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**BINARY MAINTENANCE LOG (BML)  
MESSAGE FORMATS**

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**CDC® OPERATING SYSTEMS:**

**CYBER 180  
CYBER 170  
CYBER 70  
6000**

# REVISION RECORD

REVISION	DESCRIPTION
<p style="text-align: center;">A (10-01-84)</p>	<p>Manual released. It reflects NOS 2.3 at PSR level 617.</p>
<p style="text-align: center;">B (12-16-85)</p>	<p>This manual reflects NOS 2.4.3 at PSR level 647. Additions include support of the nonimpact printer (NIP), dedicated fault tolerance (DFT) program, and rotating mass storage RAM enhancements. BML message formats have been added for unit record equipment (card reader, card punch, and printers), 836 disk, 895 disk, channel status, MAP III/MAP IV, and CYBER 180 class models.</p> <p>Due to extensive changes, chart tape is not used; all pages reflect the current revision level. This edition obsoletes all previous editions.</p>
<p style="text-align: center;">C (12-15-86)</p>	<p>This manual reflects NOS 2.5.1 at PSR level 670. Additions include support of the 887 disk subsystem, as well as enhancements to the 885 disk subsystem, and support of 698 tape drives. This edition obsoletes all previous editions.</p>
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or use Comment Sheet in the back of this manual.

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## PREFACE

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This manual describes messages issued to the binary maintenance log (BML) which interfaces the Network Operating System Version 2 (NOS 2) and the Hardware Performance Analyzer (HPA). This manual also references all NOS-supported equipment and entities that issue messages to the BML system file.

NOS 2 and HPA operate on the following:

CDC®CYBER 70 Computer Systems  
Models 71, 72, 73, and 74

CDC CYBER 170 Computer Systems  
Models 171, 172, 173, 174, 175,  
176A, 176B, 720, 730, 740, 750,  
760, 815, 825, 835, 845, 855, 865,  
and 875

CDC CYBER 180 Computer Systems  
Models 810, 830, 835, 840, 845,  
850, 855, 860, 870, 990, and 995

CDC 6000 Computer Systems

### AUDIENCE

This manual is a reference for customer operations people and Control Data customer engineers who are using the Hardware Performance Analyzer (HPA).

### ORGANIZATION

This manual consists of five sections. Section 1 describes the general BML message format and types. Section 2 summarizes octal message identifier (MSGID) codes. Section 3 summarizes common symptom codes. Section 4 summarizes common MSGID and symptom code combinations. Section 5 lists the specific structure for each message type in numeric MSGID order.

RELATED PUBLICATIONS

<u>Control Data Publication</u>	<u>Publication Number</u>
CDC 5870 Non-Impact Printer Subsystem Hardware Reference Manual	60461360
CDC Intelligent Hydra Drive Hardware Maintenance Manual, Volume 2 of 4	83325590
CDC Intelligent Hydra Drive Hardware Reference Manual	83325550
CDC 7155 Disk Storage Subsystem Reference Manual	60455860
CYBER 70 Model 71 Computer System Hardware Reference Manual	60453300
CYBER 70 Model 72 Computer System Hardware Reference Manual	60347000
CYBER 70 Model 73 Computer System Hardware Reference Manual	60347200
CYBER 70 Model 74 Computer System Hardware Reference Manual	60347400
CYBER 170 Computer Systems Models 171 through 175 (Levels A, B, C) Model 176 (Level A) Hardware Reference Manual	60420000
CYBER 170 Computer Systems Models 720, 730, 740, 750, and 760, Model 176 (Level B/C) Hardware Reference Manual	60456100
CYBER 170 Computer System Models 815 and 825 Hardware Reference Manual	60469350
CYBER 170/180 Computer Systems Models 835, 840, 845, 850, 855, 860, and 990 (CYBER 170 State) Hardware Reference Manual	60469290
CYBER 170 Computer Systems Models 865 and 875 Hardware Reference Manual	60458920
CYBER 180 Models 810 and 830 (CYBER 170 State) Hardware Reference Manual	60469420
CYBER 840A, 850A, and 860A Computer Systems Hardware Reference Manual, Volume 2	60463580
CYBER Record Manager BAM Reference Manual	60495700
CYBER Systems Peripheral Diagnostic Reference Manual	60000114
Direct Extended Memory Access (DEMA) Disk Storage Reference Manual	60459570
834/836 Intelligent Small Disk (ISD) Subsystem Hardware Reference Manual	60455580
Hardware Performance Analyzer User Reference Manual	60459460
MAP Field Maintenance Manual	60459900

