D, I, M, N, Q, R.
l	Direct services dialing: A, B, C, D, I, M, N, Q, R.
m	Dial it: A, B, C, D, I, M, N, Q, R.
n	Teleconferencing: A, B, C, D, I, M, N, Q, R.
o	Directory assistance: A, B, C, D, I, M, N, Q, R.
p	Inward operator: A, B, C, D, I, M, N, Q, R.
q	Test line: A, B, C, D, I, M, N, Q, R.
r	Restricted system codes: A, B, C, D, I, M, N, Q, R.
s	Miscellaneous 1: A, B, C, D, I, M, N, Q, R.
t	Miscellaneous 2: A, B, C, D, I, M, N, Q, R.
u	Miscellaneous 3: A, B, C, D, I, M, N, Q, R.
v	Miscellaneous 4: A, B, C, D, I, M, N, Q, R.
w	International Carrier (INC), not Interexchange Carrier (IC) switch owner's INC: A, B, C, D, I, M, N, Q, R.
x	Alaskan POTS: A, B, C, D, I, M, N, Q, R.
y	Caribbean - U.S. territories POTS: A, B, C, D, I, M, N, Q, R.
z	International carrier: A, B, C, D, I, M, N, Q, R.
a ¹	Exchange access signaling code: A, B, C, D, I, M, N, Q, R.
b ¹	Inter-LATA carrier switch's international carrier: A, B, C, D, I, M, N, Q, R.

SEE PROPRIETARY NOTICE ON COVER PAGE

c ¹	Spare category - 1: A, B, C, D, I, M, N, Q, R.
d ¹	Spare category - 2: A, B, C, D, I, M, N, Q, R.
e ¹	Spare category - 3: A, B, C, D, I, M, N, Q, R.
f ¹	Spare category - 4: A, B, C, D, I, M, N, Q, R.
g ¹	Spare category - 5: A, B, C, D, I, M, N, Q, R.
h ¹	Spare category - 6: A, B, C, D, I, M, N, Q, R.
i ¹	Spare category - 7: A, B, C, D, I, M, N, Q, R.
j ¹	Spare category - 8: A, B, C, D, I, M, N, Q, R.
k ¹	Spare category - 9: A, B, C, D, I, M, N, Q, R.
l ¹	Spare category - 10: A, B, C, D, I, M, N, Q, R.
m ¹	Spare category - 11: A, B, C, D, I, M, N, Q, R.
n ¹	Spare category - 12: A, B, C, D, I, M, N, Q, R.
o ¹	Spare category - 13: A, B, C, D, I, M, N, Q, R.
p ¹	Spare category - 14: A, B, C, D, I, M, N, Q, R.
q ¹	Spare category - 15: A, B, C, D, I, M, N, Q, R.
r ¹	Spare category - 16: A, B, C, D, I, M, N, Q, R.
s ¹	Spare category - 17: A, B, C, D, I, M, N, Q, R.
t ¹	Spare category - 18: A, B, C, D, I, M, N, Q, R.
u ¹	Spare category - 19: A, B, C, D, I, M, N, Q, R.
v ¹	Spare category - 20: A, B, C, D, I, M, N, Q, R.
w ¹	Spare category - 21: A, B, C, D, I, M, N, Q, R.
x ¹	Spare category - 22: A, B, C, D, I, M, N, Q, R.
y ¹	Spare category - 23: A, B, C, D, I, M, N, Q, R.
z ¹	Spare category - 24: A, B, C, D, I, M, N, Q, R.
a ²	Spare category - 25: A, B, C, D, I, M, N, Q, R.
b ²	Spare category - 26: A, B, C, D, I, M, N, Q, R.
c ²	Spare category - 27: A, B, C, D, I, M, N, Q, R.
d ²	Spare category - 28: A, B, C, D, I, M, N, Q, R.
e ²	Spare category - 29: A, B, C, D, I, M, N, Q, R.
f ²	Spare category - 30: A, B, C, D, I, M, N, Q, R.
g ²	Spare category - 31: A, B, C, D, I, M, N, Q, R.
h ²	Spare category - 32: A, B, C, D, I, M, N, Q, R.
i ²	Spare category - 33: A, B, C, D, I, M, N, Q, R.

SEE PROPRIETARY NOTICE ON COVER PAGE

j ²	Spare category - 34: A, B, C, D, I, M, N, Q, R.
k ²	Spare category - 35: A, B, C, D, I, M, N, Q, R.
l ²	Spare category - 36: A, B, C, D, I, M, N, Q, R.
m ²	Call to a software defined network: A, B, C, D, I, M, N, Q, R.
n ²	Call to a local directory assistance: A, B, C, D, I, M, N, Q, R.
o ²	Call to a service switching point: A, B, C, D, I, M, N, Q, R.
p ²	Sponsor paid dial it: A, B, C, D, I, M, N, Q, R.
q ²	MultiQuest®: A, B, C, D, I, M, N, Q, R.
r ²	MultiQuest® calling party paid: A, B, C, D, I, M, N, Q, R.
s ²	Interim nationwide emergency telecommunication system: A, B, C, D, I, M, N, Q, R.
t ²	Software Defined Network (SDN) data: A, B, C, D, I, M, N, Q, R.
u ²	Quantum: A, B, C, D, I, M, N, Q, R.
v ²	Denied calls in category DEF1: N — No Y — Yes
w ²	Denied calls in category DEF2: N — No Y — Yes
x ²	Denied calls in category DEF3: N — No Y — Yes
y ²	Denied calls in category DEF4: N — No Y — Yes
z ²	Define final handling treatment of denied calls: AR, BT, DNN, D00, E01-E20, EA1-EA7, HW, I01-I30, IFF, INC, INF, ISB, IVC, LDV, LOB, LSA, MCA, NCA, NCB, NCC, NCD, NWC, NWN, 00A, 00B, OTS, R01-R10, ROA, S01-S19, SNA, SP1, SP2, ST0, T, TDN, UNN, VCA, VMA, WAT.

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
IOCPPVR4
VRFYCNTL
VRFYINPT
VRFYMISC
VRFYOUT

Translation Guide, 4ESSTM, Division 8, Section 6s

Input Message
VER:FEN

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:GETS-ANN
WORK CENTER.. MAC, MOC
GENERIC 4E21 Rel. 3 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:GETS;OPT(ANN):

GETSINT,	a,									
GETSDDG,	b,	GETSDAN,	c,	GETSMTPA,	d,					
GETSADG,	e,	GETSAAT,	f,	GETSMTPE,	g,					
GETSRCVL,	h,	GETSRQLT,	i,							

AON1	AOF1	AON2	AOF2	AON3	AOF3	AON4	AOF4	AON5	AOF5
j,	k,	j,	k,	j,	k,	j,	k,	j,	k,

DON1	DOF1
l,	m,

2. REASON FOR OUTPUT

To display miscellaneous announcement data for the Government Emergency Telecommunications Service (GETS).

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | Interruptible indicator (0-1). |
| b | Indicator of number of destination digits (0-18). |
| c | Destination announcement number (0-65535). |
| d | Indicates whether the outgoing GETS Initial Address Message (IAM) Message Transfer Part (MTP) priority level should be set one higher than normal commercial traffic in the AT&T Switched Network (ASN):

OFF — Turns the priority level off.

ON — Turns the priority level on. |
| e | Indicator of number of authorization digits (0-12). |
| f | Announcement tone (0-65535). |
| g | Indicates whether the outgoing GETS IAM MTP priority level from the terminating switch to the Egress Network should be set one higher than normal commercial traffic:

OFF — Turns the priority level off.

ON — Turns the priority level on. |

SEE PROPRIETARY NOTICE ON COVER PAGE

h	Maximum number of Dual Tone Multifrequency (DTMF) receiver for GETS usage (0-255).
i	Maximum queuing time for GETS call on DTMF receiver (0, 201-1023).
j	Length of tone period when collecting authorization digits (0, 4-252).
k	Length of silence period when collecting authorization digits (0, 4-252).
l	Length of tone period when collecting destination digits (0, 4-252).
m	Length of silence period when collecting destination digits (0, 4-252).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPIMC4
IOCPMCP4
IOCPPVR4
VRFYCNTL
VRFYINPT
VRFYMISC
VRFYOUT

Translation Guide, 4ESSTM, Division 8, Section 6bi

Input Message
VER:MISC

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:GETS-SAT
WORK CENTER.. MAC, MOC
GENERIC 4E19 Rel. 3 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:GETS;OPT(SAT):

 TOWN ST BL FBS
NSN aaa, NSNAME bbbb cc dd eee,

NSN	NSN	NSN	NSN	NSN	NSN	NSN	NSN	NSN	NSN
fff,	fff,	fff,	fff,	fff,	fff,	fff,	fff,	fff,	fff,
fff,	fff,	fff,	fff,	fff,	fff,	fff,	fff,	fff,	fff,
fff,	fff,	fff,	fff,	fff,	fff,	fff,	fff,	fff,	fff,
fff,	fff,	fff,	fff,	fff,	fff,	fff,	fff,	fff,	fff,
fff,	fff,	fff,	fff,	fff,	fff,	fff,	fff,	fff,	fff,
fff,	fff,	fff,	fff,	fff,	fff,	fff,	fff,	fff,	fff,
fff,	fff,	fff,	fff,	fff,	fff,	fff,	fff,	fff,	fff,

2. REASON FOR OUTPUT

To display the satellite connectivity bitmap for a network switch number (NSN).

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | Network switch number (1 to 167). |
| b | TOWN — This four character alphabetic code represents the town, city, or location. |
| c | ST — State. This two character alphabetic code identifies the far end state, province, or foreign country. |
| d | BL — Building. This two-character alphabetic or two-character numeric character code identifies the office. |
| e | Far building subdivision (FBS). This three-character alphanumeric code identifies the internal building subdivision. |
| f | Network switch number connectivity bitmap (1 to 167). |

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
IOCPIMC4
IOCPMCP4
IOCPPVR4
VRFYCNTL
VRFYINPT
VRFYMISC
VRFYOUT

Input Message
VER:MISC

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:GT-UGTT
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:GT;OPT(UGTT): NUMPL a

NPA PSPC PSSN SSPC SSSN

bbb, ccccccccc, ddd, eeeeeeeee, fff,

2. REASON FOR OUTPUT

Display the primary and secondary signaling point code (SPC) and secondary subsystem number (SSN) on a per numbering plan area (NPA)/ numbering plan (NUMPL) basis.

3. VARIABLE FIELD DEFINITIONS

- a Numbering plan:
- APN — Action point numbering plan.
 NANP — North American numbering plan.
- b Numbering plan area.
- c Primary signaling point code (PSPC):
- NET — First three digits (000-255).
 CR — Next two digits (00-63).
 CT — Next one digit (0-7).
 MEM — Last three digits (000-255).
- d Primary subsystem number (PSSN) (0-255).
- e Secondary signaling point code (SSPC):
- NET — First three digits (000-255).
 CR — Next two digits (00-63).
 CT — Next one digit (0-7).
 MEM — Last three digits (000-255).
- f Secondary subsystem number (SSSN) (0-255).

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
IOCPIMC4
IOCPPVR4
VRFYCNTL
VRFYINPT
VRFYMISC
VRFYOUT

Input Message
VER:GT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:IDAM
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:IDAM

INSEP	DESEP	CELLGRP
aaa	bbb	ccc
.	.	.
.	.	.
.	.	.

2. REASON FOR OUTPUT

Lists the incoming and destination separations and cell group for the incoming and destination separation classes (DESEPs) requested.

3. VARIABLE FIELD DEFINITIONS

aaa	Incoming separation class (INSEP) number: 0-255 (0-127 for AT&T offices).
bbb	DESEP number: 1-255 (0-127 for AT&T offices).
ccc	Cell group index: 0-1022

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPPVR4
VRFYCNTL
VRFYINPT
VRFYMISC
VRFYOUT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:IDAMLIST
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:IDAMLIST: CELLGRP aaa,

INSEP	DESEP
bbb	ccc
.	.
.	.
.	.

2. REASON FOR OUTPUT

Lists the incoming and destination separation classes for the cell group requested.

3. VARIABLE FIELD DEFINITIONS

aaa	Cell group index: 0-1023
bbb	Incoming separation class (INSEP) number: 0-255 (0-127 for AT&T offices).
ccc	Destination separation class (DESEP) number: 1-255 (0-127 for AT&T offices).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPPVR4
VRFYCNTL
VRFYINPT
VRFYMISC
VRFYOUT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:INSPLIST
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:INSPLIST(OPT,TSG): INSEP a,
BTFN TOWN ST BL FBS NBS

bbbb bbbb bb bb bbb bbb
bbbb bbbb bb bb bbb bbb

2. REASON FOR OUTPUT

To verify trunk subgroups (TSGs) that have the incoming separation (INSEPs) classes specified.

3. VARIABLE FIELD DEFINITIONS

- a Incoming separation class (0-255).
- b Trunk subgroup circuit identification number (CIN).
- BTFN — Base traffic number.
- TOWN — The town, city, or location for the far end of the TSG.
- ST — The far end state, province, or foreign country.
- BL — The building or office identity for the far end of the TSG.
- FBS — The far building subdivision code for internal building identification.
- NBS — The internal building subdivision for the near end of the TSG.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYCNTL
VRFYINPT
VRFYOUT
VRFYTSG

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:LATASTAT-ARE
WORK CENTER.. MOC
GENERIC 4E19 thru 4E21
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:LATASTAT;OPT(AREAS)
LATA STATE
aaa bb
•
•
•

2. REASON FOR OUTPUT

To display Local Access Transport Area (LATA)/ state areas where traffic must be screened.

3. VARIABLE FIELD DEFINITIONS

- a Local Access Transport Area (LATA) (000-999).
b Specifies the STATE of the area identified for screening (2 alphabetic characters).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYINPT
VRFYMISC
VRFYOUT

Translation Guide, 4ESSTM, Division 8, Section 6ae

Input Message
VER:LATASTAT-ARE

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:LATASTAT-MAT
WORK CENTER.. MOC
GENERIC 4E19 thru 4E21
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:LATASTAT;OPT(MATRIX): MATRIX a,

ORIGINATING AREA IS DOWN THE PAGE - TERMINATING IS ACROSS

LATA bbb bbb

ST	cc	.	.	.	.	.	.	.	.	.	.	.	.	.	cc
ddd ee	f	.	.	.	.	.	.	.	.	.	.	.	.	f	
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
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.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
ddd ee	f	.	.	.	.	.	.	.	.	.	.	.	.	f	

2. REASON FOR OUTPUT

To display Local Access Transport Area (LATA)/ state screening matrixes.

3. VARIABLE FIELD DEFINITIONS

- a Specifies which LATA/ state screening matrix is being displayed (1-7).
- b Terminating Local Access Transport Area (LATA) (000-999).
- c Terminating state of the area identified for screening calls (2 alphabetic characters).
- d Originating local access transport area (000-999).
- e Originating state of the area identified for screening calls (2 alphabetic characters).

SEE PROPRIETARY NOTICE ON COVER PAGE

f Matrix entry:
blank — No screening.
Y — An originating LATA/state area (row) and terminating
 LATA/state area (column) combination that is subject to
 screening.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYINPT
VRFYMISC
VRFYOUT

Translation Guide, 4ESSTM, Division 8, Section 6af

Input Message
VER:LATASTAT-MAT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:MEASREPT
WORK CENTER.. MAC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:MEASREPT aa b b b b PRIM c
MAXM TSGCAP ENGMEM TAPE ERAP PRINT
dddd eee f g h i
CHAN:
j k k k k
ACCINT
lllmm
SCHEDULED OUTPUT DURING THE WEEK
FIRST LAST
nnn oopp qqqrss

2. REASON FOR OUTPUT

To print in response to VER:MEASREPT input message requesting the verification of the parameters defining a traffic or plant measurement report.

3. VARIABLE FIELD DEFINITIONS

- a Measurement report number (01-23).
- b Disposition of the corresponding input message processing:
 - ABORTED — Processing is not completed; no memory has been updated
 - COMPLETED — Processing is completed
 - NOT STARTED — Processing is not completed; no memory has been updated
 - NOT STARTED MEASREPT UNAS — Processing cannot continue; measurement report is unassigned.
- c Primary channel on which changes to the measurement report are made.
- d Maximum number of measurements allowed on the report. 0 for tape schedules.
- e Maximum number of trunk subgroups allowed on the report (0 - 63). 0 for tape schedules.
- f
 - N — Engineered file store memory is NOT allocated to the report for the accumulation of measurement.
 - Y — Engineered file store memory is allocated to the report for the accumulation of measurement.

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g	N —	Report is output on a terminal.
	Y —	Report is output on tape.
h	N —	Schedule is NOT collected and stored by ERAP.
	Y —	Schedule is collected and stored by ERAP.
i	N —	ERAP is Y and printing of the schedule is inhibited.
	Y —	Otherwise.
j, k		Output channels on which the report is output.
l, m		The report accumulation interval in hours and minutes where l is the number of hours (000 - 168), and m is the number of minutes (00,15,30,45).
n		The day of the first scheduled output of the measurement report during the week.
o, p		The time of the first scheduled output of the measurement report in hours and minutes where o is the hour in the day (00 - 23), and p is the number of minutes (00,15,30,45).
q		The day of the last scheduled output of the measurement report during the week.
r, s		The time of the last scheduled output of the measurement report in hours and minutes where r is the hour in the day (00 - 23) and s is the number of minutes (00,15,30,45).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
TRAFMSGs

Practice 234-180-045, *Plant Measurements and Machine Performance Report - Description*

Translation Guide, 4ESSTM, Division 10, Section 3j

Input Message
VER:MEASREPT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:MEMORY
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:MEMORY;OPT(EM),CUR:
TSGHC TBS WORDS aaaaa
AMA BLOCKS bbbb
IB BLOCKS cccc
SPARE RDBI dddd, SPARE ARDBI eeee,

2. REASON FOR OUTPUT

To list spare engineered memory items.

3. VARIABLE FIELD DEFINITIONS

- a Number of trunk subgroup head cell-trunk block status (TSGHC-TBS) words.
- b Number of automatic message accounting (AMA) blocks.
- c Number of inward wide area telecommunications service (INWATS) billing (IB) blocks.
- d Number of unassigned routing data blocks (RDBs).
- e Number of unassigned auxiliary RDBs.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPPVR4
VRFYMISC
VRFYOUT

Translation Guide, 4ESSTM, TG-4, Division 8

SEE PROPRIETARY NOTICE ON COVER PAGE

1. FORMAT

NUMBER OF PCP2 ANIS ASSIGNED	f,
NUMBER OF CPA ANIS ASSIGNED	g,
NUMBER OF SPARE PCP ANIS	h,
NUMBER OF AIN DNTS ASSIGNED	i,

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September 2001

[illegible]

	ST	The state, province, or foreign country.
	BL	The building or office identity.
	NBS	Building subdivision.
AIN TRIGGERS		Advanced Intelligent Network (AIN).
AUX RDBI		Auxiliary routing indexes.
CDBI		Customer data block indexes.
CRDBI		Customer routing block indexes.
DIGSUPP INDEXES		Digit supplemental indexes.
FENN BLOCKS		Far End Network (FENN) blocks.
MCTI		Multiple carrier treatment indexes.
MRTI		Multiple routing treatment indexes.
NDBI		Numbering data block indexes.
PRTI		Proportional routing indexes.
RDBI		Routing data block indexes.
TRUNK BLOCKS		Trunk blocks.
TSG BLOCKS		Trunk Subgroup (TSG) blocks.
TTSI		Terminating toll switch indexes.
1-DIG BLOCKS		1-digit blocks.
PCP-ABCID		Positive Call Processing (PCP) ABC digits identification.
AUTO SDX INDEXES		Automatic subsequent digit indexes.
MAN SDX INDEXES		Manual subsequent digit indexes.
MAIN_CS BLOCKS		Main call store translations blocks.
DO_TRAN BLOCKS		Disk only store translations blocks.
ACI_TRAN BLOCKS		Account Code Information (ACI) translations blocks.
EXT_CS1 BLOCKS		Extended call store, segment 1 blocks.
EXT_CS2 BLOCKS		Extended call store, segment 2 blocks.
EXT_CS3 BLOCKS		Extended call store, segment 3 blocks.
TSGHC TBS WORDS		TSG Head Cell (TSGHC) Trunk Block Status (TBS) words.
DCLIP		Destination calling line identification.
b		Quantity of spare for corresponding engineered item.
c		Quantity of used for corresponding engineered item.
d		Number of 1024 word blocks assigned to disk only MIN/NUM/MAX translators in file segment 2.

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e	Largest grouping entry in adjunct destination table where the last four digits of the destination number are the same.
f	Number of Automatic Number Identifications (ANIs) used for PCP.
g	Number of ANIs used for Calling Party Address (CPA).
h	Number of spare PCP ANIs.
i	Number of AIN dialed number triggers assigned.
j	Number of nailed up trunks (i.e., number of connections).
k	Number of Link Access Circuit Identifiers (LACIDs) assigned.
l	For AT&T offices, geographical identifier of the switch. For non-AT&T offices, Home Numbering Plan Area (NPA).
m	Served NPAs. For AT&T offices, up to 31 may be output. For non-AT&T offices, up to 8 may be output.
n	Space administration use number. See Table 1.
o	Number of 1024-word blocks assigned.
p	Memory type: ACI_TRAN — Disk memory used to store disk only Office Data Assembler (ODA) structures for the Direct Link Node (DLN). DO_TRAN — Disk memory used to store disk only ODA structures such as the disk TSG translator. EXT_CS — Core memory located in Extended Non-Secure Call Store (XS) call stores. MAIN_CS — Core memory located in the base 1B processor call stores.
q	Memory segment (0-3).
r	Assigned routing domains. See Table 2.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPPVR4
VRFYMISC
VRFYOUT

Translation Guide, 4ESSTM, TG-4, Division 8, Sec. 6c

SEE PROPRIETARY NOTICE ON COVER PAGE

Table 1

Use Number	Description of Translator
2	Trunk Scanner Number - Trunk Block Number (TSN-TBN)
3	Core TBN
4	TBN core packed.
5	Link Access Circuit Identifier (LACID) data translator
6	LACID to trunk block translator
7	Common Channel Interoffice Signaling (CCIS) Terminal Echo Receiver (TER), label-TSN
8	CCIS TSN- Prime (PRIM) Terminal (TERM), label
9	Toll terminal frame to Trunk Appearance Number (TAN)
10	Space administration
11	Core Trunk Subgroup (TSG)
12	Disk TSG
13	Three digit
14	S Digit (DIG) grid table
15	S DIG code group
16	Type Of Origin (TORIG)/ Signaling Service Type (SST)/ Dialed Number Service Type (DNST)/ Type Of Destination (TDEST) to Service Identity Index (SII) translator
17	Routing Data Block (RDB)
18	Auxiliary Routing Data Block (ARDB)
20	Centralized Automatic Message Accounting (CAMA) screening
21	Originating Local Call Intercept Group (OLCIG)
22	Terminating Local Call Intercept Group (TLCIG)
23	Circuit Identification Number Code (CINC) or Circuit Identification Number (CIN)
24	CIN Length (CINLEN)
25	Miscellaneous Scanner Number (MSN)
26	Miscellaneous Distributor Number (MDN)
30	Unit Type (UT) entry
31	International 1-digit
32	TSN to miscellaneous
33	TSN to miscellaneous supplementary
34	TSN to terminal-label supplementary
35	Terminal-label to TSN supplementary
36	Dedicated Time Slot Interchange (TSI) nail up
37	Mass Announcement Service (MAS) announcement data
38	Backup band data

SEE PROPRIETARY NOTICE ON COVER PAGE

Table 1
(continued)

Use Number	Description of Translator
42	Time Assigned Speech Interpolation - E - Dynamic Load Control (TASI-E-DLC) translator
43	Terminating Toll Switch (TTS) for Dynamic Non Hierarchical Routing (DNHR)
44	Supplementary digit translator
45	Far end network translator
46	TSG translator
47	TAN to TAN assignments table
48	Alternate Number Translations (ANT) record 1024 Routing (RTNG) Synchronized Unsupervised Burst Tone (SUBT)
49	Account Code Information (ACI) subtranslator space Destination Point Code (DPC) subheadtable
50	ACI fixed assigned headtable
51	ACI subtranslator space TSN-to-ALL
52	ACI subtranslator space DPC conflict table
53	ACI subtranslator space Circuit Identification Code (CIC) SUBT headtable
54	ACI subtranslator space CIC subtranslator
55	ACI subtranslator space q.931/ Service Access Data Channel (SADC) SUBT headtable
56	ACI subtranslator space q.931/SADC subtranslator
57	Customer routing block translator
58	Customer data block translator
59	TSN to customer data block translator
60	Number services data block translator
61	Proportional routing translator
62	Grid head table
63	Grid mask head table
64	Codegroup head table
65	Network switch number to DPC translator
66	Network Switch Number (NSN) to TSG list translator
67	Intermediate switches to destination NSN
68	Multiple routing treatment translator
69	SII to Routing Pattern Identity (RPI) subtranslator

SEE PROPRIETARY NOTICE ON COVER PAGE

Table 1
(continued)

Use Number	Description of Translator
70	Positive lookup Automatic Number Identification (ANI)
71	RPI to NSN translator
72	Manual Subsequent Digit Indexes (SDXs) disk subtranslator
73	Safer and alternate destination call redirection
74	GH digits ANI lookup
75	Positive Call Processing (PCP) IJ digits subtranslator - size 256
76	PCP collision subtranslator
77	PCP parallel collision subtranslator
78	PCP customer data block subtranslator
79	Express connect ACI subtranslator
80	Positive Look Up (PLU) record 1024 subtranslator
81	PLU record 64 subtranslator
82	PLU record 128 subtranslator
83	PLU record 256 subtranslator
84	PLU record 1024 bitmap SUBT
85	SII to Service Identity Index Name (SIINAME) translator
86	PLU record 1024 subtranslator
87	PLU record 512 subtranslator
88	Carrier proportioned routing treatment translator
89	Global Title Translation (GTT) 6 digit 1024 Numbering Plan Areas (NPAs) Data Block Indexes (DBI) subtranslator
90	GTT 6 digit 1024 Exchange Number (NXX) subtranslator
91	JK digits ANI lookup
93	Calling Party Address (CPA) terminating table
94	CPA destination trigger table subtranslator
95	Emergency alternate routing assignment translator
96	Emergency alternate routing active translator
97	Multiple Routing Treatment (MRT) final handling announcement translator
98	End-To-End Class Of Service (ECOS) trunk block number translator
99	ECOS switch Identification (ID) name translator

SEE PROPRIETARY NOTICE ON COVER PAGE

Table 1
(continued)

Use Number	Description of Translator
100	ECOS switch ID translator
101	ECOS trunk sub-group list translator
102	ECOS route list index translator
103	Area name translator
104	ECOS alternate route list translator
105	ECOS overflow route list translator
108	Adjunct Logical Address / Operations Support Network (ALA/OSN) to Routing Data Block Indexes (RDBIs) translator
110	Subsystem Number (SSN) topology translator
111	Numbering Plan Type (NPT) / NPA to Universal Global Title Translation (UGTT) subtranslator
112	Advanced intelligent network translator
114	TAN to Universal Services Echo Celler (USEC) subtranslator
115	USEC to TAN subtranslator
116	Multiple CINC translator
117	Positive look-up call type - HT4PLUCT
118	Positive look-up called - HT4PLUCLD
119	Positive look-up for 1 to 1023 line numbers - HT4PLULKP
120	Positive look-up for over 1023 line numbers - HT4PLUF2LKP
122	Positive look-up for over 1023 line numbers - HT4PLUL2LKP
123	Satellite connectivity bit map translator
124	International 1-digit annex translator
125	Expanded Time Slot Interchange (XTSI) D3U associated data
126	Originating Carrier And Terminating Country Pair (OCTCP) overflow foreign administration index list
127	TSG carrier identification parameter list
128	Universal T1.5 access subtranslators

SEE PROPRIETARY NOTICE ON COVER PAGE

Table 2

Use Number	Description of Domain
1	Plain Old Telephone Service (POTS) home Numbering Plan Area (NPA)
2	POTS Home Numbering Plan Area (HNPA) - nonarea code
3	POTS-area code
4	POTS intertoll
5	POTS intertoll-non area code
6	POTS served NPA1
7	POTS served NPA1-non area code
8	POTS served NPA2
9	POTS served NPA2-non area code
10	POTS served NPA3
11	POTS served NPA3-non area code
12	POTS served NPA4
13	POTS served NPA4-non area code
14	POTS served NPA5
15	POTS served NPA5-non area code
16	POTS served NPA6
17	POTS served NPA6-non area code
18	POTS served NPA7
19	POTS served NPA7-non area code
78	Skip network management
79	Long lines overseas use
80	Long lines overseas use
81	Non-POTS domain used for international outbound to Intelligent Serial Controller (ISC)
82	Non-POTS domain used for Full Rate Data (FRDATA)
83	Domain 83 used for Taiwan network
84	International traffic TSG
85	International originating
86	International transit
87	Verification network
88	Software defined network
89	Dedicated egress voice

SEE PROPRIETARY NOTICE ON COVER PAGE

Table 2
(continued)

Domain Number	Description of Domain
90	Dedicated egress data
91	Dedicated egress clear 64kbps
92	Dedicated egress restricted 64kbps
93	Dedicated egress clear 64kbps H0
94	Dedicated egress restricted 64kbps H0
95	Dedicated egress clear 64kbps H11
96	Dedicated egress restricted 64kbps H11
99	Number services routing
100	Local Access Transport Area (LATA) / state screening
101	International incoming data
102	International outbound 56k data
103	International outbound 64k clear data
104	International transit data
105	Access tandem transit network selection
106	Clear 64kbps using 10-digit North American Numbering Plan (NANP)
107	Restricted 64kbps using 10-digit NANP
108	International clear 64k data domain
109	International 56k data domain
110	Global software defined network
111	Dial-a-view attendant
112	Action point number
113	NANP 384kbps clear
114	NANP 1536kbps clear
115	International transport 384kbps clear data domain
116	International outbound 384kbps clear data domain
117	Global Software Defined Network (GSDN) outbound international domain
118	Spare international domain
119	International 1536kbps clear data domain
120	International outbound 1536kbps clear data domain

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:MISC-AINITM
WORK CENTER.. MAC, MOC
GENERIC 4E23 Rel. 3 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:MISC;OPT(AINITM)

AT0SI A6T0SI L6T0SI

[a], [b], [c],

2. REASON FOR OUTPUT

To display the Advanced Intelligent Network (AIN) data.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | AIN office-wide Type Of Service (TOS) index parameter (0-31). |
| b | Office-wide six digit trigger expansion AIN TOS index parameter (0-31). |
| c | Office-wide six digit trigger expansion Local Number Portability (LNP) TOS index parameter (0-31). |

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPPVR4
VRFYCNTL
VRFYINPT
VRFYMISC
VRFYOUT

Translation Guide, 4ESSTM, Division 8, Section 6br

Input Message
VER:MISC

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:MISC-AINTRIG
WORK CENTER.. MAC, MOC
GENERIC 4E19 Rel. 4 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:MISC:FHT AINTRIG:

ABC	DEF	GHIJ	TOS
aaa,	bbb,	cccc,	dd,
.	.	.	.