7155-401 Disk Storage Subsystem Hardware Reference Manual	60459570
65206-2 FSC Hardware Reference Manual	60457940
380-170 Network Access Device Hardware Reference Manual	60458500

## CONVENTIONS

The following conventions apply to user entry formats presented in this manual.

- Bit 0 is the least significant bit in fields shown with bit numbers.
- All numbers are decimal unless otherwise noted.
- Hexadecimal numbers are indicated by the use of parentheses.
- All MSGID and symptom codes are octal numbers, designated with a B. For example, 0012B is the same as 0012<sub>8</sub>.
- CYBER Computer Systems are designated by system number or model number. For example, 170 Models refers to all CYBER 170 Models listed in the preface, and Model 825 refers to the CYBER 170 Model 825.

## DISCLAIMER

The descriptions of BML messages are intended for use only with HPA and NOS 2. Control Data cannot be responsible for BML messages produced by other programs or systems.

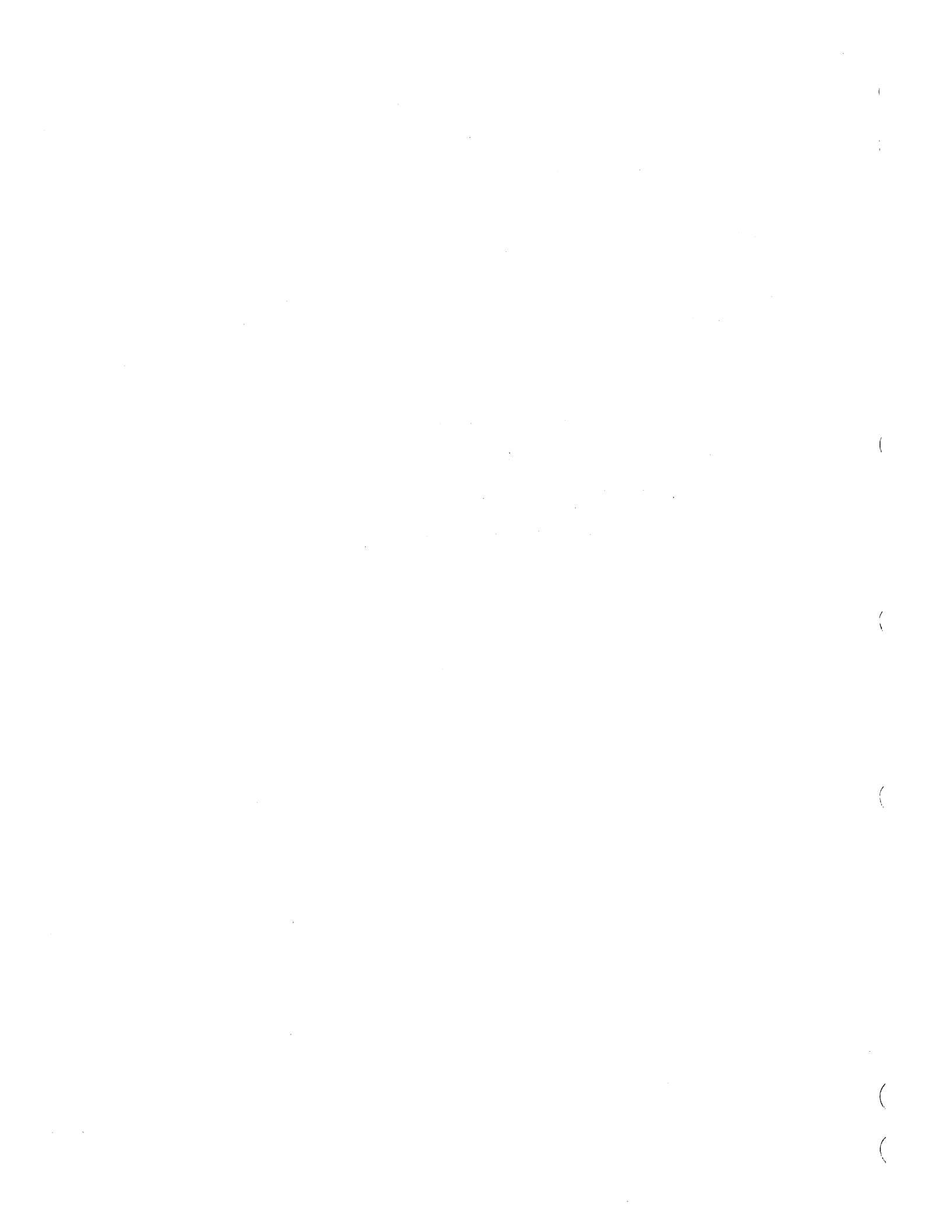




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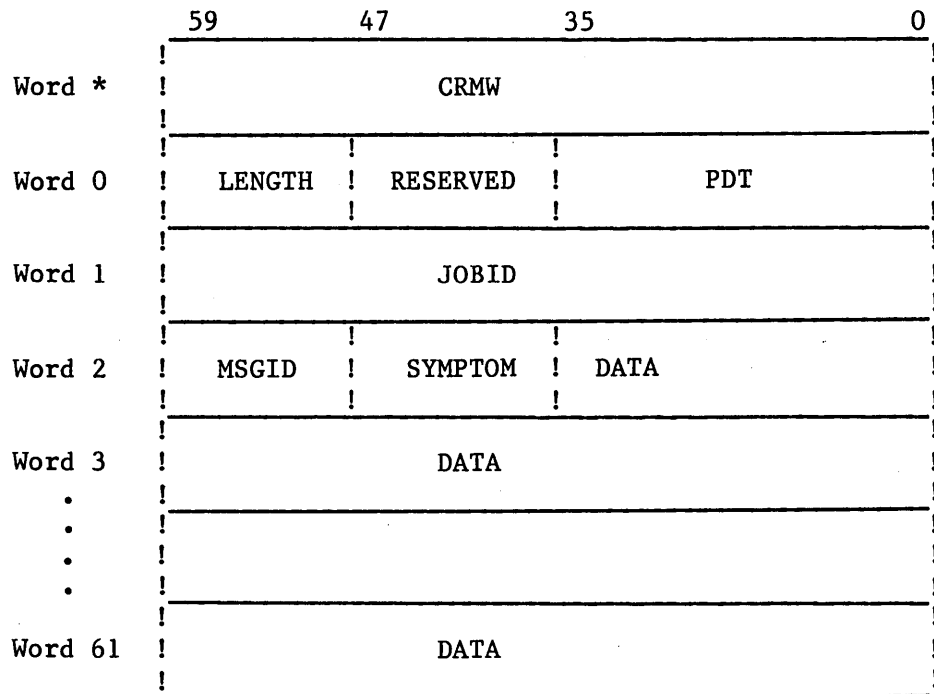
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The binary maintenance log (BML) is a system file that stores equipment-related messages issued by operating system programs. The structure of each message in the file depends upon the type of equipment or entity to which the message applies. Each message contains a message identifier (MSGID) and a symptom code that specifies the message structure and identifies the error or special condition causing the message to be generated.

This section describes the general BML message structure, the CYBER Record Manager (CRM) W-word, BML message formats for the central processing unit (CPU) and peripheral processing (PP) programs, and the BML disk format. This section also describes message types and the format of both hardware error/usage messages and system software messages.

GENERAL BML MESSAGE STRUCTURE

The BML interface is defined as the user-accessible file produced by the MAINLOG utility. The format of a BML message as it appears in this file is shown below.



<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
CRMW	*	59-0	CYBER Record Manager (CRM) W-word.
LENGTH	0	59-48	Binary number specifying total message length in number of 60-bit words, including word 0.
RESERVED	0	47-36	Reserved for future use. This field must be set to zero.
PDT	0	35-0	Packed date and time. Date and time is in the format YYMMDDHHMMSS. The year (YY) is biased by 1970. The date and time are needed to correctly sequence messages. The accuracy of the time is not as critical as the relative accuracy of the elapsed time from event to event. The date and time might not be present for BML messages generated during deadstart procedures.