2. REASON FOR OUTPUT

To display Type Of Service (TOS) index associated with the 10-digit Advanced Intelligent Network (AIN) triggers contained in the expanded 10-digit trigger database.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | ABC digits (000-999). |
| b | DEF digits (000-999). The fourth, fifth and sixth digits of a series. |
| c | GHIJ digits (0000-9999). The seventh, eighth, ninth and tenth digits of a series. |
| d | Type of service index (00-31). |

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPIMC4
IOCPMCP4
IOCPPVR4
IOCPVRT4
VRFYCNTL
VRFYFHT
VRFYINPT
VRFYOUT
VRFYPCP

Translation Guide, 4ESSTM, Division 8, Section 6dg

SEE PROPRIETARY NOTICE ON COVER PAGE

4ESS
OM-4B000-01

VER:MISC:FHT AINTRIG

Input Message
VER:MISC-AINTRIG

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VER:MISC-AINTRIG-2

Issue 1.8
September 2001

ID VER:MISC-AMA
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:MISC;OPT(AMA)

CALL CODE	STRUCTURE CODE SET
a,	bbbb,
•	
•	
•	

2. REASON FOR OUTPUT

To display the structure code indexed by a calling code.

3. VARIABLE FIELD DEFINITIONS

a	Automatic Message Accounting (AMA) call code index (0-999).
b	Structure code set for the call code: NONE — No code set. SET1 — Code set number 1. SET2 — Code set number 2.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPIMC4
VRFYCNTL
VRFYINPT
VRFYMISC
VRFYOUT

Translation Guide, 4ESSTM, Division 8, Section 6ab

Input Message
VER:AMA

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:MISC-ANN
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:MISC;OPT(ANN)

ANINDEX	ANN
a,	b,
•	
•	
•	

2. REASON FOR OUTPUT

To display the announcement treatment associated with each announcement index.

3. VARIABLE FIELD DEFINITIONS

a	Announcement index (0-255).
b	Announcement treatment associated with the index: AR, BT, DNN, D00, E01-E20, EA1-EA7, HW, I01-I30, IFF, INC, INF, ISB, IVC, LDV, LOB, LSA, MCA, NCA, NCB, NCC, NCD, NWC, NWN, OOA, OOB, OTS, R01-R10, ROA, S01-S19, SNA, SP1, SP2, ST0, T, TDN, UNN, VCA, VMA, WAT.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPIMC4
VRFYCNTL
VRFYINPT
VRFYMISC
VRFYOUT

Translation Guide, 4ESSTM, Division 8, Section 6aa

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:MISC-CHGSDX
WORK CENTER.. MAC, MOC
GENERIC 4E23 Rel. 4 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:MISC;OPT(CHGSDX,UNA): SDINDEX a,

2. REASON FOR OUTPUT

Displays the index of an entry that has been deleted for the Subsequent Digit Routing Index (SDINDEX) structure since the time and date specified in the input command.

3. VARIABLE FIELD DEFINITIONS

a Subsequent Digit Routing Index (SDINDEX) number (0-16383).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYIRTG
VRFYMISC
VRFYOUT
VRFYRTNG

Input Message
VER:MISC

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ID VER:MISC-CHGTSG
WORK CENTER.. MAC, MOC
GENERIC 4E23 Rel. 4 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:MISC;OPT(CHGTSG,UNA): TSGN a,

2. REASON FOR OUTPUT

Displays the Trunk Subgroup Number (TSGN) of an entry that has been deleted for the Trunk Subgroup (TSG) since the time and date specified in the input command.

3. VARIABLE FIELD DEFINITIONS

a Trunk Subgroup Number (TSGN) (0-4095).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYIRTG
VRFYMISC
VRFYOUT
VRFYRTNG

Input Message
VER:MISC

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ID VER:MISC-FHT-RC
WORK CENTER.. MAC, MOC
GENERIC 4E21 Rel. 4 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:MISC:FHT RCECO4CVU:

FEATURE ON/OFF STATUS: a
CHANNEL 1 CHANNEL 2
[b(c)] [d(e)]

2. REASON FOR OUTPUT

This message is in response to the VER:MISC-FHT-RC input message.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | Feature status:

OFF

ON |
| b | Name for Channel 1. (If blank, then no channel was input via Recent Change.) |
| c | Numeric Value for Channel 1. (If blank, then no channel was input via Recent Change.) |
| d | Name for Channel 2. (If blank, then no channel was input via Recent Change.) |
| e | Numeric Value for Channel 2. (If blank, then no channel was input via Recent Change.) |

4. ACTION TO BE TAKEN

None. For information only.

5. REFERENCES

PIDENTs
VRFYFHT
VRFYMSCM

Input Message
VER:MISC-FHT-RC

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ID VER:MISC-FHT-USD
WORK CENTER.. MAC, MOC
GENERIC 4E21 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:MISC:FHT USDSPCSSN:

PC	QPF SSN	SDF SSN
aaa bb c ddd	e	f
•		
•		
•		

2. REASON FOR OUTPUT

The output is in response to the VER:MISC-FHT-USD input message. This message displays the Universal Subscriber Data Structure (USDS) point codes and Subsystem Numbers (SSNs) which have been populated.

3. VARIABLE FIELD DEFINITIONS

a	Network portion of point Code (000-255).
b	Region portion of point Code (00-31).
c	Cluster portion of point Code (0-7).
d	Member portion of point Code (000-255).
e	Query Processing Function (QPF) subsystem number (1-255). If 0 then unassigned SSN.
f	Shared Directory Function (SDF) subsystem number (1-255). If 0 then unassigned SSN.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYFHT

Translation Guide, 4ESSTM, Division 8, Section 6dc

Input Message
VER:MISC-FHT-USD

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:MISC-FHTEASY
WORK CENTER.. MAC, MOC
GENERIC 4E20 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:MISC:FHT EASYREACH:

FEATURE INTERACTION STATUS INDICATORS

SPR ALA PCP SDN

a b c d

SPC SSN

eee ff g hhh iii

•
•
•

2. REASON FOR OUTPUT

The output is in response to the VER:MISC-FHTEASY input message. This message displays the state of the feature interaction status indicators and the currently populated point code and subsystem entries (maximum of 4) for the EasyReach® capability.

3. VARIABLE FIELD DEFINITIONS

- a Spare EasyReach® (SPR) feature interaction status indicator:
- 0 — Off.
- 1 — On.
- b Adjunct Logical Address (ALA) EasyReach® feature interaction status indicator:
- 0 — Off.
- 1 — On.
- c Positive Call Processing (PCP) EasyReach® feature interaction status indicator:
- 0 — Off.
- 1 — On.

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d	Software Defined Network (SDN) EasyReach® feature interaction status indicator: 0 — Off. 1 — On.
e	Network portion of point code (000-255).
f	Cluster portion of point code (00-31).
g	Region portion of point code (0-7).
h	Member portion of point code (000-255).
i	Subsystem Number (SSN). (000-255).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYFHT

Translation Guide, 4ESSTM, Division 8, Section 6db

Input Message
VER:MISC-FHTEASY

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ID VER:MISC-FHTIBNS
WORK CENTER.. MAC, MOC
GENERIC 4E20 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:MISC:FHT IBNSROUTE:

ABC-WXYZ Routing Number

aaa-aaaa

2. REASON FOR OUTPUT

The output is in response to the VER:MISC-FHTIBNS input message. This message displays the international billed number screening (IBNS) routing number.

3. VARIABLE FIELD DEFINITIONS

a A seven digit routing number.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYFHT

Input Message
VER:MISC-FHTIBNS

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:MISC-OCTCP
WORK CENTER.. MAC, MOC
GENERIC 4E24 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:MISC;OPT(OCTCP)

OTYP a, ONPACC b, ONXX [ccc,] ORIGFAI d,
TTYT e, TNPACC f, TNXX [ggg,] SII h,

TCSR i, TEI j,

FAI	PERCENT	OVERFLOW	FAI	FAI	PERCENT	OVERFLOW	FAI
k,	l.l,	[m,][m,][m,][m,][m,][m,]	k,	l.l,	[m,][m,][m,][m,][m,][m,]		
.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.

REMARKS n

2. REASON FOR OUTPUT

To display the originating carrier and terminating country pair to foreign administration identity assignment for the change carrier specific routing for international switched transit service.

3. VARIABLE FIELD DEFINITIONS

- a Originating type:
CC — Country Code (CC).
NPA — Numbering Plan Area (NPA).
- b Originating NPA or CC number (2-999).
- c Originating Exchange Number (NXX) (000-999).
- d Originating foreign administration identity number (1-31).
- e Terminating type:
CC — Country Code (CC).
NPA — Numbering Plan Area (NPA).
- f Terminating NPA or CC number (2-999).

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g	Terminating Exchange Number (NXX) (000-999).
h	Service identity number (1-255).
i	Treatment of carrier specific routing: MAND — Mandatory routing. NONE — No routing specified. PREF — Preferred routing.
j	Table entry index number (0-255).
k	Foreign administration identity number (1-31).
l	Percentage (0.0-100.0). Can be specified in tenths.
m	Overflow foreign administration identity number (1-31).
n	Additional information.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPIMC4
IOCPMCP4
IOCPPVR4
VRFYCNTL
VRFYINPT
VRFYMISC
VRFYOUT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:MISC-ONOFF
WORK CENTER.. MAC, MOC
GENERIC 4E21 Rel. 2 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:MISC;OPT(ONOFF)

ATP, SCSFH, CPESR, I800P1, I800P2, ITRA, LSDS, GETS, SUA,
a, b, c, d, e, f, g, h, i,

CSCRACT, PCPNCP, ASM, AASE, AINON, AINRDFLT,
j, k, l, m, n, o.

FEATURE BITS

[p, [p, ...]][NONE]
[p, [p, ...]]
[p, [p, ...]]
[p, [p, ...]]
[p, [p, ...]]

PROPRIETARY FEATURE BITS

[q, [q, ...]][NONE]
[q, [q, ...]]
[q, [q, ...]]
[q, [q, ...]]
[q, [q, ...]]
[q, [q, ...]]

2. REASON FOR OUTPUT

To display the status of internal feature, proprietary and non-proprietary feature indicators.

3. VARIABLE FIELD DEFINITIONS

a AT&T Trigger Platform (ATP) feature active:

N — No.

Y — Yes.

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- b Service Circuit System (SCS) for Integrated Services Digital Network User Part (ISUP) releasability of expanded final handling announcement:
N — No.
Y — Yes.
- c Call Prompter with enhanced speech recognition:
N — No.
Y — Yes.
- d Inbound 800 separation of Country Code (CC) phase 1:
N — No.
Y — Yes.
- e Inbound 800 separation of Country Code (CC) phase 2:
N — No.
Y — Yes.
- f Intra- Local Access Transport Area (LATA) competition parameter:
N — No.
Y — Yes.
- g Local Exchange Carrier (LEC) switch digital services phase 2 On/Off parameter:
N — No.
Y — Yes.
- h Fail Open parameter defined for the Government Emergency Telecommunications Service (GETS):
N — No.
Y — Yes.
- i Software update automation:
N — No.
Y — Yes.
- j Carrier screening for 800 number portability active:
N — No.
Y — Yes.

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- k Positive Call Processing (PCP) using Network Control Point (2NCP) / Network Services Complex (NSCX):
N — No.
Y — Yes.
- l SCS update system type Announcement Systems Manager (ASM) / Announcement Administration Processor (AAP):
N — No.
Y — Yes.
- m Announcement administration system equipment office parameter:
N — No.
Y — Yes.
- n Advanced Intelligent Network (AIN) On / Off switch:
N — No.
Y — Yes.
- o AIN route using default:
N — No.
Y — Yes.
- p Feature indicators for non-proprietary features (F1-F72).
- q Feature indicators for proprietary features (PF1-PF96).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPIMC4
VRFYCNTL
VRFYINPT
VRFYMISC
VRFYOUT

Input Message
VER:MISC

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:MISC-SUXTSI
WORK CENTER.. MAC, MOC
GENERIC 4E24 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:MISC;OPT(SUXTSI): XT SI MEMN a,

XTCN 0 1
XTCHV b,b,
XTCSV c,c,

CSP,PUBI,GRAM,CIA,ALF,EXEC
XTC0 PACKS d, e, f, g, h, i,
XTC1 PACKS d, e, f, g, h, i,

XT SI FRAME INBAND ENABLED j,

IBUEQ k,
IBUHV l,
IBUSV m,

D3UN 0 1 2 3 4 5 6 7
D3UEQ n,n,n,n,n,n, n,n,
D3UHV o,o,o,o,o,o, o,o,
D3USV p,p,p,p,p,p, p,p,

SPUN 0 1 2 3 4 5 6 7 8 9 10 11
SPUEQ [q,q,q,q,q,q,q,q,q,q q, q,
SPUHV r,r,r,r,r,r,r,r,r,r r, r,
SPUSV s,s,s,s,s,s,s,s,s,s s, s,]

2. REASON FOR OUTPUT

Display the sub-unit Expanded Time Slot Interchange (XTSI) type data for the requested XT SI.

3. VARIABLE FIELD DEFINITIONS

- a XT SI member number (2-62 even numbers only).
- XTCN XT SI controller number.
- b XT SI Controller Hardware Version (XTCHV) number (0-7).
- c XT SI Controller Software Version (XTCSV) number (0-7).

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- d Hardware version of the Controller Signal Processor (CSP) pack for XTSI controller 0 or 1:
- 0 — No CSP pack present.
 - 1 — Initial 4WB9 CSP pack needed for In-Band.
 - 2 — Unassigned.
 - 3 — Unassigned.
- e Hardware version of the Peripheral Unit Bus Interface (PUBI) pack for XTSI controller 0 or 1:
- 0 — Initial KBN16 PUBI pack present.
 - 1 — KBN23 PUBI pack needed for In-Band.
 - 2 — Unassigned.
 - 3 — Unassigned.
- f Hardware version of the Global Random Access Memory (GRAM) pack for XTSI controller 0 or 1:
- 0 — Initial UN557 GRAM pack present.
 - 1 — Unassigned.
 - 2 — Unassigned.
 - 3 — Unassigned.
- g Hardware version of the Controller Bus Image Administration (CIA) pack for XTSI controller 0 or 1:
- 0 — Initial UN547 CIA pack present.
 - 1 — UN650 CIA pack needed for In-Band.
 - 2 — Unassigned.
 - 3 — Unassigned.
- h Hardware version of the A-Link Formatter (ALF) pack for XTSI controller 0 or 1:
- 0 — Initial 4WB6 ALF pack present.
 - 1 — Unassigned.
 - 2 — Unassigned.
 - 3 — Unassigned.

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i	Hardware version of the Executive Controller (EXEC) pack for XTSI controller 0 or 1: 0 — Initial UN548 EXEC pack present. 1 — UN549 EXEC pack needed for In-Band. 2-15 — Unassigned.
j	XTSI frame In-Band enabled: N — XTSI without In-Band signaling. Y — XTSI with In-Band signaling enabled.
k	In-Band Unit (IBU) equipage: G — Grow O — Operational S — Special Growth U — Unequipped
l	IBU hardware version: 0 — Initial hardware version. 1-7 — Unassigned.
m	IBU software version (0-7).
D3UN	Digital Signal Level 3 (DS3) number (0-7). Six is the spare Digital Signal Level 3 Unit (D3U) number for D3U numbers 0-2. Seven is the spare D3U number for D3U numbers 3-5.
n	DS3 Unit Equipage (D3UEQ): G — Grow O — Operational S — Special Growth U — Unequipped
o	D3U Hardware Version (D3UHV) number (0-7). 0 — Initial 4WB3 D3U pack. 1 — 4WB11 In-Band Capable D3U pack.
p	D3U Software Version (D3USV) number (0-7).
SPUN	Signal Processing Unit Number (SPUN) Ten is the spare Signal Processing Unit (SPU) number for SPU numbers 0-4. Eleven is the spare SPU number for SPU numbers 5-9.

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q Signal Processing Unit Equipage (SPUEQ) AT&T exclusive:
 G — Grow
 O — Operational
 S — Special Growth
 U — Unequipped

r SPU Hardware Version (SPUHV) number (0 - 7). AT&T exclusive.

s SPU Software Version (SPUSV) number (0 - 7). AT&T exclusive.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPIMC4
IOCPMCP4
IOCPPVR4
VRFYCNTL
VRFYINPT
VRFYMISC
VRFYOUT

Input Message
VER:VFUNC

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:MISC-TOS
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:MISC;OPT(TOS)

TOS	TT	SSN	CODE	AIN	TFREE
a,	b,	ccc,	ddd,		[e],
	•				
	•				
	•				

2. REASON FOR OUTPUT

To display the Bell Operating Company's service switching point information corresponding to the type of service input.

3. VARIABLE FIELD DEFINITIONS

a	Type of service (0-31).
b	Translation type (0-255).
c	Subsystem number (232-235).
d	Three-digit code (000-999).
e	Advanced Intelligent Network (AIN) 800 / Tollfree (TFREE) indicator: N — No TFREE indicator active. Y — Yes TFREE indicator active.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPPVR4
VRFYCNTL
VRFYINPT
VRFYMISC
VRFYOUT

Translation Guide, 4ESSTM, Division 8, Section 6ae

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Input Message
VER: TOS

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ID VER:MISC-TRGASN
WORK CENTER.. MAC, MOC
GENERIC 4E23 Rel. 3 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:MISC;OPT(TRGASN):

NPA	NXX	CNT
aaa,	bbb,	c,

2. REASON FOR OUTPUT

To display the Advanced Intelligent Network (AIN)/ Local Number Portability (LNP) trigger assignment data.

3. VARIABLE FIELD DEFINITIONS

a	Numbering Plan Area (NPA).
b	Exchange Number (NXX).
c	Assignment data: AIN — AIN trigger assigned LNP — LNP trigger assigned BOTH — AIN and LNP triggers assigned

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPPVR4
VRFYCNTL
VRFYINPT
VRFYMISC
VRFYOUT

Input Message
VER:MISC

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ID VER:MISC-XTSID3U
WORK CENTER.. MAC, MOC
GENERIC 4E24 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:MISC;OPT(XTSID3U) XTSI MEMN a, D3UN b,
REM ALARM c, MAX LBO d, DS3 APPL [e], INBAND D3U f,

DS1 INFO

DS1 NUMBER	1	2	3	4	5	6	7	8	9	10	11	12	13	14,
EQUIPAGE	g,	g,	g,	g,	g,	g,	g,	g,	g,	g,	g,	g,	g,	g,
FRAME FORMAT	h,	h,	h,	h,	h,	h,	h,	h,	h,	h,	h,	h,	h,	h,
STATIC A/B	i,	i,	i,	i,	i,	i,	i,	i,	i,	i,	i,	i,	i,	i,
INBAND DS1	j,	j,	j,	j,	j,	j,	j,	j,	j,	j,	j,	j,	j,	j,

DS1 NUMBER	15	16	17	18	19	20	21	22	23	24	25	26	27	28,
EQUIPAGE	g,	g,	g,	g,	g,	g,	g,	g,	g,	g,	g,	g,	g,	g,
FRAME FORMAT	h,	h,	h,	h,	h,	h,	h,	h,	h,	h,	h,	h,	h,	h,
STATIC A/B	i,	i,	i,	i,	i,	i,	i,	i,	i,	i,	i,	i,	i,	i,
INBAND DS1	j,	j,	j,	j,	j,	j,	j,	j,	j,	j,	j,	j,	j,	j,

2. REASON FOR OUTPUT

To display the Digital Signal Level 3 (DS3) informational data for the DS3 and the Digital Signal Level 1 (DS1) information for the requested DS3.

3. VARIABLE FIELD DEFINITIONS

- a Expanded Time Slot Interchange (XTSI) member number (2-62 even numbers only).
- b DS3 number (0-5).
- c Remote alarm indication:
 IGN — Ignore
 INV — Inverted
 STD — Standard
- d Maximum line build out for cable length:
 225 — For lengths 0 to 225.
 450 — For lengths 225 to 450.

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- e DS3 application:
CBP
M23
- f In-Band signaling state for this D3U:
N — In-Band disabled.
Y — In-Band enabled.
- g Equipage for the 1st through the 28th DS1 for this D3U:
F — Future
P — Present / provisioned.
- h Frame format for the 1st through the 28th DS1 for this D3U:
E — Extended Superframe
S — Superframe
- i Static A/B for this DS1:
N — 64K clear channel.
Y — Static A/B 64K speed but only 56k usable, the rest of the bits are restricted.
- j In-Band signaling state for this D31:
N — In-Band disabled.
Y — In-Band enabled.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPIMC4
IOCPMCP4
IOCPPVR4
VRFYCNTL
VRFYINPT
VRFYMISC
VRFYOUT

Input Message
VER:VFUNC

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:MSN
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] VER:MSN; a: SP b, MML c, ROW d
MISC APPL
- | | | |
|-----|-----|--------|
| COL | MPI | DATA |
| e | f | gggggg |
- [2] VER:MSN; a: SP b, MML c, ROW d
COL NTPI UTY MEMN
e h i j
- [3] VER:MSN; a: SP b, MML c, ROW d
TSN
- | | | | | | |
|-----|-----|----|-----|-----|-----|
| COL | TPI | SP | MML | ROW | COL |
| e | k | l | m | n | o |
- [4] VER:MSN; a: SP b, MML c, ROW d
UNASSIGNED
COL
e

2. REASON FOR OUTPUT

To verify the assignment for a Miscellaneous Scanner Number (MSN) in response to a VER:MSN input message.

Format 1 prints for MSNs that contain a Miscellaneous Program Index (MPI) entry.

Format 2 prints for MSNs that contain a Non-Trunk Program Index (NTPI) entry.

Format 3 prints for MSNs that contain a trunk Program Index (TPI) entry.

Format 4 prints for Unassigned (UNA) entries.

3. VARIABLE FIELD DEFINITIONS

- a Indicator:
- CUR — Current
- INA — Inactive
- b Signaling Processor (SP) number (0-31).

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c	Matrix half: 0 — Left half. 1 — Right half.
d	Row number (0-63).
e	SP column number of MSN in VER:MSN input message (0-15).
f	Miscellaneous program index (0-63).
g	Contents of data field (in octal) of MSN entry.
h	Non-trunk program index (0-63).
i	Unit Type (UTYP) number (0-127).
j	Member Number (MEMN) of unit type (0-127).
k	Trunk program index (0-63).
l	SP number of Trunk Scanner Number (TSN) (0-31).
m	SP matrix of TSN: 0 — Left. 1 — Right.
n	SP row of TSN (0-63).
o	SP column number of TSN (0-15).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYMISC
VRFYOUT

Translation Guide, 4ESSTM, TG-4, Division 8, Section 6d

Input Message
VER:MSN

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:NAILUP
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:NAILUP

	TAN				TAN						
QTRK	TSI	SPC	LVL	FTS	TSI	SPC	LVL	FTS	TYP	RDC	TL
aaa,	bb,	c,	d,	eee,	bb,	c,	d,	eee,	fff	g,	[h],

2. REASON FOR OUTPUT

To list both ends of a trunk that are in the nailup state. The data line may print up to sixteen times here. If there are more than sixteen trunks in the nailup state, a new header will print, followed by up to sixteen lines of additional data. This will continue until all trunks in the nailup state that were requested have been listed, or until a craftsman terminates the message.

3. VARIABLE FIELD DEFINITIONS

TAN	Trunk Appearance Number (TAN).
a	Quantity of trunks (1-120).
b	Time Slot Interchange (TSI) (0-63).
c	Switching And Permuting Circuit (SPC) (0-1).
d	TSI level (0-7).
e	First Time Slot (FTS) (0-127).
f	Transmission type (type of nailup): FSP — Four-state pass through transmission. R56 — 56 kbs, restricted transmission. R64 — 64 kbs, restricted transmission.
g	Red circuit handling. Indicates whether special circuit handling is required: N No Y Yes
h	Terminate and leave status. Indicates whether the TAN is in the Terminate and Leave (TL) state. Trunks that are in the terminate and leave state are blocked from service. blank Neither TAN is in the TL state. B Both TANs are in the TL state.

SEE PROPRIETARY NOTICE ON COVER PAGE

- L The left TAN is in the TL state.
- R The right TAN is in the TL state.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYMISC
VRFYOUT

Translation Guide, 4ESSTM, Division 8

Input Message
VER:NAILUP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:NDB-NDBI
 WORK CENTER.. MAC, MOC
 GENERIC 4E19 and later
 APPLICATION .. 4E
 TYPE Output

1. FORMAT

VER:NDB;OPT(NDBI) :

NDB	FENCLASS	FENID	RDBI	NXZZ	NNDB	FG	ANI	CPN	PATH	INTL
a,	b,	[c],	d,	ee,	[f],	g,	h,	i,	jjj,	k,
	.									
	.									
	.									

2. REASON FOR OUTPUT

To display the data in the number services routing data blocks that were selected by the user.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | Number services routing data block (1-1023). |
| b | Far end network class Access Tandem (ACCESA). |
| c | Far end network Identification (ID) (1-6 alphanumeric characters). |
| d | Routing data block index (1-8191). |
| e | Exchange (NX)/ Equal Access Digits (ZZ) for Interexchange Carrier (IC)/ International Carrier (INC) (00-99). |
| f | Next number services routing data (1-1023). |
| g | Feature group: |
| | C |
| | D |
| h | Automatic number identification: |
| | N — No |
| | Y — Yes |
| i | Calling party number: |
| | N — No |
| | Y — Yes |

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j Signaling path:
 ATD
 ATI
 DIR

k International signaling indicator:
 N — No
 Y — Yes

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPPVR4
VRFYCNTL
VRFYINPT
VRFYOUT
VRFYRDB

Translation Guide, 4ESSTM, Division 8, Section 5l

Input Message
VER:NDB-NDBI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:NDB-NDBLIST
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:NDB;OPT(NDBLIST): RDBI a,

NDB	NDB	NDB	NDB
b,	b,	b,	b,
•			
•			
•			

2. REASON FOR OUTPUT

To display all number services routing data blocks which contain a specified routing data block index.

3. VARIABLE FIELD DEFINITIONS

a	Routing data block index (1-8191).
b	Number services rating data block (1-1023).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPIMC4
VRFYCNTL
VRFYINPT
VRFYOUT
VRFYRDB

Translation Guide, 4ESSTM, Division 8, Section 5m

Input Message
VER:NDB-NDBLIST

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:NPADPC
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:NPADPC;OPT(NPA) NPA aaa,

	NET	CR	CT	MEM
SSN bbb, DPC	c,	d,	e,	f

2. REASON FOR OUTPUT

To display the Destination Point Code (DPC) and Subsystem Number (SSN) used to route Network Call Denial (NCD) queries to the NCD network control point.

3. VARIABLE FIELD DEFINITIONS

- a Numbering Plan Area (NPA) (200-999).
- b Subsystem Number (SSN) (232-255).
- c Network (NET) Indicator (0-255).
- d Cluster Region (CR) (0-31).
- e Cluster Type (CT) (0-7).
- f Cluster Member (MEM) (0-255).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYINPT
VRFYMISC
VRFYOUT

Translation Guide, 4ESSTM, Division 8, Section 6ah

Input Message
VER:NPADPC

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:OFFICE
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:OFFICE:

GENERIC INFO	TOWN	ST	BL	NBS	PCF	OPC	NSN
a	b	c	d	e	f	g	[h]

2. REASON FOR OUTPUT

To output the generic of an office, its unique CLLI code, point code format (PCF), origination point code (OPC), and network switch number (NSN).

3. VARIABLE FIELD DEFINITIONS

a	Generic in format of 4E<17>4A.08 R2.
b	CLLI office code, TOWN.
c	CLLI office code, state (ST).
d	CLLI office code, building (BL).
e	CLLI office code, near building subdivision (NBS).
f	Point code format.
g	Origination point code.
h	Network switch number (blank-191).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYCNTL
VRFYINPT
VRFYMISC

Input Message
VER:OFFICE

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ID VER:PASANN
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:PASANN;OPT(LIST); [a:]

ANNUM VSSID SID ANSEP

b, c, d, e,

2. REASON FOR OUTPUT

To verify all Public Announcement Service (PAS) announcements currently defined in the office.

3. VARIABLE FIELD DEFINITIONS

- a Translation type:
CUR — Current translations.
- b Announcement number (1-511).
- c Voice Storage System (VSS) Identification (VSSID) will be 0.
- d Service identification number:
For Service Circuit System (SCS) updated announcements —
(00000000-99900000, 99999001, 99999002).
For barge-in announcements — (99990001 - 9999512, 99999001,
99999002).
- e The announcement separation class (0-31).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYCNTL
VRFYINPT
VRFYMAS
VRFYOUT

Translation Guide, 4ESSTM, Division 8, Section 6p

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:PASANN-ANN
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:PASANN;OPT(ANN)[;CUR] TYPE a, UFH [b], VSSID c, SID d,

STANDBY TIMES AND DATES

STRTT ee:ff, STRTM g, STRTD h, STRTY i,
STOPT jj:kk,

LENGTH l, PLAYS m, ANSEP n,

ANSWR o, ANNUM p,

CAREA q, CPOS r,

CAPPN s

SSI [t], SAN [u],

ADSI [v], ADFHT w, ANNUM x

2. REASON FOR OUTPUT

To display detailed information about one Public Announcement Service (PAS) announcement. If a range of announcements is specified, undefined announcements are not listed.

3. VARIABLE FIELD DEFINITIONS

CUR	Data currently residing in the translation area.
a	Announcement type: BI — Barge-in announcements. SCS — Service Circuit System (SCS) announcements.
b	Use Final Handling (UFH): blank — indicates that a Mass Announcement System (MAS) announcement is used. N — indicates that a MAS announcement is used. Y — indicates that the service SCS is used.
c	Voice Storage System Identification (VSSID), the entry will be 0.

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d	Service identity: For SCS announcements — (00000000-99900000, 99999001, 99999002). For barge-in announcements — (99990001 - 99995111, 99999001, 99999002).
e	Start time hours based on a 24-hour clock (00-23).
f	Start time minutes based on a 24-hour clock (00-59).
g	Start month (1-12).
h	Start day (0-31).
i	Start year (0-99).
j	Stop time hours based on a 24-hour clock (00-23).
k	Stop time minutes based on a 24-hour clock (00-59).
l	Length of announcement (5-300 sec.; in 30 sec. increments).
m	The number of playbacks of an announcement that a caller may listen to before being disconnected. (1, 2, 3 or U for unlimited.)
n	Announcement separation class (0-31). Class 0 may have more than one announcement assigned.
o	Answer supervision: N — Indicates that answer supervision has not returned on the incoming trunk. Y — Indicates that answer supervision has returned on the incoming trunk.
p	Announcement number (1-511).
q	Control area for announcement trouble reports (0-9).
r	Control position for announcement trouble reports (0-9).
s	Cut-through application number (0-63).
t	SCS service circuit ID: FHA FHB
u	SCS announcement number: 1-4095
v	Automatic Number Identification (ANI) delivery service index (1-16).
w	ANI delivery final handling treatment: AR, BT, DNN, D00, E01-E20, EA1-EA7, HW, I01-I30, IFF, INC, INF, ISB, IVC, LDV, LOB, LSA, MCA, NCA, NCB, NCC, NCD, NWC, NWN, OOA, OOB, OTS, R01-R10, ROA, S01-S19, SNA, SP1, SP2, STO, T, TDN, UNN, VCA, VMA, WAT.

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x Announcement number (1-511).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYCNTL
VRFYINPT
VRFYMAS
VRFYOUT

Translation Guide, 4ESSTM, Division 8, Section 6q

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j	Cut through stop date (1-31).
k	Cut through stop year (0-99).
l	Cut through start hours (00-23).
m	Cut through start minutes (00-59).
n	Cut through stop hours (00-23).
o	Cut through stop minutes (00-59).
p	Man Direct Distance Dialing (DDD) number (10 digit number).
q	Cut through DDD number (10 digit number).
r	Gap index (0-15).
s	Announcement number (1-511).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPPVR4
VRFYCNTL
VRFYINPT
VRFYMAS
VRFYOUT

Translation Guide, 4ESSTM, Division 8, Section 6g

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:PASTVOTE-M
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:PASTVOTE;OPT(MASTER);a: MSI b, MAPN c,

START DATE

STRTM d, STRTD e, STRTY f,

STOP DATE

STOPM g, STOPD h, STOPY i,

STRTT jj:kk, STOPT ll:mm,

DUPID [n],

MAN ACNTR

o, [p],

2. REASON FOR OUTPUT

To display televote data associated with offices which are used as master televote applications.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | Indicator:

CUR — Current translations.

INA — Inactive translations. |
| b | Televote application office designation:

B — Both master and slave.

M — Master.

S — Slave. |
| c | Master application number (0-63). |
| d | Start month (1-12). |
| e | Start day (1-31). |
| f | Start year (0-99). |
| g | Stop month (1-12). |
| h | Stop day (1-31). |

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i	Stop year (0-99).
j	Daily start time hours (0-23).
k	Daily start time minutes (0-59).
l	Daily stop time hours (0-23).
m	Daily stop time minutes (0-59).
n	Dial-up port identification that uniquely identifies the specific dial-up port of the televote sponsor (2 alphanumeric characters).
o	A 4-digit number representing the rightmost digits of the Direct Distance Dialing (DDD) number advertised for callers to use to register their vote.
p	Accumulating counter index that is assigned to the master televote application for the line number (0-127).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
VRFYOUT

Translation Guide, 4ESSTM, Division 8, Section 6i

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:PASTVOTE-S
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:PASTVOTE;OPT(SLAVE); a: MSI b, SAPN [c], MAPN d,

START DATE

STRTM e, STRTD f, STRTY g,

STOP DATE

STOPM h, STOPD i, STOPY j,

STRTT kk:ll, STOPT mm:nn,

DSFUN o, SKEW [p],

MAN VSSID SID TCNTR ANNUM

q, r, s, [t], u,

2. REASON FOR OUTPUT

To display televote data associated with the offices which are used as slave televote applications.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | Indicator: |
| | CUR — Current translations. |
| | INA — Inactive translations. |
| b | Televote application office designation: |
| | B — Both master and slave. |
| | M — Master. |
| | S — Slave. |
| c | Slave application number (0-63). |
| d | Master application number (0-63). |
| e | Start month (1-12). |
| f | Start day (1-31). |
| g | Start year (0-99). |
| h | Stop month (1-12). |

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i	Stop day (1-31).
j	Stop year (0-99).
k	Daily start time hours (0-23).
l	Daily start time minutes (0-59).
m	Daily stop time hours (0-23).
n	Daily stop time minutes (0-59).
o	Common Channel Interoffice Signaling (CCIS) direct signaling function (1-32763).
p	The offset in seconds from start time when the count will be transmitted the first time from slave to master (0-300).
q	A 10-digit number representing the Direct Distance Dialing (DDD) number advertised for callers to use to register their vote.
r	Voice storage system identity (0).
s	Service identity.
t	Televote counter index that is assigned to the slave televote application for the DDD number (0-127).
u	Announcement number (1-511).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
VRFYOUT

Translation Guide, 4ESSTM, Division 8, Section 6h

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:PCP
WORK CENTER.. MAC, MOC
GENERIC 4E20 - 4E25R4
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:PCP:

CANI TOA TSVC NUMPL ACI/L CDS FAX FAXPR FAXSF CDET ANCD

aaaaaaaaaa, bb, cccc, dddd, e/[f], g,[hhhh,] i, j, k, llll,
.
.
.

2. REASON FOR OUTPUT

To display information on the CANIs contained in the Positive Call Processing (PCP) database.

3. VARIABLE FIELD DEFINITIONS

- a Customer automatic number identification (10 digits).
- b Type of access:
 DC — Direct connect.
 SA — Switch access.
- c Type of service:
 LDS — Long distance service.
 OMEG — Outward Wide Area Telephone Service (OUTWATS)
 or Megacom® Telecommunications Service.
- d Numbering plan:
 APN — Action point numbering.
 NANP — North American numbering plan.
- e Account code indicator:
 O — Optional.
 R — Required.
- f Account code length:
 blank
 1 to 8 digits
- g Call delivery service:
 Y — Customer is subscribed to service.
 N — Customer is not subscribed to service.

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- h Facsimile (FAX) service:
- blank — Customer is not subscribed to FAX service.
 - DFAX — Customer is subscribed to dedicated FAX service.
 - MUVF — Customer is subscribed to mixed-use voice / FAX.
 - N — Customer is not subscribed to FAX service.
- i FAX preferred routing:
- N — No
 - Y — Yes
- j FAX store and forward:
- N — No
 - Y — Yes
- k Call detail data:
- N — No
 - Y — Yes
- l Automatic Number Identification (ANI) based network call denial:
- ALLW — Non-delinquent ANI, allow call.
 - DENY — Delinquent ANI, block call.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPMCP4
IOCPPVR4
VRFYINPT
VRFYOUT
VRFYPCP

Input Message
VER:PCP

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:PCP-NPASPLIT
WORK CENTER.. MAC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:PCP;OPT(NPASPLIT):

OLD NPA	NEW NPA
aaa,	bbb,
•	
•	
•	

2. REASON FOR OUTPUT

To display all the Numbering Plan Area (NPA) split information that is stored in the Positive Call Processing (PCP) database.

3. VARIABLE FIELD DEFINITIONS

a	Old NPA (200-999).
b	New NPA (200-999).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPOMC4
IOCPPVR4
VRFYOUT
VRFYPCP

Translation Guide, 4ESSTM, TG-4, Division 8, Section 6av

Input Message
VER:PCP-NPASPLIT

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1. FORMAT

TOA	TSVC	RIIAI	RSII
aa,	bbbb,	cc,	ddd,
.	.	.	.
.	.	.	.
.	.	.	.

a Type of access:
 SA — Switch access.
 DC — Direct connect.

b Type of service:
 LDS — Long distance service.
 OMEG — Outward wide area telephone service (OUTWATS) or
 Megacom® Telecommunications Service.

c Routing information indicator access indicator:
 SA — Switch access.
 DC — Direct connect.

d Redirect service identity (0 to 255).

PIDENTs
IOCPOMC4
IOCPPVR4
VRFYOUT
VRFYPCP

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Translation Guide, 4ESSTM, TG-4, Division 8

Input Message
VER:PCP-TTSII

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ID VER:PCP-SCT
WORK CENTER.. MAC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:PCP;OPT(SCT)

SCODE	RDN	SCUSE	EQOWN
aaa,	bbbbbbbbbb,	c,	d,
•			
•			
•			

2. REASON FOR OUTPUT

To display all service code to redirect destination number mappings.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | Service code (000-999). |
| b | Redirect destination number (10 digit number). |
| c | Service code use:
FAX
VOICE |
| d | Equipment owned by AT&T:
N — No
Y — Yes |

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPOMC4
IOCPPVR4
VRFYOUT
VRFYPCP

Translation Guide, 4ESSTM, TG-4, Division 8, Section 6aw

Input Message
VER:PCP-SCTABLE

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:RCFORM
WORK CENTER.. MAC, MOC, NMOC, TEC,
TOC
GENERIC 4E24 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:RCFORM:

RC FORM {a b ERR}	ACTIVATED(#) c	LONGEST PROC TIME d	ACC PROC TIME {e 999999999}
.	.	.	.
.	.	.	.
.	.	.	.

2. REASON FOR OUTPUT

Provides the ability to verify the metric reports for all activated Recent Change Forms (RCFORM) and messages.

The RC form metric reports are presented in 16 entries per segment.

3. VARIABLE FIELD DEFINITIONS

a	Recent change form number (100-999).
b	Miscellaneous RC message type: FHT — Type A. FHB — Type B.
ERR	Unassigned RC form / message.
c	Number of times the Recent Change (RC) form has been activated (1-16777215).
d	Longest processing time in centiseconds (1-16777215).
e	Accumulative processing time in centiseconds (1-3153600000).
999999999	Invalid data in accumulative processing time register.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYT002

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Input Message
VER:RCFORM

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:RDB-INCHAIN
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:RDB:OPT(INCHAIN),CUR: RDBI a,
TTSI [b], RDBFHT c, ADG [d,] ANFHT e,
BTFN TOWN ST BL FBS NBS DEL PREFIX DNHRTYPE
f g h i j k l [m] [n]

2. REASON FOR OUTPUT

To verify an in-chain Routing Data Block (RDB) in response to a VER:RDB input message.

3. VARIABLE FIELD DEFINITIONS

- a Routing Data Block Index (RDBI) (1-8191).
- b Terminating toll switch index (1-31).
- c Routing Data Block Final Handling Treatment (RDBFHT): AR, BT, DNN, DOO, E01-E20, EA1-EA7, HW, I01-I30, IFF, INC, INF, ISB, IVC, LDV, LOB, LSA, MCA, NCA, NCB, NCC, NCD, NWC, NWN, OOA, OOB, OTS, R01-R10, ROA, S01-S19, SNA, SP1, SP2, ST0, T, TDN, UNN, VCA, VMA, WAT.
- d Automatic Distribution Group (ADG). It specifies the operator group number (0-3 or blank). Each operator group can contain eight trunk subgroups.
- e Automatic Number Identification (ANI) Failure Action Final Handling Treatment (ANFHT): AR, BT, DNN, DOO, E01-E20, EA1-EA7, HW, I01-I30, IFF, INC, INF, ISB, IVC, LDV, LOB, LSA, MCA, NCA, NCB, NCC, NCD, NWC, NWN, OOA, OOB, OTS, R01-R10, ROA, S01-S19, SNA, SP1, SP2, ST0, T, TDN, UNN, VCA, VMA, WAT.
- f Base Traffic Number (BTFN) (0-9976). It is the first block of traffic numbers for the Trunk Subgroups (TSGs). Additional traffic numbers, either higher or lower in numerical value than the Base Traffic Number (BTFN), are assigned to the TSG in blocks of 24.
- g This four character alphabetic code represents the town, city, or location for the far end of the TSG.
- h This two character alphabetic code identifies the far end state, province, or foreign country.

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i	This two-character alphabetic or two-character numeric character code identifies the office for the far end of the TSG. Independent Telephone Company offices are always designated by an X plus an alpha character. If the TSG terminates in a customer's building and this code is not necessary to identify that building, this code is arbitrary.
j	This three-character alphanumeric code identifies the internal building subdivision for the far end of the TSG.
k	This three-character alphanumeric code identifies the internal building for the near end termination of the TSG.
l	This field specifies the number of digits to be deleted from the dialed address before outputting. Up to 14 digits may be deleted. If no deletion is required, a 0 must be in this field. Digit deletion always begins with the first address digit in a sequence. For example, delete three would remove the ABC digits from a dialed address. When deleting and prefixing is done on a dialed address, digit deletion occurs first. Each TSG in the routing block may have its own delete/prefix definition. The requirement for manipulation is determined by the ability of the far end office to accept various digit combinations.
m	If prefixing is not required, this column is blank. If it is required, the digit or digits in this field are added to the dialed address after digit deletion. Any number up to six digits (0-999999) may be specified as a digit prefix.
n	Dynamic non-hierarchical network route type: blank — Non Dynamic Non-Hierarchical Routing (DNHR). ED — Engineered direct. EV — Engineered via. ID — Ignore delete and prefix. RT — Real time.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYCNTL
VRFYINPT
VRFYOUT
VRFYRDB

Translation Guide, 4ESSTM, TG-4, Division 8, Section 5a

Input Message
VER:RDB

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:RDB-INTL
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:RDB;OPT(INTL), CUR: RDBI a, IDOM b,

RDBFHT c, ADG d, ANFHT e,

BTFN TOWN ST BL FBS NBS DEL PREFIX KP

f gggg hh ii jjj kkk l [m] n

2. REASON FOR OUTPUT

To display the contents of an in-chain international Routing Data Block (RDB) including its auxiliary RDBs.

3. VARIABLE FIELD DEFINITIONS

- a RDB index number (0-8191).
- b Type of calling:
0 — Originating
T — Transit
- c Final handling treatment code: AR, BT, DNN, DOO, E01-E20, EA1-EA7, HW, I01-I30, IFF, INC, INF, ISB, IVC, LDV, LOB, LSA, MCA, NCA, NCB, NCC, NCD, NWC, NWN, OOA, OOB, OTS, R01-R10, ROA, S01-S19, SNA, SP1, SP2, ST0, T, TDN, UNN, VCA, VMA, WAT.
- d Automatic distribution action code (0-3).
- e Automatic Number Identification (ANI) Failure Action Final Handling Treatment (ANFHT): AR, BT, DNN, DOO, E01-E20, EA1-EA7, HW, I01-I30, IFF, INC, INF, ISB, IVC, LDV, LOB, LSA, MCA, NCA, NCB, NCC, NCD, NWC, NWN, OOA, OOB, OTS, R01-R10, ROA, S01-S19, SNA, SP1, SP2, ST0, T, TDN, UNN, VCA, VMA, WAT.
- f Base traffic number (0-9976) .
- g The town, city, or location for the far end of the Trunk Subgroup (TSG) (4 characters).
- h The far end state, province, or foreign country (2 characters).
- i The building or office identity for the far end of the TSG (2 characters).

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j	The far building subdivision code for internal building identification (3 characters).
k	The internal building subdivision for the near end of the TSG (3 characters).
l	Specified number of deleted digits (up to 14). 0 — No deletion.
m	Prefixing (0-999999) or blank — no prefixing.
n	Keypulse indicator (1-2).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYCNTL
VRFYINPT
VRFYOUT
VRFYRDB

Translation Guide, 4ESSTM, Division 8, Section 5d

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:RDB-LISTTH
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:RDB;OPT(LIST)					BTFN TOWN ST BL FBS NBS						
					TSG	a	bbbb	cc	dd	eee	fff
		TG					TG				
RDBI	ORDER	DEL	PREFIX	KP	RDBI	ORDER	DEL	PREFIX	KP		
g		h	i	[j]	k	g		h	i	[j]	k

2. REASON FOR OUTPUT

To display the list of all international Routing Data Blocks (RDBs), which contains a specified Trunk Subgroup (TSG) together with the position of the TSG within the RDB.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | Base traffic number (0-9976). |
| b | The town, city, or location for the far end of the TSG (4 characters). |
| c | The far end state, province, or foreign country (2 characters). |
| d | The building or office identity for the far end of the TSG (2 characters). |
| e | The far building subdivision code for internal building identification (3 characters). |
| f | The internal building subdivision for the near end of the TSG (3 characters). |
| g | RDB index number (1-8191). |
| h | Specifies the position (order) of the TSG within the RDB (1-48). |
| i | Specifies the number of digits to be deleted (0-15). |
| | 0 — No digit deletion. |
| j | Prefixing (0-999999). |
| k | Keypulse indicator (1-2). |

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
VRFYCNTL
VRFYINPT
VRFYOUT
VRFYRDB

Translation Guide, 4ESSTM, Division 8, Section 5g

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:RDB-LISTTW
 WORK CENTER.. MAC, MOC
 GENERIC 4E19 and later
 APPLICATION .. 4E
 TYPE Output

1. FORMAT

```

VER:RDB; OPT(LIST):      BTFN  TOWN  ST  BL  FBS  NBS
                        TSG    a  bbbb  cc  dd  eee  fff

      TG
RDBI ORDER DEL PREFIX DNHRTYPE RDBI ORDER DEL PREFIX DNHRTYPE
  g   h   i       j   [kk]      g   h   i       j   [kk]
  •
  •
  •
  
```

2. REASON FOR OUTPUT

To list all domestic Routing Data Blocks (RDBs) that contain a given trunk subgroup.

3. VARIABLE FIELD DEFINITIONS

- a Base traffic number of the Trunk Subgroup (TSG) (0-9976).
- b The town, city, or location for the far end of the TSG (4 characters).
- c The far end state, province, or foreign country (2 characters).
- d The building or office identity for the far end of the TSG (2 characters).
- e The far building subdivision code for internal building identification (3 characters).
- f The internal building subdivision for the near end of the TSG (3 characters).
- g Routing data block index that contains the trunk subgroup (1-8191).
- h Position of TSG in the routing data block (1-48).
- i Delete code (0-15).
- j Prefix code (0-999999).
- k Type of route in Dynamic Non-Hierarchical Routing (DNHR):
 - blank — Non Dynamic Non-Hierarchical Routing (DNHR).
 - ED — Engineered direct.
 - EV — Engineered via.
 - ID — Ignore delete and prefix.
 - RT — Real time.

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYCNTL
VRFYINPT
VRFYOUT
VRFYRDB

Translation Guide, 4ESSTM, Division 8, Section 5f

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:RDB-RDBIGR
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:RDB;OPT(RDBIGRP),aaa: QRDBI b, FRDBI c,
d

2. REASON FOR OUTPUT

Possible output in response to a VER:RDB input message.

3. VARIABLE FIELD DEFINITIONS

a	Indicator:
	CUR — Current
	INA — Inactive
b	Quantity of routing data block indexes.
c	First routing data block index (1-8191).
d	Unassigned or no recent changes found in test state.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYOUT
VRFYRDB

Translation Guide, 4ESSTM, Division 8

Input Message
VER:RDB

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:RDB-UNA
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:RDB;OPT(UNA):

RDBI	QTY	SUBTST
a,	b,	[UNA,]

2. REASON FOR OUTPUT

This message verifies Routing Data Blocks (RDBs) that are unassigned and thus available for use.

3. VARIABLE FIELD DEFINITIONS

a	Routing data block index . Lists the first RDB that is unassigned (1-8191).
b	Quantity, specifies the number of successive RDBs that are unassigned including and following the RDBI (1-128) .
UNA	Subtranslator status, indicates if the entire subtranslator is unassigned for the RDBI and quantity. If the subtranslator is unassigned, UNA will appear in the field, otherwise the field will be blank.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPPVR4
VRFYCNTL
VRFYINPT
VRFYOUT
VRFYRDB

Translation Guide, 4ESSTM, Division 8, Section 5e

Input Message
VER:RDB

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:RDBLIST-ABC
WORK CENTER.. MAC, MOC
GENERIC 4E21 Rel. 3 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:RDBLIST;OPT(ABC): ABC aaa,

RDBI	RDBI	RDBI	RDBI	RDBI	RDBI	RDBI	RDBI	RDBI	RDBI	RDBI
b,	b,	b,	b,	b,	b,	b,	b,	b,	b,	b,
•										
•										
•										

2. REASON FOR OUTPUT

To list all Routing Data Blocks (RDBs) that contain a given ABC prefix digit. Only domestic RDBs are searched.

3. VARIABLE FIELD DEFINITIONS

- a First three prefix digits (000-999).
b Routing data block index that contains the ABC digit (1-8191).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYCNTL
VRFYINPT
VRFYOUT
VRFYRDB

Translation Guide, 4ESSTM, Division 8, Section 5k

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:RDBLIST-FHT
WORK CENTER.. MAC, MOC
GENERIC 4E21 Rel. 3 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:RDBLIST;OPT(FHT): FHT a,

RDBI	RDBI	RDBI	RDBI	RDBI	RDBI	RDBI	RDBI	RDBI	RDBI
b,	b,	b,	b,	b,	b,	b,	b,	b,	b,
•									
•									
•									

2. REASON FOR OUTPUT

To list all Routing Data Blocks (RDBs) that contain a given Final Handling Treatment (FHT). Only domestic RDBs are searched.

3. VARIABLE FIELD DEFINITIONS

- a Final handling treatment:
AR, BT, DNN, D00, E01-E20, EA1-EA7, HW, I01-I30,
IFF, INC, INF, ISB, IVC, LDV, LOB, LSA, MCA, NCA,
NCB, NCC, NCD, NWC, NWN, OOA, OOB, OTS, R01-R10,
ROA, S01-S19, SNA, SP1, SP2, ST0, T, TDN, UNN, VCA,
VMA, WAT.
- b Routing data block index that contains the FHT (1-8191).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYCNTL
VRFYINPT
VRFYOUT
VRFYRDB

Translation Guide, 4ESSTM, Division 8, Section 5k

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:RDBLIST-TTSI
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:RDBLIST;OPT(TTSI): TTSI a,

RDBI	RDBI	RDBI	RDBI	RDBI	RDBI	RDBI	RDBI	RDBI	RDBI
bbbb,	bbbb,	bbbb,	bbbb,	bbbb,	bbbb,	bbbb,	bbbb,	bbbb,	bbbb,
.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.

2. REASON FOR OUTPUT

To list all Routing Data Blocks (RDBs) that contain a given Terminating Toll Switch Index (TTSI).

3. VARIABLE FIELD DEFINITIONS

- a Terminating toll switch index decimal number range or list (00-31).
b Routing data block index (0-8191) that contains the TTSI.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYCNTL
VRFYINPT
VRFYOUT
VRFYRDB

SEE PROPRIETARY NOTICE ON COVER PAGE

1. FORMAT

a TABLE

2. REASON FOR OUTPUT

3. VARIABLE FIELD DEFINITIONS

4. ACTION TO BE TAKEN

5. REFERENCES

SEE PROPRIETARY NOTICE ON COVER PAGE

VERFYINPT
VERFYOUT
VERFYRTNG

Translation Guide, 4ESSTM, TG-4, Division 8, Section 3an

Input Messages

VER:CODEGRP-MCTI
VER:CODEGRP-MRTI
VER:CODEGRP-PRTI
VER:RTGLIST

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:RTNR-ISW
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:RTNR;OPT(ISW):
DESTINATION SWITCH

TOWN ST BL FBS

NSN aaa, NSNAME bbbb cc dd eee, ISL f, GRADE g,

INTERMEDIATE SWITCHES

NSN TOWN ST BL FBS NSN TOWN ST BL FBS NSN TOWN ST BL FBS

h, bbbb cc dd eee, h, bbbb cc dd eee, h, bbbb cc dd eee,
•
•
•

2. REASON FOR OUTPUT

To list intermediate switches for a specified Network Switch Number (NSN).

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | Destination network switch number (1-167). |
| b | The town, city, or location for the far end of the Trunk Subgroup (TSG) (4 characters). |
| c | The far end state, province, or foreign country (2 characters). |
| d | The building or office identity for the far end of the TSG (2 characters). |
| e | The far building subdivision code for internal building identification (3 characters). |
| f | Intermediate switch list (1-31). |
| g | Grade of intermediate switches (1-2). |
| h | Intermediate network switch number (1-167). |

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
IOCPIMC4
IOCPPVR4
VRFYINPT
VRFYOUT
VRFYRTNR

Translation Guide, 4ESSTM, Division 8, Section 6am

Input Message
VER:RTNR-ISW

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:RTNR-MSI
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:RTNR;OPT (MSI):

MSI	SST
LITE,	aaaa,
CLCM,	aaaa,
CLC,	aaaa,
CLCP,	aaaa,
GOLD,	aaaa,
PLT,	aaaa,

2. REASON FOR OUTPUT

To display the signaling service types (SSTs) assigned for each market segment index (MSI).

3. VARIABLE FIELD DEFINITIONS

a Service signaling type:

SP1 — Software defined network (SDN) digital radio avoidance routing (SDN-DRAR) no key.

SP2 — SDN digital radio avoidance routing (SDN-DRAR) key.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPIMC4
IOCPMCP4
IOCPPVR4
VRFYCNTL
VRFYINPT
VRFYOUT
VRFYRTNR

Input Message
VER:RTNR-MSI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:RTNR-NSN
WORK CENTER.. MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:RTNR;OPT(NSN):

NSN	NSNAME				DPC			
	TOWN	ST	BL	FBS	NET	CR	CT	MEM
a,	bbbb	cc	dd	eee,	f,	g,	h,	i,
	•							
	•							
	•							

2. REASON FOR OUTPUT

To display the NSNAME and destination point code for a specified Network Switch Number (NSN).

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | Network switch number (1-167). |
| b | The town, city, or location for the far end of the Trunk Subgroup (TSG) (4 characters). |
| c | The far end state, province, or foreign country (2 characters). |
| d | The building or office identity for the far end of the TSG (2 characters). |
| e | The far building subdivision code for internal building identification (3 characters). |
| g | Network (NET) indicator (0-255). |
| g | Cluster Region (CR) (0-31). |
| h | Cluster Type (CT) (0-7). |
| i | Cluster Member (MEM) (0-255). |

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
IOCPIMC4
IOCPPVR4
VRFYINPT
VRFYOUT
VRFYRTNR

Translation Guide, 4ESSTM, Division 8, Section 6al

Input Message
VER:RTNR-NSN

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:RTNR-RN
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:RTNR;OPT(RN):

NSN	RPI	DHL	DRSV	VTENG
a,	b,	c,	d,	e,

2. REASON FOR OUTPUT

This message is used to output the number of channels engineered and the depth factor for heavily loaded and reserved routes used in determining path selection for Real Time Network Routing (RTNR).

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | Network Switch Number (NSN) (1-167). |
| b | Routing Pattern Identity (RPI):
ECOS — 33-63
RTNR — 1-31 |
| c | Depth Heavily Loaded (DHL) (0-7). |
| d | Depth Reserved (DRSV) (0-7). |
| e | Virtual Terminal (VT) Engineered (VTENG) (0-32767). |

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPMCP4
IOCPPVR4
VRFYINPT
VRFYOUT
VRFYRTNR

Translation Guide, 4ESSTM, TG-4, Division 8, Section 6as

Input Message
VER:RTNR-RNSN

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:RTNR-RPI
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] VER:RTNR;OPT(RPI): RPI a,
TOB1 [b], TOB2 [c], BR1 d, BR2 e, BR3 [f], BR4 [g],
RES [h], NTR i, VT j, KRPI k,
TPC l, ISL [m], NNDR [n], DRO [o],
- [2] VER:RTNR;OPT(RPI-ALL): RPI a,
TOB1 [b], TOB2 [c], BR1 d, BR2 e, BR3 [f], BR4 [g],
RES [h], NTR i, VT j, KRPI k, ETYPE [p],
TPC l, ISL [m], NNDR [n], DRO [o], ERPI q,
INT_STAT r, DOM_STAT s, INT_CNT t, DOM_CNT u, COM_CNT v,

2. REASON FOR OUTPUT

This message is used to output the Routing Pattern Identity (RPI) information for Real Time Network Routing (RTNR).

3. VARIABLE FIELD DEFINITIONS

- a Routing pattern identity:
End to End Class of Service (ECOS) — 33-63
RTNR — 1-31
- NOTE:** BR3, BR4, DRO, ISL, NNDR, RES, TOB1, and TOB2 must be blank for RPI greater than 32.
- b Total Office Blocking Rate 1 (TOB1) (0-14).
- c Total Office Blocking Rate 2 (TOB2) (1-15).
- d Blocking rate 1:
RPI<32 — 0-12
RPI>32 — 0-14

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e	Blocking rate 2: RPI<32 — 1-13 RPI>32 — 1-15
f	Blocking rate 3 (2-14).
g	Blocking rate 4 (3-15).
h	Reserved (RES) percent of traffic (0-15).
i	Number Of Trunks Reserved (NTR): ECOS — 0-15 RTNR — 0-63
j	Virtual Trunk (VT) limit (0-2047).
k	Key Routing Pattern Identity (KRPI): N — Basic RPI S — Superkey RPI Y — Key RPI
l	Transport Capability (TPC): D15C, D384C, D64C, VOICE.
m	Intermediate Switch List (ISL) index (0-31).
n	Node-To-Node Data Register (NNDR) (0-31).
o	Delay Reduction Option (DRO). N — No Y — Yes
p	ERPISET of Extended Routing Pattern Identity (ERPI): BTH — Both domestic and international. DOM — Domestic INT — International
q	Index of RPI (1-31).
r	ERPI status index within the international ERPISET (0-31).
s	ERPI status index within the domestic ERPISET (0-31).
t	ERPI count index within the international ERPISET based on the direction (0-31).
u	ERPI count index within the domestic ERPISET based on the direction (0-31).
v	ERPI count index within the complete ERPISET based on the direction (0-31).