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
JOBID	1	59-0	Job identification (job sequence name, JSN) of job that issued the message; in display code, left-justified, zero-filled.
MSGID	2	59-48	Message identifier. Binary number used to identify the format of the data fields.
SYMPTOM	2	47-36	Binary number indicating the error or special condition causing the entry to be logged. This field is unique for each MSGID.
DATA			The format of the data area varies from message to message, and depends on the value of the MSGID and SYMPTOM fields. The length of the data area also varies. Total message length can be as large as 63 words including the CRM W-word.



CPU PROGRAM MESSAGE FORMAT

The general format of BML messages issued by a CPU program is shown below. After the CPU program issues a BML message, NOS strips off word \* and adds words 0 and 1. When MAINLOG accesses the BML file, MAINLOG adds the CRM W-word.

	59	47	35	0
Word *	MSIZE			0
Word 2	MSGID	SYMPTOM		DATA
Word 3				DATA
Word 4				DATA
.				.
.				.
.				.
Word 61				DATA

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
MSIZE	*	59-48	Number of 60-bit words in the message, not including word *.
MSGID	2	59-48	Message identifier for the message type.
SYMPTOM	2	47-36	Symptom code indicating the error or special condition causing the entry to be logged.
DATA			Data in these fields depends on the message type specified in the MSGID and SYMPTOM fields.

PP PROGRAM MESSAGE FORMAT

The general format of BML messages issued by a PP program is shown below. After the PP program issues a BML message, NOS adds words 0 and 1. When MAINLOG accesses the BML file, MAINLOG adds the CRM W-word.

	59	47	35	0
Word 2	MSGID	SYMPTOM	DATA	
Word 3			DATA	
Word 4			DATA	
Word 5			DATA	
Word 6			DATA	
Word 7			DATA	

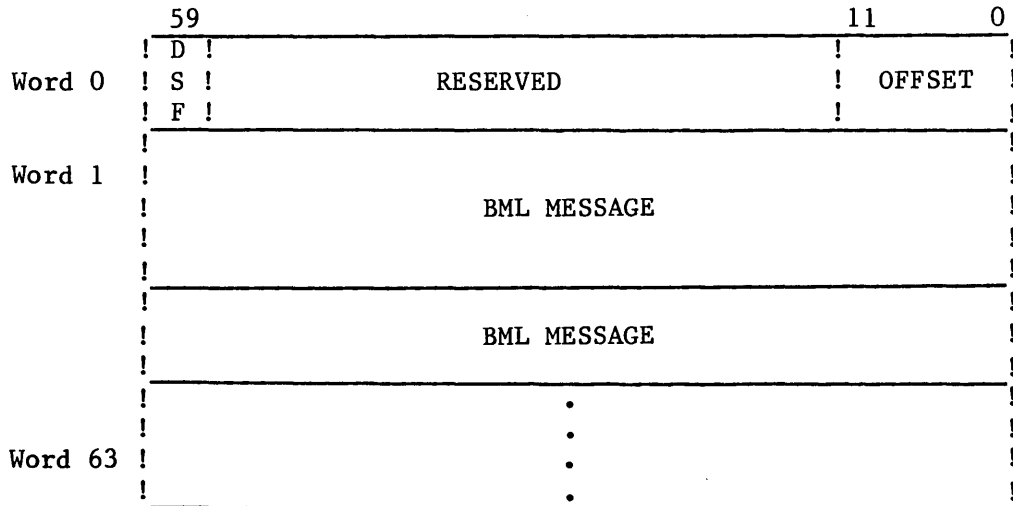
<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
MSGID	2	59-48	Message identifier for the message type.
SYMPTOM	2	47-36	Symptom code indicating the error or special condition causing the entry to be logged.
DATA			Data in these fields depends on the message type specified in the MSGID and SYMPTOM fields.



BML DISK SECTOR FORMAT

BML messages are written to disk in 64-word sectors. The first word of each sector is a control word that identifies the beginning of the first message in the sector. NOS uses this control word to recover from situations where a deadstart caused an incomplete BML message to be written in a preceding sector.