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPMCP4
IOCPPVR4
VRFYINPT
VRFYOUT
VRFYRTNR

Translation Guide, 4ESSTM, Division 8, Section 6an

Input Message
VER:RTNR-RPI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:RTNR-SII
WORK CENTER.. MAC, MOC
GENERIC 4E22 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:RTNR;OPT(SII): SII a, TPC b,

RPI c,

RSI [d], RSIDF e, RSHFT f, DIR [g],

2. REASON FOR OUTPUT

Verification of Service Identity Index (SII) and Transport Capability (TPC) used for Real Time Network Routing (RTNR).

3. VARIABLE FIELD DEFINITIONS

- a Service identity index (0-255).
- b Transport capability: D15C, D384C, D64C, D64R, VOICE.
- c Routing pattern identity:
ECOS — 33-63
RTNR — 1-31
- d Route selection index (0-126).
- e Route selection index default:
A
D
- f Route selection final handling treatment: AR, BT, DNN, D00,
E01-E20, EA1-EA7, HW, I01-I30, IFF, INC, INF, ISB,
IVC, LDV, LOB, LSA, MCA, NCA, NCB, NCC, NCD, NWC,
NWN, OOA, OOB, OTS, R01-R10, ROA, S01-S19, SNA, SP1,
SP2, ST0, T, TDN, UNN, VCA, VMA, WAT.
- g Direction of the Extended Routing Pattern Identity (ERPI):
BOTH
IN
OUT

NOTE: Must be blank if RPI is less than 32.

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPMCP4
IOCPPVR4
VRFYOUT
VRFYRTNR

Translation Guide, 4ESSTM, TG-4, Division 8, Section 6ao

Input Message
VER:RTNR-SII

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:RTNR-TSDT
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:RTNR;OPT(TSDT)
TORIG TDEST SST DNST SII
a, b, c, d, e,

2. REASON FOR OUTPUT

Use to output the Service Identity Index (SII) for a specified Type Of Origin (TORIG), Type Of Destination (TDEST), Signaling Service Type (SST), and/or Dialed Number Service Type (DNST).

3. VARIABLE FIELD DEFINITIONS

- a Type of origin:
- ISC — International switching center
 - IWZ1 — International world zone 1
 - IXC — Interexchange carrier
 - LEC — Local exchange carrier
 - NODAL — NODAL; e.g., PBX
 - OPR — Operator
- b Type of destination:
- ISC — International switching center
 - IWZ1 — International world zone 1
 - LEC — Local exchange carrier
 - NODAL — NODAL; e.g., PBX
 - OPR — Operator
 - SP1 — Spare
- c Signaling service type:
- CLC — 800 Class Of Service (COS) classic
 - CLCM — 800 COS classic -
 - CLCP — 800 COS classic +
 - GOLD — 800 COS gold
 - GSDN — Global Software Defined Network (SDN)

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	GSDNK — Global SDN key customer
	LITE — 800 COS lite
	LDS — Long distance service
	MEGK — Megacom® Telecommunications Service key customer
	OMEG — Outward Wide Area Telephone Service (OUTWATS) or Megacom® Telecommunications Service
	PLT — 800 COS platinum
	REACH — Remote adjunct call handling
	RECHK — Remote adjunct call handling key
	SDN — Basic software defined network
	SDNK — Software defined network key customer
	SDS — Switched digital service
	SDCSR — Switched digital international Carrier Specific Routing (CSR)
	SST1 — SDN Digital Radio Avoidance Routing (SDN-DRAR) no key
	SST2 — SDN Digital Radio Avoidance Routing (SDN-DRAR) key
	SST3 - SST47 — Spare 3 through spare 47
d	Dialed number service type:
	D900 — Dial-It 900
	DNST1 - DNST23 — Spare 1 through spare 23
	DSD800 — Direct Services Dialing (DSD) 800
	HC800 — High Capacity Calling (HICAP) 800
	I800 — I800 Canada
	INWATS — Inward wide area telecommunications service.
	MQ — MultiQuest®
	NETS — National emergency telephone service
	TC — Teleconferencing
	UNAS — Long distance service
e	Service identity index (1-255).

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
VRFYINPT
VRFYOUT
VRFYRTNR

Translation Guide, 4ESSTM, TG-4, Division 8, Section 6ap

Input Message
VER:RTNR-TORIG

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:RTNR-TSGUSE
WORK CENTER.. MAC, MOC
GENERIC 4E19 Rel. 3 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:RTNR;OPT(TSGUSE): TSG abbbbccddeeefff,

NSN g, VOICE h, C64 i, C384 j, C1536 k,
TSGBBC [l], VDCAP [m], DATAF [n], GETS [o],

2. REASON FOR OUTPUT

To display Network Switch Number (NSN) information about a specific Technical Services Capability (TSC) in the Real Time Network Routing (RTNR) network.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | Base traffic number (0-9976). |
| b | The town, city, or location for the far end of the Trunk Subgroup (TSG) (4 characters). |
| c | The far end state, province, or foreign country (2 characters). |
| d | The building or office identity for the far end of the TSG (2 characters). |
| e | The far building subdivision code for internal building identification (3 characters). |
| f | The internal building subdivision for the near end of the TSG (3 characters). |
| g | Network switch number (1-167). |
| h | Voice traffic:
N — No
Y — Yes |
| i | Clear 64 Kilobits Per Second (kbps):
N — No
Y — Yes |
| j | Clear 384 kbps:
N — No
Y — Yes |

SEE PROPRIETARY NOTICE ON COVER PAGE

k	Clear 1536 kbps: N — No Y — Yes
l	Trunk Subgroup (TSG) broadband capability (0-6).
m	Voice / data capability: BOTH DATA VOICE
n	Data format: C R
o	Government Emergency Telecommunications Service (GETS) capability: N — No Y — Yes

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPOMC4
IOCPPVR4
VRFYCNTL
VRFYOUT
VRFYRTNR

Translation Guide, 4ESSTM, TG-4, Division 8, Section 6at

Input Message
VER:RTNR-CIN

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:SCRN
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:SCRN,OPT(TSGLIST): a bb,
BTFN TOWN ST BL FBS NBS
cccc dddd dd dd ddd ddd
.
.
.

2. REASON FOR OUTPUT

To list trunk subgroups that have a given multiple treatment screening class or go/no-go screening class.

3. VARIABLE FIELD DEFINITIONS

- a Screening class:
- GNSC — Go/no-go screening class.
- MTSC — Multiple treatment screening class.
- b Multiple treatment. Go/no-go screening class index.
- c Base traffic number.
- d Circuit identification number (CIN) of trunk subgroup:
- BTFN — Base traffic number
- TOWN — The town, city, or location for the far end of the trunk subgroup (TSG).
- ST — The far end state, province, or foreign country.
- BL — The building or office identity for the far end of the TSG.
- FBS — The far building subdivision code for internal building identification.
- NBS — The internal building subdivision for the near end of the TSG.

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENT
VRFYOUT

Translation Guide, 4ESSTM, TG-4, Division 8

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:SCS-FHT
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:SCS:OPT(FHT) SCSFHT a, MT, b,

AIR c, ANIR d, AN4R e, CIV0 f, CAUSE [g], FEALN [h],

LOC i, NPLY j, OFHT k, SAN [l], SSI [mmm], TUBM [nnn]

2. REASON FOR OUTPUT

To display per-announcement data for Final Handling Treatment (FHT) input.

3. VARIABLE FIELD DEFINITIONS

- a Service circuit system final handling treatment: AR, BT, DNN, D00, E01-E20, EA1-EA7, HW, I01-I30, IFF, INC, INF, ISB, IVC, LDV, LOB, LSA, MCA, NCA, NCB, NCC, NCD, NWC, NWN, OOA, OOB, OTS, R01-R10, ROA, S01-S19, SNA, SP1, SP2, ST0, T, TDN, UNN, VCA, VMA, WAT.
- b Main transition:

NEW

OLD
- c AT&T Integrated Services Digital Network (ISDN) User Part (ISUP) releasability:

N — No

Y — Yes
- d AT&T network interconnect releasability:

PA

REL
- e AT&T non--4ESSTM releasability:

PA

REL
- f Common channel signal (ISUP and International ISDN User Part [INUP]) voice calls and old announcement:

PA

REL

SEE PROPRIETARY NOTICE ON COVER PAGE

g	Cause value (0-127).
h	Far End AT&T Local Network (FEALN): blank — No change. PA — Play Announcement. REL — Release.
i	Location (0-15).
j	Number of plays (1-4).
k	Old final handling treatment: AR, BT, EA1-EA7, HW, IFF, INC, IVC, MCA, NCA, NCC, NCD, NWC, OOB, ROA, SP1, SP2, T, VCA.
l	Service circuit system announcement number (1-511).
mmm	Service Circuit System (SCS) service circuit Identification (ID): FHA FHB
nnn	Telephone User Part (TUP) unsuccessful backwards release: ADI, CEC, CFL, SEL, SP1, SP2, SSB, UNN.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPIMC4
IOCPPVR4
VFRYCNTL
VFRYINPT
VFRYMISC
VRFYOUT

Translation Guide, 4ESSTM, Division 8, Section 6aj

Input Message
VER:SCS-FHT

SEE PROPRIETARY NOTICE ON COVER PAGE

1. FORMAT

2. REASON FOR OUTPUT

3. VARIABLE FIELD DEFINITIONS

- #### 4. ACTION TO BE TAKEN

5. REFERENCES

Translation Guide, 4ESSTM, TG-4, Division 8, Section 6ag

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4ESS
OM-4B000-01

VER:SERVICE;OPT(SRVC)

Input Message
VER:SERVICE

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VER:SERVICE-2

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ID VER:SPARE
WORK CENTER.. MAC, MOC
GENERIC 4E21 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:SPARE_MEMORY,OPT(a): TYPE: b, SEG c,
d_ADDRESS SIZE
eeeeeeeeee f
.
.
.

2. REASON FOR OUTPUT

To list spare blocks of memory on either core or disk.

3. VARIABLE FIELD DEFINITIONS

- a Spare block location:
 CORE
 DISK
- b Type of memory:
 ACI_TRAN — Disk memory used to store disk only office data assembler (ODA) structures for the direct link node (DLN).
 DO_TRAN — Disk memory used to store disk only ODA structures such as the disk trunk sub-group (TSG) translator.
 EXT_CS — Core memory located in extended non-secure call stores (XSs).
 MAIN_CS — Core memory located in the base 1B processor call stores.
- c Memory segment number (0 - 3).
- d Type of address:
 CS — Core address in base 1B processor call store memory range.
 DSK — Disk address.
 XS — Core address in XS call store memory range.
- e Address of spare memory.
- f Number of consecutive 1024-word blocks.

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
VRFYOUT

Translation Guide, 4ESSTM, TG-4, Division 8, Sec. 6b

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:SPMTXPK
WORK CENTER.. MAC, MOC, NMOC, TEC,
TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

```
VER:SPMTXPK a:[b,][c,][d]
e f PACK LOC: g h [i]
[j]
k      UTMN,NTPI/CIN      PK REPAIR REF
l
.
.
.
l
[k]
l
.
.
.
l
```

2. REASON FOR OUTPUT

To respond to a VER:SPMTXPK request to give information about a signaling processor (SP) circuit pack and to list all the points on the pack.

3. VARIABLE FIELD DEFINITIONS

- | | | | | | | | | | | | | | | | | | |
|-----------|--|-----------|----------------------------|-------|----------------------------------|-------|-------------------------------------|-------|---------------------------------|---------|----------------------------------|-------|----------------------------|-------|-----------------------------|-------|-------------------------|
| a | Indicates summary option if it was specified; otherwise null. | | | | | | | | | | | | | | | | |
| b | Type of circuit pack: service circuit pack (SCP), space division module (SDM), or SDP, (blank) if pack location specified. | | | | | | | | | | | | | | | | |
| c | Point identification or trunk identity: <table border="0" style="margin-left: 20px;"> <tr> <td>b l a n k</td> <td>— Pack location specified.</td> </tr> <tr> <td>C I N</td> <td>— Circuit identification number.</td> </tr> <tr> <td>M D N</td> <td>— Miscellaneous distributor number.</td> </tr> <tr> <td>M S N</td> <td>— Miscellaneous scanner number.</td> </tr> <tr> <td>O T A N</td> <td>— Octal trunk assignment number.</td> </tr> <tr> <td>T A N</td> <td>— Trunk assignment number.</td> </tr> <tr> <td>T D N</td> <td>— Trunk distributor number.</td> </tr> <tr> <td>T S N</td> <td>— Trunk scanner number.</td> </tr> </table> | b l a n k | — Pack location specified. | C I N | — Circuit identification number. | M D N | — Miscellaneous distributor number. | M S N | — Miscellaneous scanner number. | O T A N | — Octal trunk assignment number. | T A N | — Trunk assignment number. | T D N | — Trunk distributor number. | T S N | — Trunk scanner number. |
| b l a n k | — Pack location specified. | | | | | | | | | | | | | | | | |
| C I N | — Circuit identification number. | | | | | | | | | | | | | | | | |
| M D N | — Miscellaneous distributor number. | | | | | | | | | | | | | | | | |
| M S N | — Miscellaneous scanner number. | | | | | | | | | | | | | | | | |
| O T A N | — Octal trunk assignment number. | | | | | | | | | | | | | | | | |
| T A N | — Trunk assignment number. | | | | | | | | | | | | | | | | |
| T D N | — Trunk distributor number. | | | | | | | | | | | | | | | | |
| T S N | — Trunk scanner number. | | | | | | | | | | | | | | | | |

SEE PROPRIETARY NOTICE ON COVER PAGE

- d Circuit pack location SP-EQPTLOC:
- blank — Point identification specified.
- EQPTLOC — With physical pack location specified as bay, level,
 and horizontal position.
- SP — Signal processor member number.
- e The type of points on the pack:
- MISC — Miscellaneous points.
- UNIV — Universal points.
- f The type of pack:
- PP APPLQ — Pulse point applique pack (FB229).
- PP MATRIX — Pulse point matrix pack (FA610) or SP1 with clear
 request message (CRM) scan and pulse point pack
 (FG2).
- SCAN MATRIX — Scan matrix pack (FB230).
- SD APPLQ — SD (relay) applique pack (FB228).
- SD MATRIX — Signal distributor (SD) (flip-flop) matrix pack
 (FA605).
- SPICR MATRIX — SP1 with combined relay matrix (FG1).
- g Pack location, specified with signaling processor (SP) and equipment
 location (EQPTLOC).
- h Frame location number.
- i Indicates operational state of SP:
- blank — SP is operational.
- GROWTH SP
- NONEQUIPPED SP
- j If the pack requested is an SD matrix pack, and is not a SP1 with CRM
 pack this line contains the locations of the four associated SD applique
 packs. Otherwise, this line is null.
- k Column heading for the type of points to be listed on the pack:
- MDN — If miscellaneous SD matrix or SD applique or port
 processor (PP) matrix or PP applique points on the
 pack.
- MSN — If miscellaneous scan points on the pack.
- TDN — If universal SD matrix or SD applique points on the
 pack.
- TSN — If universal scan points on the pack.

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- 1 A line for each point on the pack. There will be 8, 16, or 32 lines depending on the type of pack. These are not listed if SUM (summary option) was requested. Each line contains the 7-digit decimal format of the point in the leftmost column. The next column contains one of three formats. If the point is a miscellaneous point, this column contains unit type and member number and non-trunk program index (NTPI). If this point is a universal point or if it is a miscellaneous point associated with a trunk, this column contains the circuit identification number (CIN) of the trunk. If the point is unassigned, this column contains UNASSIGNED POINT. If the point is an MSN or a TSN on a SPICR matrix and an MDN or TDN is needed, a request for the MDN or TDN point is required because the combined relay matrix contains both MSNs and MDNs or TSNs and TDNs. The last column on each line contains a repair reference number and repair action text.

4. ACTION TO BE TAKEN

Explanation of PK REPAIR REF numbers:

Each point on an signaling processor (SP) pack will have a reference number and a phrase associated with it in the third column. One of the following numbers and phrases will be printed.

01 NOTIFY MOC

This will only appear for miscellaneous scan points associated with the peripheral unit report. Ignore the non-trunk program index (NTPI) for the dynamic overload control (DOC) transmitter and the NMDC frame. The maintenance operations center (MOC) should be notified that SP repair activity may affect the status of the units involved. The unit type and member number information should be passed to the MOC.

02 NOTIFY MOC - REMOTE RA FRM

This will only appear for miscellaneous scan points associated with the recorded announcement (RA) frame. The recorded announcement frame should be removed if scan pack replacement is being done. A 100-ms closure required every 4 seconds for the message phase update function may be missing and will cause customers to be connected to the wrong phase of a message. The MOC should be notified that the RA frame needs to be taken out of service in connection with an SP matrix repair procedure.

03 NOTIFY MOC - ALARM DISABLED

This message will only appear for miscellaneous scan points associated with the GRID unit type in miscellaneous A or B frame. The office alarm system will not work to full capacity when the scan pack is removed. The MOC (and terminal equipment centers

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[TECs]) should be notified that the GRID is disabled during the repair activity. The effects could be loss of grid report messages (but retention of frame alarm messages when provided), inability to retire alarms via the alarm retire keys (but OK via teletypewriter [TTY]), and loss of alarm messages from a foreign alarm system. Audible and visual indicators will still be present.

04 NOTIFY MOC/TEC

This will appear on most miscellaneous scan points. The MOC and TEC work centers should be notified of the sort of SP repair procedure being performed (scan pack replacement) and should be given the unit type and member number of each unit implicated. During the pack replacement the status of the unit may appear to change but the system will be safeguarded from service affecting changes. The MOC should note the status of units before the repair procedure begins and return the units to that state through normal diagnostics when the SP pack replacement is completed.

05 NOTIFY MOC/MAC/NMC

This will appear only on miscellaneous scan points associated with power for the dynamic overload control (DOC) transmitter (DOCT) and NMDR units. The MOC, machine administration center (MAC), and network management center (NMC) work centers should be notified that acknowledgment failures on DOC transmitters may be caused by the SP repair activity. These work centers should evaluate the need for manual action while SP repair activity is in progress.

06 NOTIFY MAC/NMC

This will appear on miscellaneous scan and SD points related to network management units. For SD points, DOC signals and acknowledgments cannot be sent; for scan points, DOC signals and acknowledgments cannot be received. Notify the MAC and NMC work centers giving them the unit type and member number involved and the MSN or MDN number so he can determine the circuit identification number (CIN) of the affected trunk subgroup (TSG). (This determination can be done from paper records or via verification of unit type translator and DOCT to TSG and DOCT to TSG translators.)

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07 NOTIFY TOC - REMOVE CIRCUIT

This will appear on all universal scan and scan and signal distributor (SD) points and on miscellaneous scan, SD, or pulse points associated with circuits. The CIN of the circuit will be identified and all circuits should be turned down (maintenance disabled) by the trunk operations center (TOC) or MOC before any packs are removed.

08 NOTIFY TOC - STOP TESTING

This will only appear on miscellaneous scan and SD points associated with the 51A test positions (TPOS). Loss of scan or SD points at the test position will disable some of the testing capabilities. Notify the TOC to suspend testing and place the position in the "position unattended" state to prevent incoming 101 calls at the position(s) involved until the SP repair work is complete.

09 REMOVE PP POWER

This message will appear on all duplicated pulse points miscellaneous distributor numbers (MDNs). The only action required is to remove the pulse points from service and power the unit down via the private pack list 0 (PPL 0) or pulse point register 0 (PPR 0) switch. If the mate pulse cannot be accessed (i.e., by the VIF), the out of service request will be denied.

10 SEE OUTPUT MANUAL (GRID)

This message will only appear for miscellaneous distributor numbers (MDNs) associated with the GRID unit type in miscellaneous A or B frame. The MOC and TEC work centers should be notified. They should retire any existing alarms, remove any alarm transfers or grouping between maintenance centers, and remove any foreign alarm transfers which exist. These can be reestablished when the SP repair work is completed.

11 SEE OUTPUT MANUAL (RA)

This will only appear for miscellaneous SD points associated with the recorded announcement frame. The MOC and TEC work centers should be notified. When the pack replacement work is complete, audit 47 should be requested (AUD:NUM input message).

SEE PROPRIETARY NOTICE ON COVER PAGE

12 SEE OUTPUT MANUAL (RT)

This message will only appear for miscellaneous scan and SD points associated with the ringing and tone plant. The MOC and TEC work centers should be notified giving them the unit type and member number information. When the pack replacement is complete audit 20 should be requested (AUD:NUM input message).

13 SEE OUTPUT MANUAL (SD PT)

This message will appear on most types of miscellaneous SD points. The MOC and TEC should be notified of the sort of SP repair procedure being done (SD pack replacement) and should be given the unit type and member number of each unit implicated. During the pack replacement, the status of the unit at the lamp displays may appear to change but the system is safeguarded from service affecting changes. The work centers should note the status of units before the repair procedure begins and return the units to that state when the SP pack replacement is completed. When the repair procedure is complete, PUCNAUDS should be run (AUD:PUSTAT input message).

14 NOTIFY TEC

This message will only appear for miscellaneous scan points associated with the toll terminal frame (TTF) frames. (The TEC should be notified that alarm TTY messages will not be printed for the units involved if an alarm sounds for the frame.) The aisle pilot lamps will have to be used to locate the trouble.

15 NO ACTION

This will appear if a point is unassigned or no action is required before proceeding with the repair.

16 NOTIFY ADG MGMT

An automatic distribution group (ADG) is associated with an international operator center (IOC) for gateway offices. If this is a scan point, notify ADG management for the ADG member number specified. ADG distribution must not be changed during repair procedures since changes will not be processed by 4ESSTM during that time. Obtain the base scan point for this unit type member number from the unit type translator. Set the T-bits for the base point to ignore using:

ORD:TBITS;IGNORE:MSN ---!

SEE PROPRIETARY NOTICE ON COVER PAGE

After the pack has been replaced, set the T-bits for the base point to NORM. If this is an SD point then the ADG management should be notified that acknowledgments will not be sent during the repair process time.

5. REFERENCES

PIDENTs
SPMXDATA
SPMXPGRP
TMAD0005
TMAD0006

Input Messages
AUD:NUM
AUD:PUSTAT
ORD:TBITS
VER:SPMTXPK

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:SSN-NSN
WORK CENTER.. MAC, MOC
GENERIC 4E19 thru 4E23
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:SSN;OPT(NSN): NSN a,

NSN00 [b], NSN01 [b], NSN02 [b], NSN03 [b], NSN04 [b],
NSN05 [b], NSN06 [b], NSN07 [b], NSN08 [b], NSN09 [b],
NSN10 [b], NSN11 [b], NSN12 [b], NSN13 [b], NSN14 [b],
NSN15 [b], NSN16 [b], NSN17 [b], NSN18 [b], NSN19 [b],

2. REASON FOR OUTPUT

To display a Survivable Signaling Network (SSN) S-link network for the specified Network Switch Number (NSN).

3. VARIABLE FIELD DEFINITIONS

a Network switch number (1-167).
b Destination S-link network switch number (1-167).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPIMC4
IOCPPVR4
VRFYCNTL
VRFYINPT
VRFYMISC
VRFYOUT

Input Message
VER:SSN-NSN

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:STAT-XTSIAB
WORK CENTER.. MAC, MOC
GENERIC 4E22 thru 4E23
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:STATICAB;OPT(XTSIAB): XTSI MEMN a, D3UN b,

 DS1 1 2 3 4 5 6 7 8 9 10 11 12 13 14
STATIC A/B c, c, c, c, c, c, c, c, c, c, c, c, c, c,

 DS1 15 16 17 18 19 20 21 22 23 24 25 26 27 28
STATIC A/B c, c, c, c, c, c, c, c, c, c, c, c, c, c,

2. REASON FOR OUTPUT

To display the status of Di-Groups 1-28 static A/B bits for Digital Signal Level 3 (DS3) unit on an Expanded Time Slot Interchange (XTSI) unit.

3. VARIABLE FIELD DEFINITIONS

- a XTSI member number (2-62 even numbers only).
b DS3 number (0-5).
c Status:
 N — 64k clear channel, A/B signaling bits are part of data streams.
 Y — 56k, A/B signaling bits are to be static.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPIMC4
VRFYCNTL
VRFYINPT
VRFYMISC
VRFYOUT

Input Message
VER:VFUNC

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:SUBUTP-XTSII
WORK CENTER.. MAC, MOC, NMOC, TEC,
TOC
GENERIC 4E24 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:SUBUTP;OPT(XTSIIBU): XTSI MEMN a,

TANS RESERVED b,

MF OR DTMF c,

XCVR CONFIG d,

2. REASON FOR OUTPUT

Outputs the In-Band Unit (IBU) configuration data for the requested Expanded Time Slot Interchange (XTSI) IBU.

3. VARIABLE FIELD DEFINITIONS

- a Expanded Time Slot Interchange (XTSI) member number (2-62 even numbers only).
- b Indicates whether the Trunk Appearance Numbers (TANs) associated with the IBU are reserved:
N — No.
Y — Yes.
- c Type of signaling supported by the IBU:
MF — Multi-frequency.
DTMF — Dual Tone multi-frequency.
- d Type of miscellaneous service circuits the IBU supports:
CCT — 16 Continuity Check Transceivers (CCT)
MISC — 12 CCTs plus 4 miscellaneous service circuits (i.e., digital milliwatt, digital milliwatt-10, common systems tone detector, and CCT test.

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
IOCPIMC4
VRFYCNTL
VRFYINPT
VRFYMISC
VRFYOUT

Input Message
VER:VFUNC-XTSIIB

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- | | |
|---|--|
| k | Building. This two-character alphabetic or two-character numeric code identifies the office for the far end of the TSG. Independent Telephone Company offices are always designated by an X plus an alphabetic character. If the TSG terminates in a customer's building and this code is not necessary to identify that building, this code is arbitrary. |
| l | Far building sub-division (FBS). This three-character alphanumeric code identifies the internal building sub-division for the far-end termination of the TSG. |
| m | Near building sub-division (NBS). This three-character alphanumeric code identifies the internal building for the near-end termination of the TSG. |

4. ACTION TO BE TAKEN

No action is necessary if the assignments are as desired. Recent changes can be used to make different TSG assignments. MSN assignments are not recent changeable.

5. REFERENCES

PIDENTs
VRFYMISC
VRFYOUT
VRFYTRK

Translation Guide, 4ESSTM, TG-4, Division 8

Input Message
VER:TASI

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:TERMLIST
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:TERMLIST:

ONE-WAY LINK			TSG						TWO-WAY LINK		
PTERM1	STERM1	BAND1	BTFN	TOWN	ST	BL	FBS	NBS	PTERM2	STERM2	BAND2
a	b	c	d	e	e	e	e	e	f	g	h
.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.	.

2. REASON FOR OUTPUT

To provide a list of all dangling terminal labels if any are found.

3. VARIABLE FIELD DEFINITIONS

- a Primary terminal for one-way link.
- b Secondary terminal for one-way link.
- c Band for one-way link.
- d Base traffic number for two-way link.
- e Circuit identification number for two-way link.
 - TOWN — The town, city, or location for the far end of the trunk subgroup (TSG).
 - ST — The far end state, province, or foreign country.
 - BL — The building or office identity for the far end of the TSG.
 - FBS — The far building subdivision code for internal building identification.
 - NBS — The internal building subdivision for the near end of the TSG.
- f Primary terminal for two-way link.
- g Secondary terminal for two-way link.
- h Band for two-way link.

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

None.

5. REFERENCES

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:TRK
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

```
VER:TRK:                BTFN TOWN ST BL FBS NBS

                        TSG   a bbbb cc dd eee fff,

ES N,                                D1D2 N,

QTRK  FTFN          TAN
      TSI  SPC  LVL  FTS      FCHAN      STATUS
g,    h,          i,  j,  k,  l,      0,      nnn,
.
.
.
```

2. REASON FOR OUTPUT

To verify assignments for Non-Common Channel Interoffice Signaling (non-CCIS) trunks without miscellaneous points in response to a VER:TRK input message.

NOTE: For this message Echo Suppressor (ES) is always N for none and D1 or D2 Channel Bank Connection (D1D2) is always N for No.

3. VARIABLE FIELD DEFINITIONS

a	Base Traffic Number (BTFN) (0-9976).
b	The town, city, or location for the far end of the TSG (4 characters).
c	The far end state, province, or foreign country (2 characters).
d	The building or office identity for the far end of the TSG (2 characters).
e	The far building subdivision code for internal building identification (3 characters).
f	The internal building subdivision for the near end of the TSG (3 characters).
g	Quantity of trunks verified in a given block of trunks (0-120).
h	First traffic number of the block of trunks being verified (0-9999).
TAN	Trunk Appearance Number (TAN)
i	Time Slot Interchange (TSI) frame number (0-63).

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j	Switching permuting circuit identification (0-1).
k	TSI level (0-6). For Digital Signal Level 3 Unit (D3U) applications (0-7).
l	First time slot indicating specific appearance of the TAN (1-120). For D3U applications: LVL 0 — 1-127, LVL 1-6 — 0-127, LVL 7 — 0-112.
m	Status of the trunk or block of trunks: ASN — Assigned and in service. CAD — Trunk or block of trunks is being processed by recent change. MTC — Assigned but out of service for maintenance. UNA — Unassigned.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYCNTL
VRFYINPT
VRFYOUT
VRFYTRK

Translation Guide, 4ESSTM, TG-4, Division 8, Section 2a

Input Message
VER:TRK

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:TRK-C5MISC
 WORK CENTER.. MAC, MOC
 GENERIC 4E19 and later
 APPLICATION .. 4E
 TYPE Output

1. FORMAT

VER:TRK;OPT(CCITT5/MISC): BTFN TOWN ST BL FBS NBS

TSG a bbbb cc dd eee fff,

ES g,

		TAN				MSN			ESN				
QTRK	FTFN	TSI	SPC	LVL	FTS	SP	ROW	COL	EST	ESU	CHAN	STATUS	
	h,	i,	j,	k,	l,	m,	n,	o,	p,	q,	r,	s,	ttt,
	•												
	•												
	•												

2. REASON FOR OUTPUT

To verify assignments for Common Channel Signaling System Number 5 (CCITT5) trunks with digital echo suppressors in response to a VER:TRK input message.

3. VARIABLE FIELD DEFINITIONS

- a Base Traffic Number (BTFN) (0-9976).
- b The town, city, or location for the far end of the TSG (4 characters).
- c The far end state, province, or foreign country (2 characters).
- d The building or office identity for the far end of the TSG (2 characters).
- e The far building subdivision code for internal building identification (3 characters).
- f The internal building subdivision for the near end of the TSG (3 characters).
- g Assigned echo suppressor:
 - EC — If static Echo Cancelers are in the circuit.
 - FULL — Full echo suppression.
 - HALF — Half echo suppression.
 - N — None. No echo suppressor is assigned.

SEE PROPRIETARY NOTICE ON COVER PAGE

	PCC — Trunks not terminating on an Expanded Time Slot Interchange (XTSI) per call control of echo cancelers provided by an ASSET frame or Universal Services Echo Canceler frame.
	UXPC — Trunks which terminate on an XTSI per call control of echo cancelers provided by a Signal Processing System (SPS) in the XTSI frame.
	XSPC — Trunks which terminate on an XTSI per call control of echo cancelers provided by Universal Services Echo Canceler frame.
h	Quantity of trunks verified in a given block of trunks (0-120).
i	First traffic number of the block of trunks being verified (0-9999).
TAN	Trunk Appearance Number (TAN).
j	Time Slot Interchange (TSI) frame number (0-63).
k	Switching permuting circuit identification (0-1).
l	TSI level (0-6). For Digital Signal Level 3 Unit (D3U) applications (0-7).
m	First time slot, indicating specific appearance of the TAN (1-120). For D3U applications: LVL 0 — 1-127, LVL 1-6 — 0-127, LVL 7 — 0-112.
MSN	Miscellaneous Scanner Number (MSN).
n	Signal processor (0-31).
o	Row number (0-63).
p	Column number (0-15).
ESN	Echo Suppressor Number (ESN).
q	Echo suppressor terminal (1-31).
r	Echo suppressor unit (0-13).
s	Channel (1-120).
t	Status of the trunk or block of trunks: ASN — Assigned and in service. CAD — Trunk or block of trunks is being processed by recent change. MTC — Assigned but out of service for maintenance. UNA — Unassigned.

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
VRFYCNTL
VRFYINPT
VRFYOUT
VRFYTRK

Translation Guide, 4ESSTM, TG-4, Division 8, Section 2c & 2i

Input Message
VER:TRK

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:TRK-CCITT5
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:TRK;OPT(CCITT5): BTFN TOWN ST BL FBS NBS

 TSG a bbbb cc dd eee fff,

ES g,

		TAN				MSN			
QTRK	FTFN	TSI	SPC	LVL	FTS	SP	ROW	COL	STATUS
h,	i,	j,	k,	l,	m,	n,	o,	p,	qqq,
•									
•									
•									

2. REASON FOR OUTPUT

To verify the assignments for Common Channel Signaling System Number 5 (CCITT5) trunks in response to a VER:TRK input message.

3. VARIABLE FIELD DEFINITIONS

- a Base Traffic Number (BTFN) (0-9976).
- b The town, city, or location for the far end of the TSG (4 characters).
- c The far end state, province, or foreign country (2 characters).
- d The building or office identity for the far end of the TSG (2 characters).
- e The far building subdivision code for internal building identification (3 characters).
- f The internal building subdivision for the near end of the TSG (3 characters).
- g Assigned echo suppressor:
 - EC — If static Echo Cancelers are in the circuit.
 - FULL — Full echo suppression.
 - HALF — Half echo suppression.
 - N — None. No echo suppressor is assigned.

SEE PROPRIETARY NOTICE ON COVER PAGE

	PCC — Trunks not terminating on an Expanded Time Slot Interchange (XTSI) per call control of echo cancelers provided by an ASSET frame or Universal Services Echo Canceler frame.
	UXPC — Trunks which terminate on an XTSI per call control of echo cancelers provided by a Signal Processing System (SPS) in the XTSI frame.
	XSPC — Trunks which terminate on an XTSI per call control of echo cancelers provided by Universal Services Echo Canceler frame.
h	Quantity of trunks verified in a given block of trunks (0-120).
i	First traffic number of the block of trunks being verified (0-9999).
TAN	Trunk Appearance Number (TAN).
j	Time Slot Interchange (TSI) frame number (0-63).
k	Switching permuting circuit identification (0-1).
l	TSI level (0-6). For Digital Signal Level 3 Unit (D3U) applications (0-7).
m	First time slot, indicating specific appearance of the TAN (1-120). For D3U applications: LVL 0 — 1-127, LVL 1-6 — 0-127, LVL 7 — 0-112.
MSN	Miscellaneous Scanner Number (MSN).
n	Signal processor (0-31).
o	Row number (0-63).
p	Column number (0-15).
q	Status of the trunk or block of trunks: ASN — Assigned and in service. CAD — Trunk or block of trunks is being processed by recent change. MTC — Assigned but out of service for maintenance. UNA — Unassigned.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYCNTL
VRFYINPT
VRFYOUT
VRFYTRK

SEE PROPRIETARY NOTICE ON COVER PAGE

Translation Guide, 4ESSTM, TG-4, Division 8, Section 2k

Input Message
VER:TRK

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:TRK-CCMISC
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

```
VER:TRK;OPT(CCIS/CCITT6,MISC):      BTFN TOWN ST BL FBS NBS

                                     TSG   a bbbb cc dd eee fff,

ES g,                                     PTERM h,

                                     STERM i,

QTRK  FTFN      TAN      LABEL      ESN
      TSI SPC LVL FTS  FBAND FMEMN  EST  ESV  CHAN  STATUS
      j,      k,      l, m, n, o,    p,      q,      r,      s,      t,      uuu,
      .
      .
      .
```

2. REASON FOR OUTPUT

To verify the Common Channel Interoffice Signaling (CCIS) and Common Channel Signaling System Number 6 (CCITT6) trunk assignments with digital echo suppressors in response to a VER:TRK input message.

Variables h and i together identify the terminal pair used for transmitting and receiving supervisory and address information to and from the far end office.

3. VARIABLE FIELD DEFINITIONS

- a Base Traffic Number (BTFN) (0-9976).
- b The town, city, or location for the far end of the TSG (4 characters).
- c The far end state, province, or foreign country (2 characters).
- d The building or office identity for the far end of the TSG (2 characters).
- e The far building subdivision code for internal building identification (3 characters).
- f The internal building subdivision for the near end of the TSG (3 characters).

SEE PROPRIETARY NOTICE ON COVER PAGE

g	Assigned echo suppressor: EC — If static Echo Cancelers are in the circuit. FULL — Full echo suppression. HALF — Half echo suppression. N — None. No echo suppressor is assigned. PCC — Trunks not terminating on an Expanded Time Slot Interchange (XTSI) per call control of echo cancelers provided by an ASSET frame or Universal Services Echo Canceler frame. UXPC — Trunks which terminate on an XTSI per call control of echo cancelers provided by a Signal Processing System (SPS) in the XTSI frame. XSPC — Trunks which terminate on an XTSI per call control of echo cancelers provided by Universal Services Echo Canceler frame.
h	Primary terminal number (0-255).
i	Secondary terminal number (0-255).
j	Quantity of trunks verified in a given block of trunks (0-120).
k	First traffic number of the block of trunks being verified (0-9999).
TAN	Trunk Appearance Number (TAN).
l	Time Slot Interchange (TSI) frame number (0-63).
m	Switching permuting circuit identification (0-1).
n	TSI level (0-6). For Digital Signal Level 3 Unit (D3U) applications (0-7).
o	First time slot, indicating specific appearance of the TAN (1-120). For D3U applications: LVL 0 — 1-127, LVL 1-6 — 0-127, LVL 7 — 0-112.
LABEL	Label supervisory or addressing information for a specific trunk of a TSG.
p	First band number: For CCIS (0-511). For CCITT6 (0-127).
q	First band member number (0-15).
ESN	Echo Suppressor Number (ESN).
r	Echo suppressor terminal (1-31).
s	Echo suppressor unit (0-13).

SEE PROPRIETARY NOTICE ON COVER PAGE

t Channel (1-120).

u Status of the trunk or block of trunks:

ASN — Assigned and in service.

CAD — Trunk or block of trunks is being processed by recent change.

MTC — Assigned but out of service for maintenance.

UNA — Unassigned.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYCNTL
VRFYINPT
VRFYOUT
VRFYTRK

Translation Guide, 4ESSTM, TG-4, Division 8, Section 2f

Input Message
VER:TRK

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:TRK-CCS
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:TRK;OPT(CCS):

BTFN TOWN ST BL FBS NBS

TSG a bbbb cc dd eee fff,

ES N,

PTERM g,
STERM h,

QTRK	FTFN	TSI	TAN			LABEL			VCR	BBC	STATUS
			SPC	LVL	FTS	FBAND	FMEMN	FCIC			
i,	j,	k,	l,	m,	n,	o,	p,	q,	r,	[s,]	ttt,
	.										
	.										
	.										

2. REASON FOR OUTPUT

To verify trunk assignments of Common Channel Interoffice Signaling (CCIS) or CCITT6 trunks without miscellaneous points, in response to a VER:TRK input message.

Variables g and h together identify the terminal pair used for transmitting and receiving supervisory and address information to and from the far end office.

NOTE: For this message Echo Suppressor (ES) is always N for none.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | Base Traffic Number (BTFN) (0-9976). |
| b | The town, city, or location for the far end of the TSG (4 characters). |
| c | The far end state, province, or foreign country (2 characters). |
| d | The building or office identity for the far end of the TSG (2 characters). |
| e | The far building subdivision code for internal building identification (3 characters). |
| f | The internal building subdivision for the near end of the TSG (3 characters). |
| g | Primary terminal number (0-255). |
| h | Secondary terminal number (0-255). |

SEE PROPRIETARY NOTICE ON COVER PAGE

i	Quantity of trunks verified in a given block of trunks (0-120).
j	First traffic number of the block of trunks being verified (0-9999).
TAN	Trunk Appearance Number (TAN).
k	Time Slot Interchange (TSI) frame number (0-63).
l	Switching permuting circuit identification (0-1).
m	TSI level (0-6). For Digital Signal Level 3 Unit (D3U) applications (0-7).
n	First time slot, indicating specific appearance of the TAN (0-120). For D3U applications: LVL 0 — 1-127, LVL 1-6 — 0-127, LVL 7 — 0-112.
LABEL	Label supervisory or addressing information for a specific trunk of a TSG.
o	First band number: For CCIS (0-511). For CCITT6 (0-127).
p	First band member number (0-15).
q	First Circuit Identification Code (FCIC) (0-4095).
r	Voice Path Assurance Cancellation Rate (VCR): 0 — 0 percent. 50 — 50 percent. 87 — 87.5 percent. 100 — 100 percent.
s	Broadband Capability (BBC) (1, 2, 3, 4, 5, 6, ?).
t	Status of the trunk or block of trunks: ASN — Assigned and in service. CAD — Trunk or block of trunks is being processed by recent change. MTC — Assigned but out of service for maintenance. UNA — Unassigned.

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
IOCPPVR4
VRFYCNTL
VRFYINPT
VRFYOUT
VRFYTRK

Translation Guide, 4ESSTM, TG-4, Division 8, Section 2b

Input Message
VER:TRK

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:TRK-CCS7
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

```
VER:TRK;OPT(CCS7):      BTFN TOWN ST BL FBS NBS
                        TSG      a bbbb cc dd ee  fff,
ES g,
                        TAN
QTRK  FTFN      TSI  SPC  LVL  FTS   VCR  BBC  STATUS
   h,      i,      j,  k,   l,   m,   n,  o,   ppp,
```

2. REASON FOR OUTPUT

To list trunks with Common Channel Signaling System 7 (CCS7) signaling.

3. VARIABLE FIELD DEFINITIONS

- a Base Traffic Number (BTFN) (0-9976).
- b The town, city, or location for the far end of the Trunk Subgroup (TSG) (4 characters).
- c The far end state, province, or foreign country (2 characters).
- d The building or office identity for the far end of the TSG (2 characters).
- e The far building subdivision code for internal building identification (3 characters).
- f The internal building subdivision for the near end of the TSG (3 characters).
- g Echo suppressor.
- h Quantity of trunks verified in a given block of trunks (0-120).
- i First traffic number of the block of trunks being verified (0-9999).
- j Time Slot Interchange (TSI) frame number (0-63).
- k Switching permuting circuit identification (0-1).
- l TSI level (0-6). For Digital Signal Level 3 Unit (D3U) applications (0-7).
- m First time slot, indicating specific appearance of the TAN (0-120). For D3U applications:
LVL 0 — 1-127,
LVL 1-6 — 0-127,
LVL 7 — 0-112.

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- n Voice Path Assurance Cancellation Rate (VCR):
- 0 — 0 percent.
 - 50 — 50 percent.
 - 87 — 87.5 percent.
 - 100 — 100 percent.
- o Broadband Capability (BBC) (1, 2, 3, 4, 5, 6, ?).
- p Status of the trunk or block of trunks:
- ASN — Assigned and in service.
 - CAD — Trunk or block of trunks is being processed by recent change.
 - MTC — Assigned but out of service for maintenance.
 - UNA — Unassigned.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPPOM4
VRFYOUT
VRFYTRK

Translation Guide, 4ESSTM, TG-4, Division 8

Input Message
VER:TRK

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:TRK-COOB
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

```
VER:TRK;OPT(CUS_OOB):      BTFN  TOWN  ST  BL  FBS  NBS

                             TSG      a  bbbb  cc  dd  eee  fff

ES  g,

      TAN
QTRK  FTFN  TSI  SPC  LVL  FTS  LACID  FAC  FTRID  VCR  BBC  STATUS
  h,    i,   j,  k,   l,   m,   n,    o,   p,    q,   r,   sss,
.
.
.
```

2. REASON FOR OUTPUT

To list the status of customer out-of-band trunks.

3. VARIABLE FIELD DEFINITIONS

- a Base traffic number (0-9976).
- b The town, city, or location for the far end of the Trunk Subgroup (TSG) (4 characters).
- c The far end state, province, or foreign country (2 characters).
- d The building or office identity for the far end of the TSG (2 characters).
- e The far building subdivision code for internal building identification (3 characters).
- f The internal building subdivision for the near end of the TSG (3 characters).
- g Assigned echo suppressor:
 - blank — No echo suppressor is assigned.
 - EC — If static Echo Cancelers are in the circuit.
 - FULL — Full echo suppression.
 - HALF — Half echo suppression.
 - N — None. No echo suppressor is assigned.
 - PCC — Trunks not terminating on an Expanded Time Slot Interchange (XTSI) per call control of echo cancelers provided by an ASSET frame or Universal Services Echo Canceler frame.

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	UXPC — Trunks which terminate on an XTSI per call control of echo cancelers provided by a Signal Processing System (SPS) in the XTSI frame.
	XSPC — Trunks which terminate on an XTSI per call control of echo cancelers provided by Universal Services Echo Canceler frame.
h	Quantity of trunks verified in a given block of trunks (0-120).
i	First traffic number of the block of trunks being verified (0-9999).
j	Time Slot Interchange (TSI) frame number (0-63).
k	Switching permuting circuit identification (0-1).
l	TSI level (0-6). For Digital Signal Level 3 Unit (D3U) applications (0-7).
m	First time slot, indicating specific appearance of the TAN (0-120). For D3U applications: LVL 0 — 1-127, LVL 1-6 — 0-127, LVL 7 — 0-112.
n	Link access identifier (0-2047).
o	Facility (0-31).
p	First trunk identifier (0-255).
q	Voice Path Assurance Cancellation Rate (VCR): 0 — 0 percent. 50 — 50 percent. 87 — 87.5 percent. 100 — 100 percent.
r	Broadband Capability (BBC) (1, 2, 3, 4, 5, 6, ?).
s	Status of the trunk or block of trunks: ASN — Assigned and in service. CAD — Trunk or block of trunks is being processed by recent change. MTC — Assigned but out of service for maintenance. UNA — Unassigned.

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
IOCPPVR4
VRFYOUT
VRFYTRK

Translation Guide, 4ESSTM, Division 8, Section 2m

Input Message
VER:TRK-COOB

SEE PROPRIETARY NOTICE ON COVER PAGE

1. FORMAT

2. REASON FOR OUTPUT

3. VARIABLE FIELD DEFINITIONS

- SEE PROPRIETARY NOTICE ON COVER PAGE

	N	— None. No echo suppressor is assigned.
	PCC	— Trunks not terminating on an Expanded Time Slot Interchange (XTSI) per call control of echo cancelers provided by an ASSET frame or Universal Services Echo Canceler frame.
	UXPC	— Trunks which terminate on an XTSI per call control of echo cancelers provided by a Signal Processing System (SPS) in the XTSI frame.
	XSPC	— Trunks which terminate on an XTSI per call control of echo cancelers provided by Universal Services Echo Canceler frame.
h		Input keyword for channel bank assigned to the far end office: D1 — D1D channel bank. D2 — D2 channel bank.
i		Quantity of trunks verified in a given block of trunks (0-24).
j		First traffic number of the block of trunks being verified (0-9999).
TAN		Trunk Appearance Number (TAN) identifying a block of 24 consecutive time slots which corresponds to a D1D or D2 channel bank at the far end office.
k		Time Slot Interchange (TSI) frame number (0-63).
l		Switching permuting circuit identification (0-1).
m		TSI level (0-6). For Digital Signal Level 3 Unit (D3U) applications (0-7).
n		First of 24 consecutive time slots (1, 25, 49, 73, or 97).
o		First far end D1D or D2 channel assigned to the trunk being verified (1-24).
p		Status of the trunk or block of trunks: ASN — Assigned and in service. CAD — Trunk or block of trunks is being processed by recent change. MTC — Assigned but out of service for maintenance. UNA — Unassigned.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYCNTL
VRFYINPT
VRFYOUT
VRFYTRK

SEE PROPRIETARY NOTICE ON COVER PAGE

Translation Guide, 4ESSTM, TG-4, Division 8, Section 2g

Input Message
VER:TRK

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:TRK-DCHAN
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

```
VER:TRK;OPT(D_CHANNEL)          D CHANNEL TAN
                                TSI SPC LVL FTS
                                b,  c,  d,  e,
                                b,  c,  d,  e,

                                TAN
BTFN TOWN ST BL FBS NBS   QTRK  FTFN   TSI SPC LVL FTS
  f  gggg hh ii jjj kkk,   l,    m,    b,  c,  d,  e,
  .
  .
  .
```

2. REASON FOR OUTPUT

To display all B-channels of the entered D-channel.

3. VARIABLE FIELD DEFINITIONS

- a Link Access Circuit Identifier (LACID) (0-2047).
- b Time Slot Interchange (TSI) frame number (0-63).
- c Switching permuting circuit identification (0-1).
- d TSI level (0-6). For Digital Signal Level 3 Unit (D3U) applications (0-7).
- e First time slot indicating specific appearance of the Trunk Appearance Number (TAN) (1-120). For D3U applications:
LVL 0 — 1-127,
LVL 1-6 — 0-127,
LVL 7 — 0-112.
- f Base Traffic Number (BTFN) of the B-channel subgroup (0-9976).
- g The town, city, or location for the far end of the Trunk Subgroup (TSG) (4 characters).
- h The far end state, province, or foreign country (2 characters).
- i The building or office identity for the far end of the TSG (2 characters).
- j The far building subdivision code for internal building identification (3 characters).
- k The internal building subdivision for the near end of the TSG (3 characters).

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l Quantity of Consecutive Trunks (QTRK) (1-120).
m First Traffic Number (FTFN) of the trunks (0-9999).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYCNTL
VRFYINPT
VRFYOUT
VRFYTRK

Translation Guide, 4ESSTM, Division 8, Section 2p

Input Message
VER:TRK-LACID

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:TRK-INTTSN
 WORK CENTER.. MAC, MOC
 GENERIC 4E19 and later
 APPLICATION .. 4E
 TYPE Output

1. FORMAT

VER:TRK;OPT(INTL.TSN): BTFN TOWN ST BL FBS NBS

TSG a bbbb cc dd eee fff,

ES [g,]

		TAN				TSN1			TSN2				
QTRK	FTFN	TSI	SPC	LVL	FTS	SP	ROW	COL	SP	ROW	COL	STATUS	
	h,	i,	j,	k,	l,	m,	n,	o,	p,	q,	r,	s,	ttt,
	•												
	•												
	•												

2. REASON FOR OUTPUT

To verify the correlation of a Trunk Appearance Number (TAN) to the two Trunk Scanner Numbers (TSNs) necessary for international CCITT5 and CCITT6 trunks or blocks of trunks. This message is printed in response to a VER:TRK input message.

3. VARIABLE FIELD DEFINITIONS

- a Base Traffic Number (BTFN) (0-9976).
- b The town, city, or location for the far end of the TSG (4 characters).
- c The far end state, province, or foreign country (2 characters).
- d The building or office identity for the far end of the TSG (2 characters).
- e The far building subdivision code for internal building identification (3 characters).
- f The internal building subdivision for the near end of the TSG (3 characters).
- g Assigned echo suppressor:
 - blank — No echo suppressor is assigned.
 - EC — If static Echo Cancelers are in the circuit.
 - FULL — Full echo suppression.
 - HALF — Half echo suppression.

SEE PROPRIETARY NOTICE ON COVER PAGE

N	— None. No echo suppressor is assigned.
PCC	— Trunks not terminating on an Expanded Time Slot Interchange (XTSI) per call control of echo cancelers provided by an ASSET frame or Universal Services Echo Canceler frame.
UXPC	— Trunks which terminate on an XTSI per call control of echo cancelers provided by a Signal Processing System (SPS) in the XTSI frame.
XSPC	— Trunks which terminate on an XTSI per call control of echo cancelers provided by Universal Services Echo Canceler frame.
h	Quantity of trunks verified in a given block of trunks (0-120).
i	First traffic number of the block of trunks being verified (0-9999).
TAN	Trunk Appearance Number (TAN).
j	Time Slot Interchange (TSI) frame number (0-63).
k	Switching permuting circuit identification (0-1).
l	TSI level (0-6). For Digital Signal Level 3 Unit (D3U) applications (0-7).
m	First time slot indicating specific appearance of the TAN (1-120). For D3U applications: LVL 0 — 1-127, LVL 1-6 — 0-127, LVL 7 — 0-112.
TSN	Trunk Scanner Number (TSN) (one and two) for an international trunk by row and column within a signal processor.
n	Signal processor containing TSN1 (0-31).
o	Row number for TSN1 (0-255).
p	Column number of TSN1 (0-15).
q	Signal processor containing TSN2 (0-31).
r	Row number for TSN2 (0-255).
s	Column number for TSN2 (0-15).
t	Status of the trunk or block of trunks: ASN — Assigned and in service. CAD — Trunk or block of trunks is being processed by recent change. MTC — Assigned but out of service for maintenance. UNA — Unassigned.

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYCNTL
VRFYINPT
VRFYOUT
VRFYTRK

Translation Guide, 4ESSTM, TG-4, Division 8, Section 2h

Input Message
VER:TRK

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:TRK-ISDN
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:TRK;OPT(ISDN): LACID a, SRVC b

CN [c], CNPR [d], CNS [e], ESP [f]

2. REASON FOR OUTPUT

To display Integrated Services Digital Network (ISDN) service data for a specific Link Access Circuit Identifier (LACID).

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | Link access identifier (0-2047). |
| b | ISDN service: I800, ILDS, M800, MEGC, NOVA, SDN, SDS. |
| c | Connected number (1-10 decimal numbers). |
| d | Connected number presentation restricted:
N — No
Y — Yes |
| e | Connected number subscription:
N — No
Y — Yes |
| f | Enhanced service provider:
N — No
Y — Yes |

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPOMC4
IOCPPVR4
VRFYCNTL
VRFYOUT
VRFYTRK

Translation Guide, 4ESSTM, Division 8, Section 2q

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Message
VER:TRK-LACID-SR

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:TRK-ISTP
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:TRK;OPT(ISTP):

CCISTERM aaa, BAND bbb,

SLCINDX1	BAND1	SLCINDX2	BAND2
ccc,	ddd,	eee,	fff,

2. REASON FOR OUTPUT

To verify the assignment of common channel interoffice signaling (CCIS) trunks for which the office acts as an international signal transfer point (ISTP), in response to a VER:TRK input message.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|---|
| a | Identifier of the common channel signaling system number 6 (CCITT6) terminal of the input message (0-255). |
| b | Band number of the input message (0-127). |
| c | Signaling link complement (0-255) used for transmitting and receiving supervisory and address information for the CCITT6 trunk to the international switching center (ISC) where the trunk terminates. |
| d | Band (0-255) assigned to the CCITT6 trunk SLCINDX1 (variable c) complement. The band is conveyed between offices via the signaling channel with the supervisory or address information to a specific trunk. |
| e | Signaling link complement (0-255) used for transmitting and receiving supervisory and address information for the CCITT6 to another ISC which terminates the trunk. |
| f | Band (0-255) assigned to the CCITT6 trunk SLCINDX2 (variable e) complement. The band is conveyed between offices via the signaling channel with the supervisory or address information to a specific trunk. |

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
VRFYCNTL
VRFYINPT
VRFYOUT
VRFYTRK

Translation Guide, 4ESSTM, TG-4, Division 8

Input Message
VER:TRK

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:TRK-MISC
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:TRK;OPT(MISC): BTFN TOWN ST BL FBS NBS

 TSG a bbbb cc dd eee fff,

ES [g],

QTRK	FTFN	TSI	TAN SPC	LVL	FTS	SP	MDN ROW	COL	STATUS
h,	i,	j,	k,	l,	m,	n,	o,	p,	qqq,
•									
•									
•									

2. REASON FOR OUTPUT

To verify assignments Non-Common Channel Interoffice Signaling (non-CCIS) trunks with miscellaneous point in response to a VER:TRK input message.

3. VARIABLE FIELD DEFINITIONS

- a Base Traffic Number (BTFN) (0-9976).
- b The town, city, or location for the far end of the TSG (4 characters).
- c The far end state, province, or foreign country (2 characters).
- d The building or office identity for the far end of the TSG (2 characters).
- e The far building subdivision code for internal building identification (3 characters).
- f The internal building subdivision for the near end of the TSG (3 characters).
- g Assigned echo suppressor:
 - blank — No echo suppressor is assigned.
 - EC — If static Echo Cancelers are in the circuit.
 - FULL — Full echo suppression.
 - HALF — Half echo suppression.
 - N — None. No echo suppressor is assigned.

SEE PROPRIETARY NOTICE ON COVER PAGE

	PCC — Trunks not terminating on an Expanded Time Slot Interchange (XTSI) per call control of echo cancelers provided by an ASSET frame or Universal Services Echo Canceler frame.
	UXPC — Trunks which terminate on an XTSI per call control of echo cancelers provided by a Signal Processing System (SPS) in the XTSI frame.
	XSPC — Trunks which terminate on an XTSI per call control of echo cancelers provided by Universal Services Echo Canceler frame.
h	Quantity of trunks verified in a given block of trunks (0-120).
i	First traffic number of the block of trunks being verified (0-9999).
TAN	Trunk Appearance Number (TAN).
j	Time Slot Interchange (TSI) frame number (0-63).
k	Switching permuting circuit identification (0-1).
l	TSI level (0-6). For Digital Signal Level 3 Unit (D3U) applications (0-7).
m	First time slot indicating specific appearance of the TAN (1-120). For D3U applications: LVL 0 — 1-127, LVL 1-6 — 0-127, LVL 7 — 0-112.
MDN	Miscellaneous Distributor Number (MDN) if the assigned echo suppressor is HALF or FULL. If echo suppressor is N, then the MDN represents the assignments for the ring forward feature of the trunks being verified. If the MDN contains all zeros, then the MDN is not assigned.
n	Signal processor number (0-31).
o	Row number (0-127).
p	Column number (0-15).
q	Status of the trunk or block of trunks: ASN — Assigned and in service. CAD — Trunk or block of trunks is being processed by recent change. MTC — Assigned but out of service for maintenance. UNA — Unassigned.

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
VRFYCNTL
VRFYINPT
VRFYOUT
VRFYTRK

Translation Guide, 4ESSTM, TG-4, Division 8, Section 2a

Input Message
VER:TRK

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:TRK-MISCES
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:TRK;OPT(MISC): BTFN TOWN ST BL FBS NBS

 TSG a bbbb cc dd eee fff,

ES [g],

		TAN				ESN			
QTRK	FTFN	TSI	SPC	LVL	FTS	EST	ESU	CHAN	STATUS
h,	i,	j,	k,	l,	m,	n,	o,	p,	qqq,
•									
•									
•									

2. REASON FOR OUTPUT

To verify the assignments for Non-Common Channel Interoffice Signaling (non-CCIS) trunks with digital echo suppressors in response to a VER:TRK input message.

3. VARIABLE FIELD DEFINITIONS

- a Base Traffic Number (BTFN) (0-9976).
- b The town, city, or location for the far end of the TSG (4 characters).
- c The far end state, province, or foreign country (2 characters).
- d The building or office identity for the far end of the TSG (2 characters).
- e The far building subdivision code for internal building identification (3 characters).
- f The internal building subdivision for the near end of the TSG (3 characters).
- g Assigned echo suppressor:
 - blank — No echo suppressor is assigned.
 - EC — If static Echo Cancelers are in the circuit.
 - FULL — Full echo suppression.
 - HALF — Half echo suppression.
 - N — None. No echo suppressor is assigned.

SEE PROPRIETARY NOTICE ON COVER PAGE

	PCC — Trunks not terminating on an Expanded Time Slot Interchange (XTSI) per call control of echo cancelers provided by an ASSET frame or Universal Services Echo Canceler frame.
	UXPC — Trunks which terminate on an XTSI per call control of echo cancelers provided by a Signal Processing System (SPS) in the XTSI frame.
	XSPC — Trunks which terminate on an XTSI per call control of echo cancelers provided by Universal Services Echo Canceler frame.
h	Quantity of trunks verified in a given block of trunks (0-120).
i	First traffic number of the block of trunks being verified (0-9999).
TAN	Trunk Appearance Number (TAN)
j	Time Slot Interchange (TSI) frame number (0-63).
k	Switching permuting circuit identification (0-1).
l	TSI level (0-6). For Digital Signal Level 3 Unit (D3U) applications (0-7).
m	First time slot, indicating specific appearance of the TAN (1-120). For D3U applications: LVL 0 — 1-127, LVL 1-6 — 0-127, LVL 7 — 0-112.
ESN	Digital echo suppressor associated with the trunk being verified.
n	Echo suppressor terminal (1-31).
o	Echo suppressor unit (0-13).
p	Channel (1-120).
q	Status of the trunk or block of trunks: ASN — Assigned and in service. CAD — Trunk or block of trunks is being processed by recent change. MTC — Assigned but out of service for maintenance. UNA — Unassigned.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYCNTL
VRFYINPT
VRFYOUT
VRFYTRK

SEE PROPRIETARY NOTICE ON COVER PAGE

Translation Guide, 4ESSTM, TG-4, Division 8, Section 2i

Input Message
VER:TRK

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:TRK-SCGA
 WORK CENTER.. MAC, MOC
 GENERIC 4E19 and later
 APPLICATION .. 4E
 TYPE Output

1. FORMAT

VER:TRK;OPT(SCGA): BTFN TOWN ST BL FBS NBS
 TSG a bbbb cc dd eee fff,
 ES [g],

QTRK	FTFN	TSI	TAN		FTS	SCGA	STATUS
			SPC	LVL			
h,	i,	j,	k,	l,	m,	n,	ooo,
•							
•							
•							

2. REASON FOR OUTPUT

To identify trunks assigned a type of Software Carrier Group Alarm (SCGA) protection in response to a VER:TRK input message.

3. VARIABLE FIELD DEFINITIONS

- a Base Traffic Number (BTFN) (0-9976).
- b The town, city, or location for the far end of the TSG (4 characters).
- c The far end state, province, or foreign country (2 characters).
- d The building or office identity for the far end of the TSG (2 characters).
- e The far building subdivision code for internal building identification (3 characters).
- f The internal building subdivision for the near end of the TSG (3 characters).
- g Assigned echo suppressor:
 - blank — No echo suppressor is assigned.
 - EC — If static Echo Cancelers are in the circuit.
 - FULL — Full echo suppression.
 - HALF — Half echo suppression.
 - N — None. No echo suppressor is assigned.

SEE PROPRIETARY NOTICE ON COVER PAGE

	PCC — Trunks not terminating on an Expanded Time Slot Interchange (XTSI) per call control of echo cancelers provided by an ASSET frame or Universal Services Echo Canceler frame.
	UXPC — Trunks which terminate on an XTSI per call control of echo cancelers provided by a Signal Processing System (SPS) in the XTSI frame.
	XSPC — Trunks which terminate on an XTSI per call control of echo cancelers provided by Universal Services Echo Canceler frame.
h	Quantity of trunks verified in a given block of trunks (0-120).
i	First traffic number of the block of trunks being verified (0-9999).
TAN	Trunk Appearance Number (TAN).
j	Time Slot Interchange (TSI) frame number (0-63).
k	Switching permuting circuit identification (0-1).
l	TSI level (0-6). For Digital Signal Level 3 Unit (D3U) applications (0-7).
m	First time slot indicating specific appearance of the TAN (0-120). For D3U applications: LVL 0 — 1-127, LVL 1-6 — 0-127, LVL 7 — 0-112.
n	Software carrier group alarm eligibility and treatment: CCIS — Common Channel Interoffice Signaling (CCIS) SCGA. EM — E&M or non-CCIS SCGA. HDWR — Equipped with hardware carrier group alarm Miscellaneous Scanner Number (MSN). MIX — Trunk eligible for Ear & Mouth (E&M) SCGA but not presently receiving SCGA treatment due to the mixture of trunk signaling type, directionality, or operator type circuits within the analog carrier group (12 trunks with consecutive TANs). UNEQ — Unequipped, not eligible for SCGA.
o	Status of the trunk or block of trunks: ASN — Assigned and in service. CAD — Trunk or block of trunks is being processed by recent change. MTC — Assigned but out of service for maintenance. UNA — Unassigned.

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYCNTL
VRFYINPT
VRFYOUT
VRFYTRK

Translation Guide, 4ESSTM, TG-4, Division 8, Section 2e

Input Message
VER:TRK

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:TRK-TSN
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:TRK;OPT(TSN): BTFN TOWN ST BL FBS NBS
TSG a bbbb cc dd eee fff,

ES [g,]

		TAN			TSN				
QTRK	FTFN	TSI	SPC	LVL	FTS	SP	ROW	COL	STATUS
h,	i,	j,	k,	l,	m,	n,	o,	p,	qqq,
•									
•									
•									

2. REASON FOR OUTPUT

To verify the correlation of Trunk Appearance Number (TAN) to Trunk Scanner Number (TSN) assignments in response to a VER:TRK input message.

3. VARIABLE FIELD DEFINITIONS

- a Base Traffic Number (BTFN) (0-9976).
- b The town, city, or location for the far end of the TSG (4 characters).
- c The far end state, province, or foreign country (2 characters).
- d The building or office identity for the far end of the TSG (2 characters).
- e The far building subdivision code for internal building identification (3 characters).
- f The internal building subdivision for the near end of the TSG (3 characters).
- g Assigned echo suppressor:
 blank — No echo suppressor is assigned.
 EC — If static Echo Cancelers are in the circuit.
 FULL — Full echo suppression.
 HALF — Half echo suppression.
 N — None. No echo suppressor is assigned.

SEE PROPRIETARY NOTICE ON COVER PAGE

	PCC — Trunks not terminating on an Expanded Time Slot Interchange (XTSI) per call control of echo cancelers provided by an ASSET frame or Universal Services Echo Canceler frame.
	UXPC — Trunks which terminate on an XTSI per call control of echo cancelers provided by a Signal Processing System (SPS) in the XTSI frame.
	XSPC — Trunks which terminate on an XTSI per call control of echo cancelers provided by Universal Services Echo Canceler frame.
h	Quantity of trunks verified in a given block of trunks (1-120).
i	First traffic number of the block of trunks being verified (0-9999).
TAN	Trunk Appearance Number (TAN).
j	Time Slot Interchange (TSI) frame number (0-63).
k	Switching permuting circuit identification (0-1).
l	TSI level (0-6). For Digital Signal Level 3 Unit (D3U) applications (0-7).
m	First time slot, indicating specific appearance of the TAN (0-120). For D3U applications: LVL 0 — 1-127, LVL 1-6 — 0-127, LVL 7 — 0-112.
TSN	Trunk Scanner Number (TSN).
n	Signal processor containing the TSN (0-31).
o	Row designation (0-255).
p	Column number (0-15).
q	Status of the trunk or block of trunks: ASN — Assigned and in service. CAD — Trunk or block of trunks is being processed by recent change. MTC — Assigned but out of service for maintenance. UNA — Unassigned.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYCNTL
VRFYINPT
VRFYOUT
VRFYTRK

SEE PROPRIETARY NOTICE ON COVER PAGE

Translation Guide, 4ESSTM, TG-4, Division 8, Section 2d

Input Message
VER:TRK

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:TRKNAME
WORK CENTER.. MAC, MOC, NMOC, TEC,
TOC
GENERIC 4E22 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

- [1] VER:TRKNAME,a:b
- [2] VER:TRKNAME,a:ISC c OSC d
OTAN eeeeeee - TAN fffffff
CIN gggg gg gg ggg ggg - BTFN h
TSN iiiiii - TSN 0'jjjjjj
{DIF k, DIU l, DG m, |
DT k, DTU l, DG m |
EST [n] ESU [o] |
SCS p,SCU q, |
VIF k, VIU l, |
XTSI r, D3U s, DG m |
XTSI r, SPC t, SPU u, DG m}
1st NON OPER UNIT OR SUBUNIT v
- [3] VER:TRKNAME,a:DETL, ISC c OSC d
OTAN eeeeeee - TAN ff f f fff
CIN gggg gg gg ggg ggg - BTFN h
TSN iiiiii - TSN 0'jjjjjj
{DIF k, DIU l, DG m |
DT k, DTU l, DG m, |
SCS p,SCU q, |
VIF k, VIU l |
XTSI r, D3U s, DG m |
XTSI r, SPC t, SPU u, DG m}
1st NON OPER UNIT OR SUBUNIT v
TSGN 0'www D'xxx FENBEA yyyyyyy
TBTEA zzzzzzz TSGEA a'a'a'a'a'a'a'a' TRA b'b'b'b'b'b'b'b'
TBN 0'c'c'c'c'c' MEMN 0'd'd' TB STATUS ADDR e'e'e'e'e'e'e'e'
NSN D'f'
TSGHCA g'g'g'g'g'g'g'g' DISK TSG ADDR h'h'h'h'h'h'h'h'
CINC D'i' CINEA j'j'j'j'j'j'j'j' CORE TSG ADDR k'k'k'k'k'k'k'k'
TOSL ADDR l'l'l'l'l'l'l'l' TRANNEX ADDR m'm'm'm'm'm'm'
TSNTBN ADDR n'n'n'n'n'n'n'n'
MISC DATA ADDRESS [o'o'o'o'o'o'o'o'o']
CGA MSN 0'[p'p'p'p'p'p'] GROUP SIZE [q']
SCGA EQUIPPED GROUP SIZE [r']
TANCGA ADDR [s's's's's's's's's'] TANCGA DATA [t't't't't't't't't']
DPC_TO_CINC EA [u'u'u'u'u'u'u'u'u'] DPC [v'v'v'v'v'v'v'v'v']
STC EA [w'w'w'w'w'w'w'w']

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LACID D'x'x' PTAN 0'y'y'y'y'y'y' PTAN 0'z'z'z'z'z'z'
TERMINAL D'[a''] BAND D'[b''] CKT D'[c'']

- [4] VER:TRKNAME, CIN d'' ;DETL PART II
OD4DMIN_ACI e'' ACI DISK START ADR f''
HT4TSN_TO_ALL ADR g'' SUBT ADR h''
HT4Q931_TO_TSN_ADR i'' 1ST SUB_ADR j'' FINAL SUB_ADR k''
TSN_TO_ALL DATA:
HT4TSN_TO_ALL EA l'' SAP m'' SUBT EA n''
Q931 TYPE: LACID o'' FAC p'' CHAN q''
[r'']
Q931_TO_TSN_DATA:
HT4Q931_TO_TSN EA s'' SAP1 t''
Q931_TO_TSN_FIRST_SUB EA u'' SAP2 v''
Q931_TO_TSN_FINAL_SUB EA w'' TSN x''
- [5] VER:TRKNAME, CIN y''; DETL PART II
OD4DMIN_ACI e'' ACI DISK START ADR f''
HT4TSN_TO_ALL ADR g'' SUBT ADR h''
HT4DPC_CIC ADR z'' CIC SUB HT ADR a''' CONF ADR [b''']
CIC HT ADR c''' CIC SUB_ADR d'''
TSN_TO_ALL DATA:
HT4TSN_TO_ALL EA l'' SAP m'' SUBT EA n''
CCS7 TYPE: SLS e''' CIC f''' DPC g'''
DPC_CIC_TO_TSN DATA:
HT4DPC_CIC EA h''' SAP1 i'''
DPC_CIC SUB HT EA j''' SAP2 k'''
DPC_CIC_CONF EA l''' SAP3 m'''
DPC_CIC_HT EA n''' SAP4 o'''
DPC_CIC_SUB EA p''' TST q'''
- [6] VER:TRKNAME, CIN r'''; DETL PART III
NAILUP STATUS:
LACID D' o''
CTAN: CIN s''' TAN t'''
PTAN: CIN u''' TAN v'''
w'''
CTAN DTAT: CIN [x''']
PTAN DTAT: CIN [y''']
CTAN: CIN [z'''] TAN a''''
PTAN: CIN [b'''] TAN c''''
w'''

2. REASON FOR OUTPUT

To list the identifiers that are associated with a particular trunk in response to a VER:TRKNAME input message.

Format [1] prints the requested trunk name, which may be Circuit Identification Number (CIN), Trunk Appearance Number (TAN), or Trunk Scanner Number (TSN).

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Format [2] prints if DETL was not specified on the input message.

Format [3] prints if DETL was specified on the input message.

Format [4] prints only if the DETL keyword has been specified. Part II will be output in addition to Part I only if the trunk is Q931. These trunks possess disk resident AT&T Communications Interface (ACI) translation structures. This segment will output the addresses and contents of these translators.

Format [5] prints for Common Channel Signaling System Number 7 (CCS7), International Integrated Services Digital Network (ISDN) User Part (INUP) and International Telephone User Part (ITUP) trunks. Part II will be output in addition to Part I. These trunks possess disk resident AT&T Communications Interface (ACI) translation structures. This segment will output the addresses and contents of these translators.

Format [6] prints only if the input trunk is Q931 and the DETL keyword has been specified. This segment will output data relating to nail-up connections. Part III will be output in addition to Parts I & II.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | Repeat of the trunk identity from the input message. |
| b | The parameter requested on the input message, which is another identification format:

CIN — Circuit Identification Number (CIN).
TAN — Trunk Appearance Number (TAN).
TSN — Trunk Scanner Number (TSN).
UNA — Trunk is unassigned. |
| c | Incoming signaling characteristics. |
| d | Outgoing signaling characteristics. |
| e | Octal Trunk Appearance Number (OTAN). |
| f | Decimal format Trunk Appearance Number (TAN). |
| g | Circuit Identification Number (CIN). |
| h | Base traffic number of Trunk Subgroup (TSG). |
| i | Decimal Trunk Scanner Number (TSN). |
| j | Octal TSN. |
| k | Frame number for Digital Interface Frame (DIF), Digroup Terminal (DT), or Voiceband Interface Frame (VIF). |
| l | Unit number for, Digital Interface Unit (DIU), Digroup Terminal Unit (DTU), or Voiceband Interface Unit (VIU). |
| m | Digroup number. |

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n	Echo suppressor frame number.
o	Echo suppressor unit number.
p	Service Circuit System (SCS) frame number.
q	Service Circuit Unit (SCU) unit number.
r	Expanded Time Slot Interchange (XTSI) member number.
s	D3U unit number.
t	Signal Processor Echo Canceler (SPC) switching and permuting number.
u	Signal Processor Unit (SPU) member number.
v	Specific 1st non-operational unit observed; will continue to display non-operational frames/units until all are operational. For XTSI case nonoperational Digroup (DG) can also be displayed.
w	Trunk subgroup number in octal.
x	Trunk subgroup number in decimal.
y	Far end network block entry address in octal.
z	Trunk block entry address in octal.
a'	Trunk subgroup entry address in octal.
b'	Trunk register address in octal.
c'	Trunk block number in octal.
d'	Member number of trunk in trunk block in octal.
e'	Trunk block busy/idle bit status address.
f'	Network Switch Number (NSN).
g'	Trunk subgroup head cell address (first word).
h'	Disk trunk subgroup translation data address.
i'	Circuit Identification Number (CIN) code of CIN of the trunk.
j'	CIN translator entry address.
k'	Core trunk subgroup translation data address for this Trunk Subgroup (TSG).
l'	Trunk out of service list address.
m'	Trunk register annex address.
n'	TSNTBN address.

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o'	Address of the miscellaneous translation data for this trunk, e.g. Miscellaneous Distributor Number (MDN) and/or Miscellaneous Scanner Number (MSN) trunk data.
p'	MSN of the carrier group alarm point associated with the trunk.
q'	Size (12 or 24) of the carrier group associated with the Carrier Group Alarm (CGA) MSN.
r'	Group is equipped for software carrier group alarm and the size is always 12. If the Software Carrier Group Alarm (SCGA) type is MIX and the trunk is Common Channel Interoffice Signaling (CCIS) or Common Channel Signaling System Number 7 (CCS7), this statement will not be printed.
s'	TANCGA address (carrier group alarm address).
t'	Contents of TANCGA address (specifies CGA base MSN or software carrier group alarm types).
u'	The DPC_TO_CINC Destination Point Code (DPC) entry address.
v'	Destination point code data at the relative DPC_TO_CINC address.
w'	Single Trunk Customer (STC), Customer Data Block (CDB) entry address.
x'	For Q931 trunks, the associated Link Access Circuit Identifier (LACID).
y'	For Q931 trunks, the primary port TAN (D-Channel) of the LACID.
z'	For Q931 trunks, the backup port TAN (D-Channel) of the LACID.
a''	Common Channel Interoffice Signaling (CCIS) terminal associated with the trunk.
b''	CCIS band to which the trunk is assigned.
c''	CCIS circuit number (0 through 15) in the band.
d''	CIN of input Q931 trunk.
e''	Core address of OD4DMIN_ACI.
f''	ACI disk start address; contents of OD4DMIN_ACI.
g''	Disk starting address of HT4TSN_TO_ALL translation.
h''	HT4TSN_TO_ALL disk subtranslator start address.
i''	Disk start address of HT4Q931_TO_TSN.
j''	Disk start address of first Q931 subtranslator.
k''	Disk start address of final Q931 subtranslator.
l''	Disk address of specific Trunk Scanner Number (TSN) (16-9) of HT4TSN_TO_ALL translator.
m''	Contents of disk address of specific TSN subtranslator address pointer.

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n''	Disk address of subtranslator for this specific TSN (8-0).
o''	Link Access Identifier (LACID).
p''	Facility identifier.
q''	Channel.
r''	**WARNING CORE DISK LACID MISMATCH — May print out when mismatch occurs.
s''	Disk address of HT4Q931_TO_TSN translator for this specific TSN (LACID 22-12).
t''	Contents of disk address of HT4Q931_TO_TSN translator for this specific TSN, Q931 first subtranslator pointer.
u''	Disk address of 1st Q931 subtranslator for this specific TSN (LACID 11-6).
v''	Contents of disk address of 1st Q931 subtranslator for this specific TSN, Q931 final subtranslator address for this specific TSN (LACID 5-0).
w''	Disk address of final Q931 subtranslator for this specific TSN.
x''	TSN of Q931 trunk.
y''	Circuit Identification Number (CIN) of input CCS7, INUP, ITUP, or Q931 trunk.
z''	Disk start address of HT4DPC_CIC translator.
a'''	Disk start address of HT4DPC_CIC sub-headtable.
b'''	Disk start address of HT4DPC_CIC conflict table.
c'''	Disk start address of Circuit Identification Code (CIC) headtable.
d'''	Disk start address of CIC subtranslator.
e'''	Signaling link selected.
f'''	Circuit identification code.
g'''	Destination point code.
h'''	Disk address of HT4DPC_CIC translator for this trunk (DPC [middle 8 bits]).
i'''	Contents of disk address of HT4DPC_CIC translator for this trunk, HT4DPC_CIC Sub-Headtable (SUB HT) pointer.
j'''	Disk address of DPC_CIC SUB HT for this specific trunk (DPC[low order 8 bits]).
k'''	Contents of disk address of DPC_CIC SUB HT for this specific trunk, either CIC sub-headtable pointer or conflict table pointer.
l'''	Disk address of DPC_CIC_CONF translator for specific trunk.

SEE PROPRIETARY NOTICE ON COVER PAGE

m'''	Contents of disk address of DPC_CIC_CONF translator for specific trunk, CIC sub-headtable pointer.
n'''	Disk address of DPC_CIC_HT translator for specific trunk (CIC high order 7 bits).
o'''	Contents of disk address of DPC_CIC_HT translator for specific trunk, DPC_CIC_SUB translator pointer.
p'''	Disk address of DPC_CIC_SUB translator for this trunk (CIC low order 7 bits).
q'''	Trunk Scanner Number (TSN) of trunk.
r'''	Circuit Identification Name (CIN) of input Q931 trunk.
s'''	CIN of customer Trunk Appearance Number (TAN).
t'''	Decimal TAN of customer TAN.
u'''	CIN of D-channel TAN (T1FA TAN).
v'''	Decimal TAN of D-channel.
w'''	Diagram depicting state of nailed-up connection: CTAN-----PTAN — Nailed-up connection. CTAN-----M-----M-----PTAN — Nailed-up connection that is duplex monitored. CTAN-----X-----PTAN — Broken connection; both trunks are CAD.DSA OOSI. CTAN-----X----0-----PTAN — Broken connection; the PTAN is out-of-service due to a 4ESS™ related reason; the CTAN is CAD.DSA OOSI. CTAN-----0----X----0-----PTAN — Broken connection; the PTAN is out-of-service due to a 4ESS™ related reason; the CTAN is out of service due to a 4ESS™ related reason. CTAN-----0----X-----PTAN — Broken connection; the CTAN is out-of-service due to a 4ESS™ related reason; the CTAN is CAD.DSA OOSI. CTAN-----X----D-----PTAN — Broken connection; the PTAN is involved in a Digital Loopback connection; the CTAN is CAD.DSA OOSI. CTAN-----D----X----D-----PTAN — Broken connection; the PTAN and the CTAN are involved in separate Digital Loopback connections.

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CTAN-----D-----X-----PTAN	— Broken connection; the CTAN is involved in a Digital Loopback connection; the PTAN is CAD.DSA OOSI.
CTAN-----S-----PTAN	— Broken connection, the PTAN and the CTAN are involved in a Duplex Split connection.
x'''	Digital Test Access Trunk (DTAT) CIN of DTAT involved in testing customer TAN.
y'''	DTAT CIN of DTAT involved in testing D-channel TAN.
z'''	CIN of customer TAN; this is the backup nailed-up connection.
a''''	TAN of customer trunk; this is the backup nailed-up connection.
b''''	CIN of D-channel TAN; this is the backup nailed-up connection.
c''''	TAN of D-channel trunk; this is the backup nailed-up connection.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
TMAD0005
TMAD0007

Input Message
VER:TRKNAME

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:TSG-CICS
 WORK CENTER.. MAC, MOC
 GENERIC 4E22 Rel. 2 and later
 APPLICATION .. 4E
 TYPE Output

1. FORMAT

VER:TSG;OPT(CICS)					BTFN TOWN ST BL FBS NBS						
					TSG	a	b	c	d	e	f
CICS	CICS	CICS	CICS	CICS	CICS	CICS	CICS	CICS	CICS	CICS	
[g,]	[g,]	[g,]	[g,]	[g,]	[g,]	[g,]	[g,]	[g,]	[g,]	[g,]	
.	.	.	.	.	.	.	.	.	.	.	
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2. REASON FOR OUTPUT

To display the Carrier Identification Codes (CICs) defined for the input Trunk Subgroup (TSG). Up to 16 codes can be assigned to a trunk subgroup.

3. VARIABLE FIELD DEFINITIONS

- a Base Traffic Number (BTFN) of the Trunk Subgroup (TSG) (0-9976).
- b TOWN — This four character alphabetic code represents the town, city, or location for the far end of the TSG.
- c ST — State. This two character alphabetic code identifies the far end state, province, or foreign country.
- d BL — Building. This two-character alphabetic or two-character numeric character code identifies the office for the far end of the TSG. Independent Telephone Company offices are always designated by an X plus an alpha character. If the TSG terminates in a customer's building and this code is not necessary to identify that building, this code is arbitrary.
- e Far Building Subdivision (FBS). This three-character alphanumeric code identifies the internal building subdivision for the far end of the TSG.
- f Near Building Sub-Division (NBS). This three-character alphanumeric code identifies the internal building for the near end termination of the TSG.
- g Carrier identification code (0000-9999).

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
IOCPPVR4
IOCPVRT4
VRFYOUT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:TSG-IN1WAY
WORK CENTER.. MAC, MOC
GENERIC 4E26 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:TSG,OPT(IN1WAY):

BTFN TOWN ST BL FBS NBS

PCF ----, AOPC -----, TSG ---- - - - - - ,
DPC -----,

FENCLASS -----, FENID -----, TFG -, TSGBBC -,
QTFN ----, TOT ----, SAT -, DOM ----, IT -, FAI -,
FENPA ---, FEOFC ---, FELATA ---, FESC6 -, IWZ1 -,
MEM -, PSES -, INSEP ---, MTSC --, GNSC -, GEOSEP --,

ISC -----, RFA -, ADIG -, CCIS2WRE -, CBNPR -,

BN -----, BRL -, ITC -, GSDN -, GSDNPHSE -, EAS -, CMTYP -, NPARINH -,
WATSBN -----, PSUUI -,
BNPT ----, WBNPT ----, CMERGE --, SCFN -, OVLP -, PRIT -----,
APS -, PSATP -, PBXESGD -, PBXAW -, FAR4E -,
MEGC -, SDNA -, OWAT -, DATA -, CBC -, DDD -, IDDD -, FOSPS -,
SDNPLAN ----, BFTIS ---, BFTNI ---, SKSP -, PBXNWW -, HYBRD -, CCTT -,
INCID -, ITELCO -, S5DIG -, SDS -, FVSR -, IFITR -, PCPEACEL -, UT15DA -,
LRN -----, CBN DIGS -----, CBN -, SDVG -,
CID ----, NCAR -, TTA -, EACC --, LCVT -, QPE -, NSA -,
ANCR -, ACCID ---, PSTNG-, FLDSRP -, REVAMP -, E1T1 -, SUPBLK -, ATRIG -,
IXC -, FELN -, HUNT --, CSN --, CARSON -, SOIP -, TCC --, STBI -,

CAREA -, CPOS -, SINDEX --,

S1 -, S2 -, S3 -, S4 -, S5 -, S6 -, S7 -, S8 -, S9 -, S10 -,

SEE PROPRIETARY NOTICE ON COVER PAGE

2. REASON FOR OUTPUT

To verify one-way incoming trunk subgroup characteristics in response to a VER:TSG input message.

3. VARIABLE FIELD DEFINITIONS

ACCID	Access Identification (ID) (blank or 0-255).
ADIG	'A' Digit reconstruction (blank, 0, 2-9).
ANCR	AT&T network call redirection (blank).
AOPC	Alias origination point code, blank or 9 digit code: NET — 000-255 CR — 00-31 CT — 0-7 MEM — 000-255
APS	Accunet® packet service (blank, N, Y).
ATRIG	Advanced Intelligent Network (AIN) Trunk Subgroup (TSG) trigger (N, Y).
BFTIS	Backwards failure treatment Integrated Services Digital Network (ISDN) User Part (ISUP) all the way (blank, ANN, REL).
BFTNI	Backwards failure treatment not ISUP all the way (blank, ANN, REL).
BN	Billing number (blank or 3, 4, 10 digit number).
BNPT	Billing numbering plan type (blank, APN, NANP).
BRL	Billing record length (blank, L, S).
CAREA	Control area (0-9).
CARSON	Carrier solutions (blank, N, Y).
CBC	Call by call service selection (blank, N, Y).
CBN DIGS	Connecting network access billing number (blank or 10 digit number).
CBN	Connecting network access billing number option (blank, L, N).
CBNPR	Calling party number/billing default presentation restriction indicator (blank, PA, PR).
CCIS2WRE	Common channel interoffice signaling 2Wire (blank, N, Y).
CCTT	Circuit Identification Code (CIC) TSG trigger (N, Y).
CID	Local Exchange Carrier (LEC) switch digit service (blank or 4 digit number).
CMERGE	Call merge (blank, N, Y).

SEE PROPRIETARY NOTICE ON COVER PAGE

CMTYP	Centralized Automatic Message Accounting (CAMA) type (blank, 1, 2).
CPOS	Control position (0-9).
CSN	Carrier solutions nodal (blank, AW, RS).
DATA	Data service (blank, N, Y).
DDD	Direct distance dialing (blank, N, Y).
DOM	Domain: 20-83, APN, DED, DEV, I56D, I64C, INTL, IVT, N64C, N64R, NH0C, NH1C, POTS, SDNA, VRFY.
DPC	Destination point code: If PCF is ATT then the DPC is a 9 digit number composed of: NET — 000-255 CR — 00-31 CT — 0-7 MEM — 000-255 If PCF is ANSI then the DPC is a 9 digit number composed of: NET — 000-255 CLU — 000-255 MEM — 000-255 If PCF is ISPC then the DPC is a 5 digit number composed of: WGZ — 1-7 ANI — 000-255 SPID — 0-7
E1T1	International E1/T1 carrier (N, Y).
EACC	Equal access circuit code - Transit Network Selection (TNS) parameter (blank or 0-15).
EAS	Equal access signaling (A, D, E, N, R).
FAI	Foreign administration ID (blank or 1-31).
FAR4E	Far end 4E (blank, N, Y).
FELATA	Far end Local Access and Transport Area (LATA) (blank or 000-999).
FELN	Far end AT&T local network (blank, N, Y).
FENCLASS	Far end network class (blank, ACCESA, ACCESI, ACCESO, CMC, INTL, OEO, OWATS, PBX, POTS).

SEE PROPRIETARY NOTICE ON COVER PAGE

FENID	Far end network Identification (ID) (blank or 1-6 alphanumeric characters).
FENPA	Far end numbering plan area (200-999 and for international 2-9 and 20-99).
FE0FC	Far end office (blank or 000-999).
FESC6	Far end 6-digit screening (N, Y).
FLDSPR	Feldspar (blank).
FOSPS	Far end 6-digit screening (blank, N, Y).
FVSR	Forced via switched routing indicator (blank).
GE0SEP	Geographical traffic separation class (0-31).
GNSC	Go / no go screening class (0-3).
GSDN	Global Software Defined Network (GSDN) (blank, N, Y).
GSDNPHE	Global software defined network phase (blank, 1, 2).
HUNT	Private Branch Exchange (PBX) trunk hunt option (blank or CT).
HYBRD	Hybrid (blank, N, Y).
IDDD	International direct distance dialing (blank, N, Y).
IFITR	Invoke forced intertoll routing on incoming calls indicator (blank).
INCID	Local Exchange Carrier (LEC) carrier identification code (blank, 3, 4, B).
INSEP	Incoming traffic separation class (Non-AT&T 0-255, AT&T 0-127).
ISC	Incoming signaling characteristic: CCITT5, CCITT6, DOMCCIS, DPDDSD, DPIMADG, DPIMMED, DTMFWK, DTS, INUP, MFDDSD, MFOPWK, MFWINK, Q931, TUP.
IT	Intertoll Treatment (blank, N, Y).
ITC	Incoming trunk subgroup class (blank or 0-3).
ITELCO	Calls arriving from an independent telephone company (blank, N, Y).
IWZ1	International world zone 1 (blank, N, Y).
IXC	Inter exchange carrier (blank, N, Y).
LCVT	Local circuit Common Language Location Identifier (CLLI) validation test (blank, N, Y).
LRN	Location routing number (blank or 10 digit number).
MEGC	Megacom® Telecommunications Service (blank, N, Y).
MEM	Indicates if trunk hunt with memory is to be performed (blank, N, Y).
MFCTYPE	This field is used by export offices only.
MTSC	Multiple treatment screening class (0-63).

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NCAR	No Calling Party Number (CPN) anomaly reporting (blank, N, Y).
NPARINH	Numbering Plan Area (NPA) reconstruction inhibit (blank, N, Y).
NSA	Nonsuppression of Automatic Message Accounting (AMA) recording (blank, N, Y).
OVLP	Overlap signaling (blank, N, Y).
OWAT	Direct connect Outgoing Wide Area Telephone Service (OWATS) service (blank, N, Y).
PBXAW	Private Branch Exchange (PBX) answer withheld (blank, N, Y).
PBXESGD	PBX expect station group (blank, N, Y).
PBXNWW	PBX no wait for wink (blank, N, Y).
PCF	Point code format (blank, ATT, ANSI, ISPC).
PCPEACEL	Positive Call Processing (PCP) equal access to cellular (blank, N, Y).
PRIT	Conversant® (blank, CONV, NOQ931, SSA, TSGCPA, TSGPBX, TSGACD).
PSATP	Prohibit sending All Tests Passed (ATP) information (blank, N, Y).
PSES	Prohibit service evaluation (blank, N, Y).
PSTNG	Public Switched Telephone Network (PSTN) routing capability for GSDN (blank, N, Y).
PSUUI	Prohibit sending user-to-user information (blank, N, Y).
QPE	Q931 PBX emergency indicator (blank, N, Y).
QTFN	Quantity of traffic numbers (24-504 in increments of 24).
REVAMP	Invoke revamped forced intertoll routing indicator (blank).
RFA	Ring forward allowed (N, Y).
S5DIG	Support 5-digit dialing (blank, N, Y).
SAT	Satellite (N, Y).
SCFN	Send confusion message (blank, N, Y).
SDNA	Software defined network access (blank, N, Y).
SDNPLAN	1+ / Exchange Number (NXX) dialing plan (blank, NXX, OPEN, ORIG, PLUS).
SDS	Switch digital services indicator in Software Defined Network Access (SDNA) domain (blank, N, Y).
SDVG	Switched Data Video Gateway indicator (blank, N, Y).
SINDEX	Access charge verification sampling rate index (blank or 0, 1, 2, 4, 8, 16, 32, 64).
SKSP	Selective key service protection (blank, N, Y).

SEE PROPRIETARY NOTICE ON COVER PAGE

S0IP	Send optional ISUP solutions (blank, N, Y).
STBI	Send Transit Network Selection (TNS) ISUP parameters (blank, N, Y).
SUPBLK	Suppression of blocking sequence (blank, N, Y).
S1	Spare field reserved for future use (blank or 0-7).
S2	Spare field reserved for future use (blank, N, Y).
S3	Spare field reserved for future use (blank, N, Y).
S4	Spare field reserved for future use (blank, N, Y).
S5	Spare field reserved for future use (blank, N, Y).
S6	Spare field reserved for future use (blank, N, Y).
S7	Spare field reserved for future use (blank, N, Y).
S8	Spare field reserved for future use (blank, N, Y).
S9	Spare field reserved for future use (blank, N, Y).
S10	Spare field reserved for future use (blank, N, Y).
TCC	TNS circuit code (blank or 0-15).
TFG	Terminating feature group (blank, B, C, D).
TOT	Type of trunk: CAMAA, CAMAO, ETC, INTL, INTLO, ITAND, ITOLL, ITOP, ITOPB, LCC, MISC, OCC, PBX, SECIT, STC, TAND, TOLLC, TSPS.
TSG	Trunk subgroup: BTFN — Base traffic number (0-9976). TOWN — The town, city, or location for the far end of the TSG (4 characters). ST — The far end state, province, or foreign country (2 characters). BL — The building or office identity for the far end of the TSG (2 characters). FBS — The far building subdivision code for internal building identification (3 characters). NBS — The internal building subdivision for the near end of the TSG (3 characters).
TSGBBC	Trunk Subgroup (TSG) Broadband capability (blank or 0-6).
TTA	Terminating traffic architecture (blank, N, Y).
UT15DA	Universal T1.5 data access (blank).

SEE PROPRIETARY NOTICE ON COVER PAGE

WATSBN	Wide Area Telephone Service (WATS) billing number (blank or 10 digit number).
WBNPT	WATS billing number plan type (blank or NANP).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPPVR4
VRFYOUT
VRFYTSG

Translation Guide, 4ESSTM, TG-4, Division 8, Section 1b

Input Message
VER:TSG

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:TSG-LIST
WORK CENTER.. MAC, MOC
GENERIC 4E20 Rel. 2 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:TSG;OPT(LIST)
a b
c d
e f
g h
BTFN TOWN ST BL FBS NBS TSGN
 i jjjj kk ll mmm nnn, 0000,
 •
 •
 •

2. REASON FOR OUTPUT

To list all Trunk Subgroups (TSGs) that contain the given values for the given search keys.
Refer to the VER:TSGLIST input message for more information.

3. VARIABLE FIELD DEFINITIONS

a, c, e, g	Search keys (see Table 1).
b, d, f, h	Values of search keys (see Table 1).
i	Base traffic number of the trunk subgroup (0-9976).
j	The town, city, or location for the far end of the TSG (4 characters).
k	The far end state, province, or foreign country (2 characters).
l	The building or office identity for the far end of the TSG (2 characters).
m	The far building subdivision code for internal building identification (3 characters).
n	The internal building subdivision for the near end of the TSG (3 characters).
o	Trunk Subgroup Number (TSGN).

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
IOCPIMC4
VRFYCNTL
VRFYINPT
VRFYOUT
VRFYTSG

Translation Guide, 4ESSTM, Division 8, Section 1e

Input Message
VER:TSGLIST

SEE PROPRIETARY NOTICE ON COVER PAGE

Table 1

a, c, e, g	b, d, f, h				
ACCID	1..255				
ACD	Y,N or T				
ADIG	2..9				
ANCR	Y or N				
ANI	0..255				
ANISID	NONE REQ	ANI SID	PANI *	PSID	
APS	Y or N				
AOPC	*				
BFTIS	ANN	REL			
BFTNI	ANN	REL			
BN	3 digits	4 digits	10 digits	*	
BNPT	NANP	APN			
BRL	L	S			
CAREA	0..9				
CBC	Y or N				
CBNPR	PA	PR	APR		
CCIF	Y or N				
CCIS2WRE	Y or N				
CCODE	CCNO	CCACI	CCACO	CCAM2	CCAMA
	CCCMC	CCCPA	CCFGB	CCFD	CCICR
	CCINT	CCMEG	CCMGC	CCOWC	CCOWT
	CCPBX	CCSDN	CCPOTS		
CID	0000..9999				
CHNEG	Y or N				
CLU	0..255				
CMERGE	Y or N				
CMTYP	1	2			
CODSC	Y or N				
CPOS	0..9				
CREG	0..31				
CSCSET	1..16383				
CTYP	0..7				
D3DBN	Y or N				
DATA	Y or N				

* Any legal value except blank

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Table 1 (continued)

a, c, e, g	b, d, f, h				
DATAF	C	R			
DDD	Y or N				
DELAY	20 210	80 280	220	70	140
DNHR	Y OR N				
DNP	Y or N				
DOFP	Y or N				
DOM	HNPA SNPA1 SNPA3NAC SNPA6 INTLO DED DEC1 LSI ATNS I56D 1384	HNPA SNPA1NAC SNPA4 SNPA6NAC INTT DEC6 DER1 INCD IVT GSDN	AC SNPA2 SNPA4NAC SNPA7 VERFY DER6 DEVP IO56 N64C DAVT	IT SNPA2NAC SNPA5 SNPA7NAC SDNA DEC0 DEDP IO64 N64R 1..83	ITNAC SNPA3 SNPA5NAC INTL DEV DER0 NSR ITD I64C POTS
DPSTOP	Y or N				
EAS	N	A	E		
EXSEQ	N,T or B				
FAI	1..7				
FAR4E	Y or N				
FEAREA	1 to 12 alphanumeric characters				
FELATA	000..999				
FENCLASS	ACCESA PBX CAMA	ACCESI POTS CMC	ACCESO ITS *	INTL	OWATS
FENID	1 to 6 chars				
FENPA	200..999	2..9	20..99		
FEOFC	000..999				
FEPTY	Y or N				
FESC6	Y or N				
FESWID	1 to 12 alphanumeric characters				

* Any legal value except blank

SEE PROPRIETARY NOTICE ON COVER PAGE

Table 1 (continued)

a, c, e, g	b, d, f, h				
FLDSPR	Y or N				
FOSPS	Y or N				
GEOSEP	0..31				
GLARE	A	E	O	N	
GNSC	0..3				
GSDN	Y or N				
GSDNPHSE	1	2			
HYBRD	Y or N				
IDDD	Y or N				
INCID	3	4	B		
INSEP	0..255				
ISC	MFWINK	MFDDSD	DPDDSD	DPIMMED	CCITT5
	CCITT6	DOMCCIS	1WAYOUT	DPIMADG	DPIMPSW
	Q931	DTS	ISUP	DTMFWK	
	DPPLS	MFCCLS	DCHAN		
	TUP	INUP	ICCS	TESTATP	MIOPNOP
	TOLLMFD	TSPSMFW	TSPSMFD	CAMAKEY	CAMACW
	RPACU	RPACS	MFOPWK		
IT	Y or N				
ITC	0..3				
ITELCO	Y or N				
IWZ1	Y or N				
LSST	2 chars				
MEGC	Y or N				
MEM	Y or N				
MEMBER	1..255				
MFSPEED	7	10			
MTSC	0..63				
MULAW	Y or N				
NEOTR	Y or N				
NET	0..255				
NPARINH	Y or N				
ONCID	3	4			

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Table 1 (continued)

a, c, e, g	b, d, f, h				
OSC	MFWINK	MFDDSD	DPWINK	DPDDSD	DPIMMED
	CCITT5	CCITT6	DOMCCIS	1WAYIN	MASMNTR
	MASRECT	MASPLBK	MASBIPB	AART	DTMFWK
	TONE	MWATT	ANN	TERM	
	VFL	XCVRT	DATATAT	DATALPC	SOA
	SOB	MFRCVR	MFXMTR	MFRCVRT	MFXMTR
	TONEDT	105T	TESTATP		
	XCVR	TWOPDPI	TWOPDPD	TWOPMFW	TWOPDPW
	MIOPNOP	SIOPNOP	ICOPNOP	SIOPMFW	CAMAKEY
	CAMATLK	CAMACW	ROTLCA0	ROTLTA0	ROTLCA1
	ROTLTA1	ATMEDA	ATMERA	MWDWN10	104T
	DPPLS	EMFCIXC	EMFCOXC	DTMFRCR	
	DTMFXMR	109T	104D	105D	Q931
	ISUP	DCHAN	TUP	RESD	RESV
	INUP	ICCS	NSCX	MSFH	
OTMTN	000..9999999				
OTMTT	N	ATMC	CTX2	CTX3	SXS
	SYNC	T103	*		
OTSTN	000..9999999				
OTSTT	N	ATMB	CTX2	CTX3	
	SXS	SYNC	T103	*	
OVLP	Y or N				
OWAT	Y or N				
PBXAW	Y or N				
PBXESGD	Y or N				
PBXNWW	Y or N				
PCF	ATT	ANSI®	ISPC		
PRIT	NOQ931	TSGPBX	TSGCPA	CONV	SSA
	ATP	TSGACD			
PSATP	Y or N				
PSBN	Y or N				
PSCPN	Y or N				
PSES	Y or N				
PSOLI	Y or N				
PSTNG	Y or N				
PSUUI	Y or N				

* Any legal value except blank.

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Table 1 (continued)

a, c, e, g	b, d, f, h				
REV	Y or N				
RFA	Y or N				
RFMP	Y or N				
S5DIG	Y or N				
SAT	Y or N				
SBRIV	Y or N				
SCFN	Y or N				
SDNA	Y or N				
SDNPLAN	ORIG	PLUS	NXX	OPEN	
SDVG	Y or N				
SINDEX	0 8	1 16	2 32	4 64	
SKSP	Y or N				
SPID	0..7				
TD	TWOWAY	IN1WAY	OUT1WAY	NONMSG	
TFG	B	C	D		
TOT	TOLLC	CAMAA	CAMAO	TSPS	SECIT
	TAND	ITAND	MISC	ITOLL	INTL
	INTLO	ITOPA	ITOPB	ITOP	
	NSDSD	PBX	ITS	STC	
	LCC	ETC	OCC	ATP	
TRIDX	1..31				
TSGBBC	0..6				
VDCAP	VOICE	DATA	BOTH		
WANISID	NONE REQ	ANI SID	PANI *	PSID	
WATSBN	10 digits				
WBNPT	NANP	APN			
WGZ	1..7				
XCPA	0..3				
XTMTN	000..9999999				
XTMTT	N T105	T100 *	T102		
XTSTN	000..9999999				
XTSTT	N T102	ATMA T105	T100 *		

* Any legal value except blank.

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:TSG-NONMSG
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:TSG;OPT(NONMSG): BTFN MCG SCG FBS NBS
 TSG a bbb* cccc d** eee,
QTFN f, TOT g,

INSEP h,

ISC i,

OSC j,

PRIT k,

CAREA l, CPOS m

2. REASON FOR OUTPUT

To verify non-message Trunk Subgroup (TSG) characteristics in response to a VER:TSG input message.

3. VARIABLE FIELD DEFINITIONS

- a Base traffic number (0-9976).
- b Major Category (MCG): ACI, ATM, CLN, INT, MAS, MIS, SVC, TAS.
- c Sub-Category (SCG). Dependent on the MCG:
- | MCG | SCG |
|------|---|
| — | — |
| ACI* | DCHN |
| ATM* | RT0T, RT1T, RT0A, RT1A, RPCU |
| CLN* | 104*, 104D, 105*, 105D, 109*, DLPC, DTAT, RESD, RESV, TAT*, TND*. |
| INT* | CCS7 |
| MAS* | BIPB |
| MIS* | AART, CKEY, CTLK, CCWS, OBS0, OBS1, TERM. |

SEE PROPRIETARY NOTICE ON COVER PAGE

	SVC* — AIN*, ATP*, DMRV, DMXM, MFR*, MFRT, MFX*, MFXT, SCAN, SCBN, SCNB, SCNS, XCVR, XCVT.				
	TAS* — ANN*, MW10, MWAT, TONE.				
d	The far building subdivision code for internal building identification (3 characters). Dependent on MCG and SCG.				
	<table><tr><td>MCG</td><td>SCG</td></tr><tr><td>—</td><td>—</td></tr></table>	MCG	SCG	—	—
MCG	SCG				
—	—				
	SVC* AIN* — Automatic Speech Recognition (ASR) application (0-7, if 0 no ASR capabilities apply).				
	SVC* SCNS — ASR application (0-7, if 0 no ASR capabilities apply).				
	All others — *.				
e	The internal building subdivision for the near end of the TSG (3 characters).				
f	Quantity of traffic numbers (reserved) (1-9984).				
g	Type of trunk.				
h	Incoming traffic separation class (Non-AT&T 0-2551, AT&T 0-127).				
i	Incoming signaling characteristics: 1WAYOUT, CAMACW, CAMAKEY, DCHAN, ICCS, RPAC-S, RPAC-U, TESTATP.				
j	Outgoing signaling characteristics: 104, 104D, 105, 105D, 105T, 109, 1WAYIN, ANN, CAMACW, CAMAKEY, CAMATLK, DATALPC, DATATAT, DCHAN, DTMFRCR, DTMFXMR, ICCS, MFRCVR, MFRCVRT, MFXMTR, MFXMTRT, MSFH, MWATT, NSCX, RMSDRES, RMSVRES, ROTLCA0, ROTLCA1, ROTLTA0, ROTLTA1, TERM, TESTATP, TONE, TONEDT, VFL, XCVR.				
k	Conversant® (blank or ATP).				
l	Control group (0-9).				
m	Control position (0-9).				

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPPVR4
VRFYOUT
VRFYTSG

Translation Guide, 4ESSTM, TG-4, Division 8, Section 1f

SEE PROPRIETARY NOTICE ON COVER PAGE

Input Message
VER:TSG

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:TSG-OUT1WAY
WORK CENTER.. MAC, MOC
GENERIC 4E26 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:TSG,OPT(OUT1WAY):

BTFN TOWN ST BL FBS NBS

PCF ----, AOPC -----, TSG ---- - - - - - ,
DPC -----,

FENCLASS -----, FENID -----, TFG -, TSGBBC -, VDCAP -----,
FEAREA -----, FESWID -----, EXSEQ -, FEPTY -,
QTFN ----, TOT ----, SAT -, DOM ----, ACD -, FAI-,
FENPA ---, FE0FC ---, FELATA ---, IWZ1 -,
MEM -, PSES -, ADS -,

OSC -----, RFMP -, DPSTOP -, DELAY --, CCIS2WRE -,
XCPA -, DNP -, MFSPEED --,
PSOLI -,

BN -----, BRL -, GSDN -,
PSBN ----, PSCPN -, ANISID ----, WANSID ----, PSUUI -,
BNPT ----, CMERGE -, SCFN -, PRIT -----,
APS -, CHNEG -, PSATP -, DOFP -, SBRIV -,
FOSPS -, CCIF -,

ONCID -, D3DBN -, MULAW -, CSCSET -----, CID ----, ITCENC -, OFITR -,
SPN -, LNPIC -, NCAR -, TTA -, EACC --, LCVT -, NSA -, PNLCT -,
ANCR -, ACCID ---, PSTNG -, FLDSPR -, REVAMP -, E1T1 -, SUPBLK -,
IXC -, FOLI -, FELN -, HUNT --, CSN --, CARSON -, SOIP -, TCC --, STBI -,

CAREA -, CPOS -, SINDEXT --, CODSC -, NE0TR -, TRIDEX --,
OTSTT ----, OTSTN -----, OTMTT ----, OTMTN -----,
XTSTT ----, XTSTN -----, XTMTT ----, XTMTN -----,

S1 -, S2 -, S3 -, S4 -, S5 -, S6 -, S7 -, S8 -, S9 -, S10 -,

SEE PROPRIETARY NOTICE ON COVER PAGE

2. REASON FOR OUTPUT

To verify one-way outgoing trunk subgroup characteristics in response to a VER:TSG input message.

3. VARIABLE FIELD DEFINITIONS

ACCID	Access Identification (ID) (blank or 0-255).
ACD	Automatic call distributor, (blank, N, Y, T).
ADS	Automatic Number Identification (ANI) digits send (7 or 10 digits) for CMA type-of-trunks (blank, N, Y).
ANCR	AT&T network call redirection (blank).
ANISID	Automatic Number Identification (ANI)/ Service Identification (SID) request (blank, ANI, NONE, PANI, PSID, REQ, SID).
AOPC	Alias origination point code, blank or 9 digit code: NET — 000-255 CR — 00-31 CT — 0-7 MEM — 000-255
APS	Accunet® packet service (blank, N, Y).
BN	Billing number (blank, or 3, 4, 10 digit number).
BNPT	Billing numbering plan type (blank, APN, NANP).
BRL	Billing record length (blank, L, S).
CAREA	Control area (0-9).
CARSON	Carrier solutions (blank, N, Y).
CCIF	Credit card information (blank, N, Y).
CCIS2WRE	Common channel interoffice signaling 2Wire (blank, N, Y).
CHNEG	Channel negotiation (blank, N, Y).
CID	Carrier ID (blank, 0000-9999).
CMERGE	Call merge (blank, N, Y).
CODSC	Customer Provided Equipment (CPE) (quick) outgoing disconnect (blank, N, Y).
CPOS	Control position (0-9).
CSCSET	Circuit selection set (blank or 1-16383).
CSN	Carrier solutions nodal (blank, AW, RS).
D3DBN	Delivery of 3-digit billing number (blank, N, Y).
DELAY	Delay interval (blank, 20, 70, 80, 140, 210, 220, 280).

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DNP	Dialed number preferred (blank, N, Y).
DOFP	Disable outgoing fraud prevention (N, Y).
DOM	Domain: 20-83, APN, DED, DEV, I56D, I64C, INTL, IVT, N64C, N64R, NH0C, NH1C, POTS, SDNA, VRFY.
DPC	Destination point code: If PCF is ATT then the DPC is a 9 digit number composed of: NET — 000-255 CR — 00-31 CT — 0-7 MEM — 000-255 If PCF is ANSI then the DPC is a 9 digit number composed of: NET — 000-255 CLU — 000-255 MEM — 000-255 If PCF is ISPC then the DPC is a 5 digit number composed of: WGZ — 1-7 ANI — 000-255 SPID — 0-7
DPSTOP	Dial pulse stop (blank, N, Y).
E1T1	International E1/T1 carrier (N, Y).
EACC	Equal access circuit code - Transit Network Selection (TNS) parameter (blank or 0-15).
EXSEQ	Exception sequence (blank, B, T).
FAI	Foreign administration ID (blank or 1-31).
FEAREA	Far end area (blank or 1-12 alphanumeric characters).
FELATA	Far end Local Access and Transport Area (LATA) (blank, 000-999).
FELN	Far end AT&T local network (blank, N, Y).
FENCLASS	Far end network class (blank, ACCESA, ACCESI, ACCESO, ACU, CMC, INTL, OEO, OWATS, PBX, POTS).
FENID	Far end network Identification (ID) (blank or 1-6 alphanumeric characters).
FENPA	Far end numbering plan area (200-999 and for international 2-9 and 20-99).

SEE PROPRIETARY NOTICE ON COVER PAGE

FE0FC	Far end office (blank, 000-999).
FEPTY	Far end priority (blank or Y).
FESWID	Far end switch ID (blank or 1-12 alphanumeric characters).
FLDSPR	Feldspar (blank).
FOLI	Fixed Originating Line Information (OLI) (N, Y).
FOSPS	Trunk Subgroup (TSG) from Operator Service Position System (OSPS) (blank, N, Y).
GSDN	Global Software Defined Network (GSDN) (blank, N, Y).
HUNT	Private Branch Exchange (PBX) trunk hunt option (blank or CT).
ITCENC	Information transfer capability indicator (blank, N, Y).
IWZ1	International world zone 1 (blank, N, Y).
IXC	Inter exchange carrier (blank, N, Y).
LCVT	Local circuit Common Language Location Identifier (CLLI) validation test (blank, N, Y).
LNPIC	A Trunk Subgroup (TSG) field not used.
MEM	Indicates if trunk hunt with memory is to be performed (blank, N, Y).
MFCTYPE	This field is used by export offices only.
MFSPEED	Multi-frequency speed (blank 7, 10).
MULAW	Mu-law encoding used (blank, N, Y).
NCAR	No Calling Party Number (CPN) anomaly reporting (blank, N, Y).
NEOTR	Near operational test (N, Y).
NSA	Nonsuppression of Automatic Message Accounting (AMA) recording (blank, N, Y).
OFITR	Invoke forced intertoll routing on outgoing calls indicator (blank).
ONCID	NSD carrier identification code (blank, 3, 4).
OSC	Outgoing signaling characteristic: CCITT5, CCITT6, DOMCCIS, DPDDSD, DPIMMED, DPWINK, DTMFWK, ICOPNOP, INUP, ISUP, MFDDSD, MFWINK, MIOPNOP, Q931, TUP.
OTMTN	Operational terminating test number (blank, 000-9999999).
OTMTT	Operational terminating test type: ATMC, CTX2, CTX3, N, SYNC, SXS, T103.
OTSTN	Operational thru switch test number (blank, 000-9999999).
OTSTT	Operational thru switch test type: ATMB, CTX2, CTX3, N, SYNC, SXS, T103.
PCF	Point code format (blank, ATT, ANSI, ISPC).

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PNLCT	Prohibit No-Loopback Continuity Check Test (PNLCT) TSG parameter.
PRIT	Conversant® (blank, CONV, NOQ931, SSA, TSGCPA, TSGPBX, TSGACD).
PSATP	Prohibit sending All Tests Passed (ATP) information (blank, N, Y).
PSBN	Prohibit sending billing number (blank, PALL, PNNA, SALL).
PSCPN	Prohibit sending calling party number (blank, N, Y).
PSES	Prohibit service evaluation (blank, N, Y).
PSOLI	Prohibit sending Originating Line Identity (OLI) information (blank, N, Y).
PSTNG	Public Switched Telephone Network (PSTN) routing capability for GSDN (blank, N, Y).
PSUUI	Prohibit sending user-to-user information (blank, N, Y).
QTFN	Quantity of traffic numbers (24-504 in increments of 24).
REVAMP	Invoke revamped forced intertoll routing indicator (blank).
RFMP	Ring forward miscellaneous (blank, N, Y).
SAT	Satellite (N, Y).
SBRIV	Send billing related information to the Voice Message Operations Center (VMOC) (blank, N, Y).
SCFN	Send confusion message (blank, N, Y).
SINDEX	Access charge verification sampling rate index (blank, 0, 1, 2, 4, 8, 16, 32, 64).
SOIP	Send optional Integrated Services Digital Network User Part (ISUP) solutions (blank, N, Y).
SPN	Signal ported number (blank, N, Y).
STBI	Send Transit Network Selection (TNS) ISUP parameters (blank, N, Y).
SUPBLK	Suppression of blocking sequence (N, Y).
S1	Spare field reserved for future use (blank, 0-7).
S2	Spare field reserved for future use (blank, N, Y).
S3	Spare field reserved for future use (blank, N, Y).
S4	Spare field reserved for future use (blank, N, Y).
S5	Spare field reserved for future use (blank, N, Y).
S6	Spare field reserved for future use (blank, N, Y).
S7	Spare field reserved for future use (blank, N, Y).
S8	Spare field reserved for future use (blank, N, Y).
S9	Spare field reserved for future use (blank, N, Y).

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S10	Spare field reserved for future use (blank, N, Y).
TCC	TNS circuit code (blank or 0-15).
TFG	Type of feature group (blank, B, C, D).
TOT	Type of trunk: ETC, INTL, INTLO, ITAND, ITOLL, ITOPA, LCC, MISC, OCC, PBX, SECIT, STC, TAND, TOLLC.
TRIDX	Trunk reservation index (blank or 1-31).
TSG	Trunk subgroup: BTFN — Base traffic number (0-9976). TOWN — The town, city, or location for the far end of the TSG (4 characters). ST — The far end state, province, or foreign country (2 characters). BL — The building or office identity for the far end of the TSG (2 characters). FBS — The far building subdivision code for internal building identification (3 characters). NBS — The internal building subdivision for the near end of the TSG (3 characters).
TSGBBC	Trunk Subgroup (TSG) Broadband capability (blank, 0-6).
TTA	Terminating traffic architecture (blank, N, Y).
VDCAP	Voice / data capability (blank, BOTH, DATA, VOICE).
WANISID	Wide Area Telephone Service (WATS) service ANI/SID request (blank, ANI, NONE, PANI, PSID, REQ, SID).
XCPA	Transceiver (XC) pad adjustment (blank, 0-3).
XTMTN	Transmission terminating test number (blank, 000-9999999).
XTMTT	Transmission terminating test type (ATMA, N, T100, T102, T105).
XTSTN	Transmission thru switch test number (blank, 000-9999999).
XTSTT	Transmission thru switch test type (ATMA, N, T100, T102, T105).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPPVR4
VRFYOUT
VRFYTSG

SEE PROPRIETARY NOTICE ON COVER PAGE

Translation Guide, 4ESSTM, TG-4, Division 8, Section 1c

Input Message
VER:TSG

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:TSG-RDBLIST
 WORK CENTER.. MAC, MOC
 GENERIC 4E19 and later
 APPLICATION .. 4E
 TYPE Output

1. FORMAT

VER:TSG;OPT(RDBLIST)				BTFN	TOWN	ST	BL	FBS	NBS	
				TSG	aaaa	bbbb	bb	bb	bbb	bbb
RDBI	ORDER	RDBI	ORDER							
cccc	dd	eeee	ff							
.	.	.	.							
.	.	.	.							
.	.	.	.							

2. REASON FOR OUTPUT

To list all routing data blocks (RDBs) that contain a given trunk subgroup.

3. VARIABLE FIELD DEFINITIONS

- a Base traffic number of the trunk subgroup (TSG).
- b Circuit identification number (CIN) of the trunk subgroup.
 - BTFN — Base traffic number
 - TOWN — The town, city, or location for the far end of the TSG.
 - ST — The far end state, province, or foreign country.
 - BL — The building or office identity for the far end of the TSG.
 - FBS — The far building subdivision code for internal building identification.
 - NBS — The internal building subdivision for the near end of the TSG.
- c, e Routing data block index that contains the TSG.
- d, f Position of TSG in the routing data block.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
VRFYOUT

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1. FORMAT

QTRK	FTFN	TAN				FCHAN	STATUS
b,	c,	TSI	SPC	LVL	FTS	[h],	iii,
		d,	e,	f,	g,		
•							
•							
•							

3. VARIABLE FIELD DEFINITIONS

- SEE PROPRIETARY NOTICE ON COVER PAGE

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Trunk status:

ASN — Assigned and in service.

CAD — Trunk or block of trunks is being processed by recent change.

MTC — Assigned but out of service for maintenance.

UNA — Unassigned.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPPVR4
VRFYOUT
VRFYTRK

Translation Guide, 4ESSTM, TG-4, Division 8, Section 1d

Input Message
VER:TSG

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:TSG-TWOWAY
WORK CENTER.. MAC, MOC
GENERIC 4E26 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:TSG, OPT(TWOWAY):

BTFN TOWN ST BL FBS NBS
TSG ---- - - - - -
PCF ----, AOPC ----, DPC ----,
FENCLASS ----, FENID ----, TFG -, TSGBBC -, VDCAP ----, DATAF -,
FEAREA ----, FESWID ----, EXSEQ -, FEPTY -,
QTFN ----, TOT ----, SAT -, DOM ----, ACD -, IT -, FAI -,
FENPA ---, FE0FC ---, FELATA ---, FESC6 -, IWZ1 -,
MEM -, PSES -, INSEP ---, MTSC --, GNSC -, GE0SEP --,
ISC ----, RFA -, ADIG -, CCIS2WRE -, CBNPR -,
OSC ----, RFMP -, DPSTOP -, DELAY ---, MFSPEED --, DNHR -,
XCPA -, DNP -, REV -, GLARE -, PSOLI -,
BN ----, BRL -, ITC -, GSDN -, GSDNPHSE -, EAS -, NPARINH -,
WATSBN ----, PSBN ----, PSCPN -, ANISID ----, WANISID ----, PSUUI -,
BNPT ----, WBNPT ----, CMERGE -, SCFN -, OVLP -, PRIT ----,
APS -, CHNEG -, PSATP -, PBXESGD -, PBXAW -, FAR4E -, DOFP -, SBRIV -,
MEGC -, SDNA -, OWAT -, DATA -, CBC -, DDD -, IDDD - FOSPS -, CCIF -,
SDNPLAN ----, BFTIS ---, BFTNI ---, SKSP -, PBXNWW -, HYBRD -, CCTT -,
INCID -, ITELCO -, S5DIG -, SDS -, FVSR -, IFITR -, PCPEACEL -, UT15DA -,
LRN ----, CBN DIGS ----, CBN -, SDVG -,
ONCID -, D3DBN -, MULAW -, CSCSET ----, CID ----, ITCENC -, OFITR -,
SPN -, LNPIC -, NCAR -, TTA -, EACC --, LCVT -, QPE -, NSA -, PNLCT -,
ANCR -, ACCID ---, PSTNG -, FLDSRP -, REVAMP -, E1T1 -, SUPBLK -, ATRIG -,
IXC -, FOLI -, FELN -, HUNT --, CSN --, CARSON -, SOIP -, TCC --, STBI -,
CAREA -, CPOS -, SINDEX --, CODSC -, NE0TR -, TRIDX --,
OTSTT ----, OTSTN ----, OTMTT ----, OTMTN ----,
XTSTT ----, XTSTN ----, XTMTT ----, XTMTN ----,
S1 -, S2 -, S3 -, S4 -, S5 -, S6 -, S7-, S8 -, S9 -, S10 -,

SEE PROPRIETARY NOTICE ON COVER PAGE

2. REASON FOR OUTPUT

To verify two-way trunk subgroup characteristics in response to a VER:TSG input message.

3. VARIABLE FIELD DEFINITIONS

ACCID	Access Identification (ID) (blank or 0-255).
ACD	Automatic call distributor (blank, N, T, Y).
ADIG	A digit reconstruction (blank, 0, 2-9).
ANCR	AT&T network call redirection (blank).
ANISID	Automatic Number Identification (ANI)/ Service Identification (SID) request (blank, ANI, NONE, PANI, PSID, REQ, SID).
AOPC	Alias origination point code: NET — 000-255 CR — 00-31 CT — 0-7 MEM — 000-255
APS	Accunet® packet service (blank, N, Y).
ATRIG	Advanced Intelligent Network (AIN) Trunk Subgroup (TSG) trigger (N, Y).
BFTIS	Backward failure treatment Integrated Services Digital Network (ISDN) User Part (ISUP) all the way (blank, ANN, REL).
BFTNI	Backwards failure treatment not ISUP all the way (blank, ANN, REL).
BN	Billing number (blank, or 3, 4, 10 digit number).
BNPT	Billing numbering plan type (blank, APN, NANP).
BRL	Billing record length (blank, L, S).
CAREA	Control area (0-9).
CARSON	Carrier solutions (blank, N, Y).
CBC	Call by call service selection (blank, N, Y).
CBN DIGS	Connecting network access billing number (blank or 10 digit number).
CBN	Connecting network access billing number option (blank, L, N).
CBNPR	Calling party number/billing default presentation restriction indicator (blank, PA, PR).
CCIF	Credit card information (blank, N, Y).
CCIS2WRE	Common channel interoffice signaling 2Wire (blank, N, Y).
CCTT	Circuit Identification Code (CIC) Trunk Subgroup (TSG) trigger (N, Y).

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CHNEG	Channel negotiation (blank, N, Y).
CID	Carrier ID (blank, 0000-9999).
CMERGE	Call merge (blank, N, Y).
CODSC	Customer Provided Equipment (CPE) (quick) outgoing disconnect (blank, N, Y).
CPOS	Control position (0-9).
CSCSET	Circuit selection set (blank or 1-16383).
CSN	Carrier solutions nodal (blank, AW, RS).
D3DBN	Delivery of 3-digit billing number (blank, N, Y).
DATA	Data service (blank, N, Y).
DATAF	Data format (blank, C, R).
DDD	Direct distance dialing (blank, N, Y).
DELAY	Delay interval (blank, 20, 70, 80, 140, 210, 220, 280).
DNHR	Dynamic non-hierarchical routing (N, Y).
DNP	Dialed number preferred (blank, N, Y).
DOFP	Disable outgoing fraud prevention (N, Y).
DOM	Domain: 20-83, APN, DED, DEV, I56D, I64C, INTL, IVT, N64C, N64R, NH0C, NH1C, POTS, SDNA, VRFY.
DPC	Destination point code:

If PCF is ATT then the DPC is a 9 digit number composed of:

NET — 000-255
CR — 00-31
CT — 0-7
MEM — 000-255

If PCF is ANSI then the DPC is a 9 digit number composed of:

NET — 000-255
CLU — 000-255
MEM — 000-255

If PCF is ISPC then the DPC is a 5 digit number composed of:

WGZ — 1-7
ANI — 000-255
SPID — 0-7

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DPSTOP	Dial pulse stop (blank, N, Y).
E1T1	International E1/T1 carrier (N, Y).
EACC	Equal access circuit code - Transit Network Selection (TNS) parameter (blank or 0-15).
EAS	Equal access signaling (A, D, E, N, R) .
EXSEQ	Exception sequence (blank, B, T).
FAI	Foreign administration ID (blank or 1-31).
FAR4E	Far end 4E (blank, N, Y).
FEAREA	Far end area (blank or 1-12 alphanumeric characters).
FELATA	Far end Local Access and Transport Area (LATA) (blank, 000-999).
FELN	Far end AT&T local network (blank, N, Y).
FENCLASS	Far end network class (blank, ACCESA, ACCESI, ACCESO, ACU, CMC, INTL, OEO, OWATS, PBX, POTS) .
FENID	Far end network Identification (ID) (blank or 1-6 alphanumeric characters).
FENPA	Far end numbering plan area (200-999 and for international 2-9 and 20-99).
FE0FC	Far end office (blank, 000-999).
FEPTY	Far end priority (blank or Y).
FESC6	Far end 6-digit screening (N, Y).
FESWID	Far end switch ID (blank or 1-12 alphanumeric characters).
FLDSPR	Feldspar (blank).
FOLI	Fixed Originating Line Information (OLI) (N, Y).
FOSPS	Trunk Subgroup (TSG) from Operator Service Position System (OSPS) (blank, N, Y).
FVSR	Forced via switched routing indicator (blank).
GE0SEP	Geographical traffic separation class (0-31).
GLARE	Glare control (blank, A, E, O, N).
GNSC	Go / no go screening class (0-3).
GSDN	Global Software Defined Network (GSDN) (blank, N, Y).
GSDNPHSE	Global software defined network phase (blank, 1, 2).
HUNT	Private Branch Exchange (PBX) trunk hunt option (blank or CT).
HYBRD	Hybrid (blank, N, Y).
IDDD	International direct distance dialing (blank, N, Y).

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IFITR	Invoke forced intertoll routing on incoming calls indicator (blank).
INCID	Local Exchange Carrier (LEC) carrier identification code (blank, 3, 4, B).
INSEP	Incoming traffic separation class (Non-AT&T 0-255, AT&T 0-127).
ISC	Incoming signaling characteristic: CCITT5, CCITT6, DOMCCIS, DPDDSD, DPIMADG, DPIMMED, DTMFWK, DTS, INUP, ISUP, MFDDSD, MFOPWK, MFWINK, Q931, TUP.
IT	Intertoll Treatment (blank, N, Y).
ITC	Incoming trunk subgroup class (blank, 0-3).
ITCENC	Information transfer capability indicator (blank, N, Y).
ITELCO	Calls arriving from an independent telephone company (blank, N, Y).
IWZ1	International world zone 1 (blank, N, Y).
IXC	Inter exchange carrier (blank, N, Y).
LCVT	Local circuit Common Language Location Identifier (CLLI) validation test (blank, N, Y).
LNPIC	A Trunk Subgroup (TSG) field not used.
LRN	Location routing number (blank or 10 digit number).
MEGC	Megacom® Telecommunications Service (blank, N, Y).
MEM	Indicates if trunk hunt with memory is to be performed (blank, N, Y).
MFSPEED	Multi-frequency speed (blank 7, 10).
MTSC	Multiple treatment screening class (0-63).
MULAW	Mu-law encoding used (blank, N, Y).
NCAR	No Calling Party Number (CPN) anomaly reporting (blank, N, Y).
NEOTR	Near operational test (N, Y).
NPARINH	Numbering Plan Area (NPA) reconstruction inhibit (blank, N, Y).
NSA	Nonsuppression of Automatic Message Accounting (AMA) recording (blank, N, Y).
OFITR	Invoke forced intertoll routing on outgoing calls indicator (blank).
ONCID	NSD carrier identification code.
OSC	Outgoing signaling characteristic: CCITT5, CCITT6, DOMCCIS, DPDDSD, DPIMMED, DPWINK, DTMFWK, ICOPNOP, INUP, ISUP, MFDDSD, MFWINK, MIOPNOP, Q931, TUP.
OTMTN	Operational terminating test number (blank, 000-9999999).
OTMTT	Operational terminating test type: ATMC, CTX2, CTX3, N, SYNC, SXS, T103.

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OTSTN	Operational thru switch test number (blank, 000-9999999).
OTSTT	Operational thru switch test type: ATMB, CTX2, CTX3, N, SYNC, SXS, T103.
OVLP	Billing numbering plan type (blank, N, Y).
OWAT	Direct connect Outgoing Wide Area Telephone Service (OWATS) service (blank, N, Y).
PBXAW	Private Branch Exchange (PBX) answer withheld (blank, N, Y).
PBXESGD	PBX expect station group (blank, N, Y).
PBXNWW	PBX no wait for wink (blank, N, Y).
PCF	Point code format (blank, ATT, ANSI, ISPC).
PCPEACEL	Positive Call Processing (PCP) equal access to cellular (blank, N, Y).
PNLCT	Prohibit No-Loopback Continuity Check Test (PNLCT) TSG parameter.
PRIT	Conversant® (blank, CONV, NOQ931, SSA, TSGCPA, TSGPBX, TSGACD).
PSATP	Prohibit sending All Tests Passed (ATP) information (blank, N, Y).
PSBN	Prohibit sending billing number (blank, PALL, PNNA, SALL).
PSCPN	Prohibit sending calling party number (blank, N, Y).
PSES	Prohibit service evaluation (blank, N, Y).
PSOLI	Prohibit sending Originating Line Identity (OLI) information (blank, N, Y).
PSTNG	Public Switched Telephone Network (PSTN) routing capability for GSDN (blank, N, Y).
PSUUI	Prohibit sending user-to-user information (blank, N, Y).
QPE	Q931 PBX emergency indicator (blank, N, Y).
QTFN	Quantity of traffic numbers (24-504 in increments of 24).
REV	Reverse traffic numbers (N, Y).
REVAMP	Invoke revamped forced intertoll routing indicator (blank).
RFA	Ring forward allowed (N, Y).
RFMP	Ring forward miscellaneous (blank, N, Y).
S5DIG	Support 5-digit dialing (blank, N, Y).
SAT	Satellite (N, Y).
SBRIV	Send billing-related information to the Voice Message Operations Center (VMOC) (blank, N, Y).
SCFN	Send confusion message (blank, N, Y).
SDNA	Software-defined network access (blank, N, Y).

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SDNPLAN	1+/ Exchange Number (NXX) dialing plan (blank, NXX, OPEN, ORIG, PLUS).
SDS	Switch digital services indicator in SDNA domain (blank, N, Y).
SDVG	Switched Data Video Gateway indicator (blank, N, Y).
SINDEX	Access charge verification sampling rate index (blank, 0, 1, 2, 4, 8, 16, 32, 64).
SKSP	Selective key service protection (blank, N, Y).
SOIP	Send optional ISUP solutions (blank, N, Y).
SPN	Signal ported number (blank, N, Y).
STBI	Send Transit Network Selection (TNS) ISUP parameters (blank, N, Y).
SUPBLK	Suppression of blocking sequence (N, Y).
S1	Spare field reserved for future use (blank, 0-7).
S2	Spare field reserved for future use (blank, N, Y).
S3	Spare field reserved for future use (blank, N, Y).
S4	Spare field reserved for future use (blank, N, Y).
S5	Spare field reserved for future use (blank, N, Y).
S6	Spare field reserved for future use (blank, N, Y).
S7	Spare field reserved for future use (blank, N, Y).
S8	Spare field reserved for future use (blank, N, Y).
S9	Spare field reserved for future use (blank, N, Y).
S10	Spare field reserved for future use (blank, N, Y).
TCC	TNS circuit code (blank or 0-15).
TFG	Terminating feature group (blank, B, C, D).
TOT	Type of trunk: ETC, INTL, INTLO, ITAND, ITOLL, ITOPA, LCC, NSDSD, OCC, PBX, SECIT, STC, TAND, TOLL.
TRIDX	Trunk reservation index (blank or 1-31).
TSG	Trunk subgroup. BTFN — Base traffic number (0-9976). TOWN — The town, city, or location for the far end of the TSG (4 characters). ST — The far end state, province, or foreign country (2 characters). BL — The building or office identity for the far end of the TSG (2 characters).

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	FBS — The far building subdivision code for internal building identification (3 characters).
	NBS — The internal building subdivision for the near end of the TSG (3 characters).
TSGBBC	Trunk Subgroup (TSG) Broadband capability (blank, 0-6).
TTA	Terminating Traffic Architecture (blank, N, Y).
UT15DA	Universal T1.5 data access (blank).
VDCAP	Voice / data capability (blank, BOTH, DATA, VOICE).
WANISID	Wide Area Telephone Service (WATS) service ANI/SID request (blank, ANI, NONE, PANI, PSID, REQ, SID).
WATSBN	WATS billing number (blank or 10 digit number).
WBNPT	WATS billing numbering plan type (blank or NANP).
XCPA	Transceiver (XC) pad adjustment (blank, 0-3).
XTMTN	Transmission terminating test number (blank, 000-9999999).
XTMTT	Transmission terminating test type (ATMA, N, T100, T102, T105).
XTSTN	Transmission thru switch test number (blank, 000-9999999).
XTSTT	Transmission thru switch test type (ATMA, N, T100, T102, T105).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPPVR4
VRFYOUT
VRFYTSG

Translation Guide, 4ESSTM, TG-4, Division 8, Section 1a

Input Message
VER:TSG

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:TSG-VFL
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:TSG;OPT(VFL): BTFN TOWN ST BL FBS NBS
 TSG a bbbb cc dd eee fff,

QTFN g, SAT h, DOM iiii,

CAREA j, CPOS k,

2. REASON FOR OUTPUT

To verify Voice Frequency Link (VFL) trunk subgroup characteristics in response to a VER:TSG message.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | Base Traffic Number (BTFN) of the trunk subgroup (0-9976). |
| b | The town, city, or location for the far end of the TSG (4 characters). |
| c | The far end state, province, or foreign country (2 characters). |
| d | The building or office identity for the far end of the TSG (2 characters). |
| e | The far building subdivision code for internal building identification (3 characters). |
| f | The internal building subdivision for the near end of the TSG (3 characters). |
| g | Reserved Quantity of Traffic Numbers (QTFN) (1-9984). |
| h | Satellite:
Y — Yes
N — No |
| i | Domain (DOM):
INTL — International
POTS — Plain old telephone service |
| j | Control Area (CAREA) (0-9). |
| k | Control Position (CPOS) (0-9). |

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
VRFYOUT

Translation Guide, 4ESSTM, TG-4, Division 8, Section 1g

Input Message
VER:TSG

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:TSI-WIDEBAND
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:TSI;OPT(WIDEBAND)

TSI	SPC	EQP
-----	-----	-----

a,	b,	c
.	.	.
.	.	.
.	.	.

2. REASON FOR OUTPUT

To display all the time slot interchanges (TSIs) and switching and permuting controllers (SPCs) in the 4ESSTM Switch that are wide-band capable.

3. VARIABLE FIELD DEFINITIONS

a	Time slot interchange number (0 to 63).
b	Switching permuting circuit number (0 or 1).
c	Equipage indicator:
F	Future (growth and special growth).
OP	Operational.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPIMC4
IOCPPVR4
VFRYCNTL
VRFYINPT
VFRYMISC
VFRYOUT

Translation Guide, 4ESSTM, TG-4, Division 8, Section 2r

Input Message
VER:TSI-WIDEBAND

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:TTS
WORK CENTER.. MOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:TTS;OPT(TTSNAME): TOWN ST BL FBS
 TTSNAME aaaa aaaa aaaa aaaa

TTSI	TTSI	TTSI	TTSI	TTSI	TTSI	TTSI	TTSI
bbb	bbb	bbb	bbb	bbb	bbb	bbb	bbb
bbb	bbb	bbb	bbb	bbb	bbb	bbb	bbb

2. REASON FOR OUTPUT

To verify all terminating toll switches (TTSs) whose TTSNAMEs have the same CLLI The output message lists the TTS indices (TTSIs) in ascending order.

3. VARIABLE FIELD DEFINITIONS

- a First four fields of a terminating toll switch name.
- TOWN — The town, city, or location for the far end of the trunk subgroup (TSG).
- ST — The far end state, province, or foreign country.
- BL — The building or office identity for the far end of the TSG.
- FBS — The far building subdivision code for internal building identification.
- b Terminating toll switch index (TTSI).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYCNTL
VRFYINPT
VRFYOUT
VRFYRDB

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:TTS-TTSI
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:TTS;OPT(TTSI): TTSI a

	TOWN	ST	BL	FBS	TI	
TTSNAME	bbbb	bb	bb	bbb	bb	NSN c,

RDBI'S FOR EACH FORECAST PERIOD

LSP	BLOCK A	BLOCK B
0	dddd e	dddd e
1	dddd e	dddd e
2	dddd e	dddd e
3	dddd e	dddd e
4	dddd e	dddd e
5	dddd e	dddd e
6	dddd e	dddd e
7	dddd e	dddd e
8	dddd e	dddd e
9	dddd e	dddd e
10	dddd e	dddd e
11	dddd e	dddd e
12	dddd e	dddd e
13	dddd e	dddd e
14	dddd e	dddd e
15	dddd e	dddd e

2. REASON FOR OUTPUT

To display load set periods (LSPs) 0-15, the TTSNAME, and the network switch number (NSN) associated with the terminating toll switch index (TTSI).

3. VARIABLE FIELD DEFINITIONS

- a Input TTSI decimal.
- b Associated TTSNAME (American standard code for information interchange [ASCII]):
- TOWN — The town, city, or location for the far end of the trunk subgroup (TSG).
- ST — The far end state, province, or foreign country.
- BL — The building or office identity for the far end of the TSG.
- FBS — The far building subdivision code for internal building identification.

SEE PROPRIETARY NOTICE ON COVER PAGE

	TI
c	Network switch number (NSN).
d	Routing data block index (RDBI) decimal.
e	Active block and active LSP indicator (active or blank).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYOUT
VRFYRDB

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:TTS-TTSNAME
WORK CENTER.. MOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:TTS;OPT(TTSNAME):	TOWN	ST	BL	FBS
TTSNAME	aaaa	aaaa	aaaa	aaaa

TTSI	TTSI	TTSI	TTSI	TTSI	TTSI	TTSI	TTSI
bbb	bbb	bbb	bbb	bbb	bbb	bbb	bbb
bbb	bbb	bbb	bbb	bbb	bbb	bbb	bbb

2. REASON FOR OUTPUT

To verify all terminating toll switches (TTSs) whose TTSNAMEs have the same CLLI The output message lists the TTS indices (TTSIs) in ascending order.

3. VARIABLE FIELD DEFINITIONS

- a First four fields of a terminating toll switch name.
- TOWN — The town, city, or location for the far end of the trunk subgroup (TSG).
- ST — The far end state, province, or foreign country.
- BL — The building or office identity for the far end of the TSG.
- FBS — The far building subdivision code for internal building identification.
- b Terminating toll switch index (TTSI).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
VRFYCNTL
VRFYINPT
VRFYOUT
VRFYRDB

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:TTSLIST-RDB
WORK CENTER.. MAC, MOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:TTSLIST;OPT(RDB): RDBI a

TTSI	TTSI	TTSI	TTSI	TTSI	TTSI	TTSI	TTSI
bbb	bbb	bbb	bbb	bbb	bbb	bbb	bbb
bbb	bbb	bbb	bbb	bbb	bbb	bbb	bbb

2. REASON FOR OUTPUT

To display terminating toll switch indices (TTSIs) associated with a routing data block index (RDBI).

3. VARIABLE FIELD DEFINITIONS

a RDBI in decimal (1-8191).
b TTSI decimal number range or list (0 - 31).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENT
VRFYRDB

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:UTMN
WORK CENTER.. MAC, MOC
GENERIC 4E21 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:UTMN;OPT([ENTRY]),CUR: FLN a, UTYN b,

MEMN c, ME d,
ENTRY ADDRESS e, ENTRY SIZE f,

CUR
WORD 0 ggggggggg ggggggggg [ggggggggg ggggggggg
 ggggggggg ggggggggg ggggggggg ggggggggg
WORD 10 ggggggggg ggggggggg ggggggggg ggggggggg
 ggggggggg ggggggggg ggggggggg ggggggggg
WORD 20 ggggggggg ggggggggg ggggggggg ggggggggg
 ggggggggg ggggggggg ggggggggg ggggggggg

WORD 160 ggggggggg ggggggggg ggggggggg ggggggggg
 ggggggggg ggggggggg ggggggggg ggggggggg
WORD 170 ggggggggg ggggggggg ggggggggg ggggggggg
 ggggggggg ggggggggg ggggggggg
WORD 200]

[TMSP CONFIGURATION h]

2. REASON FOR OUTPUT

To display unit type information in response to a VER:UTMN input message either using the ENTRY option, for unit type entry, or by not entering any option.

3. VARIABLE FIELD DEFINITIONS

- a Floor Location Number (FLN) for the member.
- b Unit Type Name (UTYN).
- c Member number.
- d Member equipage.
- e Octal entry address.
- f Entry size.

SEE PROPRIETARY NOTICE ON COVER PAGE

- g Octal word register output. Up to 16 word registers may be output.
- NOTE:** Additional word register names may be output without listing any register information.
- h Contents of OD4TMSNUM (configuration parameter). Only prints when the Unit Type Name (UTYN) is Time Multiplexed Switch Pair (TMSP).

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPIMC4
IOCPPVR4
VRFYOUT
VRFYUTYP

Translation Guide, 4ESSTM, TG-4, Division 8

SEE PROPRIETARY NOTICE ON COVER PAGE

Issue 1.8
September 2001

ID VER:UTMN-MISC
 WORK CENTER.. MAC, MOC
 GENERIC 4E21 and later
 APPLICATION .. 4E
 TYPE Output

1. FORMAT

[1] VER:UTMN;OPT(MISC),CUR: UTYN a,

MEMN b,

SP	PORT	DIGROUP	TERMINAL
	0		c[*],
	1		c[*],
	2		c[*],
	.		.
	.		.
	.		.
	13		c[*],
	14		c[*],
	15		c[*]

* INDICATES PORT IS NOT ASSIGNED

[2] VER:UTMN;OPT(MISC),CUR: UTYN a,

MEMN b,

SP	PORT
d	e

2. REASON FOR OUTPUT

To display unit type information in response to a VER:UTMN input message with the MISC option, specifying miscellaneous data.

3. VARIABLE FIELD DEFINITIONS

- a Unit Type Name (UTYN).
- b Member number.
- c Member number of the Digroup Terminal (DT) connected to the indicated Signaling Processor (SP) port.
- d SP number.
- e SP port that the DT is connected to.

4. ACTION TO BE TAKEN

None.

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
IOCPIMC4
IOCPPVR4
VRFYOUT
VRFYUTYP

Translation Guide, 4ESSTM, TG-4, Division 8

SEE PROPRIETARY NOTICE ON COVER PAGE

1. FORMAT

2. REASON FOR OUTPUT

3. VARIABLE FIELD DEFINITIONS

- #### 4. ACTION TO BE TAKEN

SEE PROPRIETARY NOTICE ON COVER PAGE

5. REFERENCES

PIDENTs
IOCPIMC4
IOCPPVR4
VRFYOUT
VRFYUTYP

Translation Guide, 4ESSTM, TG-4, Division 8

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:UTYPE-SCSDAT
WORK CENTER.. MAC, MOC
GENERIC 4E22 Rel. 4 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:UTYPE;OPT(SCSDATA): SCS MEMN a,

SCSCN 0 1
SCSHV b,b,
SCSFV c,c,

SCUN	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
SCUEQ	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
SCUHV	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e
SCUFV	f	f	f	f	f	f	f	f	f	f	f	f	f	f	f	f
SVCT	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g
ASRAPP	h	h	h	h	h	h	h	h	h	h	h	h	h	h	h	h

2. REASON FOR OUTPUT

Display the Service Circuit System Sub-Unit Data (**SCSDATA**) for the requested Service Circuit System (SCS) member number.

3. VARIABLE FIELD DEFINITIONS

- a SCS member number (0-7).
- SCSCN SCS controller number.
- b SCS Controller Hardware Version (SCSHV) number (0-7).
- c SCS Controller Firmware Version (SCSFV) number (0-7).
- SCUN Service Circuit Unit (SCU) number.
- d SCU Unit Equipage (SCUEQ):
 - G — Grow
 - O — Operational
 - S — Special Growth
 - U — Unequipped
- e SCU Hardware Version (SCUHV) number (0-7).
- f SCU Firmware Version (SCUFV) number (0-3).
- g Service type (0-7).
- h Automatic Speech Recognition Application (ASRAPP) (0-7).

SEE PROPRIETARY NOTICE ON COVER PAGE

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPIMC4
IOCPMCP4
IOCPPVR4
VRFYCNTL
VRFYINPT
VRFYMISC
VRFYOUT

Translation Guide, 4ESSTM, TG-4, Division 8, Section 7k

Input Message
VER:VFUNC-SCSDAT

SEE PROPRIETARY NOTICE ON COVER PAGE

ID VER:VFUNC-XTSISP
WORK CENTER.. MAC, MOC
GENERIC 4E22 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

VER:VFUNC;OPT(XTSISPU):		XTSI MEMN a, SPUPN b,
	SPC0	SPC1
HYBLS	c,	d,
NMTCH	e,	f,
TONDIS	g,	h,

2. REASON FOR OUTPUT

To display the echo cancellation configuration of Expanded Time Slot Interchange (XTSI) Signal Processing Unit (SPU) system.

3. VARIABLE FIELD DEFINITIONS

- | | |
|---|--|
| a | XTSI member number (2-62 even numbers only). |
| b | Signal Processing System (SPS) pack number (0-9). |
| c | Echo canceler hybrid return loss for Switching and Permuting Circuit (SPC) 0 (0-6). |
| d | Echo canceler hybrid return loss for SPC 1 (0-6). |
| e | Echo canceler noise matching for SPC 0:
DISAB — Disabled.
ENAB — Enabled. |
| f | Echo canceler noise matching for SPC 1:
DISAB — Disabled.
ENAB — Enabled. |
| g | Echo canceler tone disabler for SPC 0:
NONE — Disable echo canceler tone disabler.
PI — Disable echo cancellation upon detection of a 2100Hz tone with or without phase reversal (phase independent).
PR — Disable echo cancellation upon detection of a 2100Hz tone with phase reversal. |

SEE PROPRIETARY NOTICE ON COVER PAGE

- h Echo canceler tone disabler for SPC 1:
- NONE — Disable echo canceler tone disabler.
 - PI — Disable echo cancellation upon detection of a 2100Hz tone with or without phase reversal (phase independent).
 - PR — Disable echo cancellation upon detection of a 2100Hz tone with phase reversal.

4. ACTION TO BE TAKEN

None.

5. REFERENCES

PIDENTs
IOCPIMC4
VRFYCNTL
VRFYINPT
VRFYMISC
VRFYOUT

Input Message
VER:VFUNC

SEE PROPRIETARY NOTICE ON COVER PAGE

ID WTSG:FOR
WORK CENTER.. MOC, TOC
GENERIC 4E19 and later
APPLICATION .. 4E
TYPE Output

1. FORMAT

WTSG FOR TCA a IS EMPTY

2. REASON FOR OUTPUT

Printed when the worst trunk subgroups for a given trunk control area are empty.

3. VARIABLE FIELD DEFINITIONS

a Trunk control area.

4. ACTION TO BE TAKEN

None. Information message only.

5. REFERENCES

PIDENT
TERA00

Practice 234-103-016, *Trunk Error Analysis (TERA)*

SEE PROPRIETARY NOTICE ON COVER PAGE

4ESS™ 1B Processor Input/Output Message Error Reporting Form

Use this form to report errors and make suggestions for improving the contents of the manual or quarterly release. If an error relates to a specific message, please write your comments on a TTY output or a photocopy of the message documentation and attach it to this form.

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