Each sector of the BML is written in the following format.



<u>Field</u>	<u>Location</u>	<u>Description</u>
DSF	59	Zero-level deadstart flag. This bit is set if a 0, 1, or 2 recovery level deadstart has occurred since the previous sector was written.
OFFSET	11-0	A 12-bit field containing a binary number for the word offset in the sector of the beginning of the first message.
BML MESSAGE		BML message as previously described in this section. The first and last BML messages in the sector may be incomplete and span sector boundaries.

MESSAGE TYPES

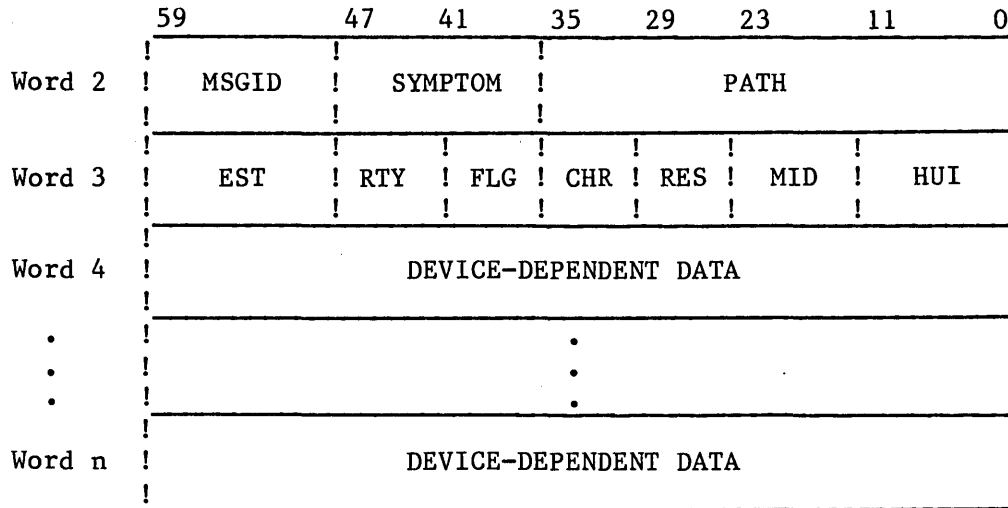
The message identification (MSGID) field contains a binary number that identifies the format of the remaining portion of the message. Message types and corresponding MSGID octal numbers are as follows.

<u>Message Type</u>	<u>MSGID</u>
Hardware Error/Usage Message	0001B-0377B
System Software Messages	0400B-0477B
CDC Reserved	0500B-0577B
QSS Software Messages	0600B-0677B
QSE Hardware Messages	0700B-0777B
CDC Reserved	1000B-7777B

Refer to section 2 for a list of defined message identification numbers.

HARDWARE ERROR/USAGE MESSAGES

All hardware error/usage messages (octal MSGIDs between 0001B and 0377B) conform to the detailed format given below. Words 0 and 1 are described earlier in this section under General BML Message Structure. Unused fields are zero-filled.



<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
MSGID	2	59-48	Message identifier in the range from 0001B to 0377B.
SYMPTOM	2	47-36	Binary value indicating the error or special condition causing the entry to be logged. This field is unique for each MSGID.
PATH	2	35-0	Description of the path used to access the equipment. Information in this field may include but is not limited to PP number, channel number, equipment number, and unit number. Additional information describing this path may be placed in the device-dependent data field.
EST	3	59-48	Binary value of the ordinal number from the equipment status table (EST). It is zero when no EST ordinal exists for the equipment. Examples are LCN NADs, federal standard channel (FSC) adaptors, and status and control registers, and maintenance registers.
RTY	3	47-42	Binary number indicating either the number of attempts it took to recover or the number of retries attempted before declaring the problem to be unrecoverable. If more than 63 entries were attempted, RTY is set to 77B.
FLG	3	41-36	Flag field. This field is a general-purpose utility field for indicators and conditions that may be expressed as a binary value. <ul style="list-style-type: none"> <li>Bits 41-40: Reserved and zero-filled.</li> <li>Bit 39: Not first block flag. <ul style="list-style-type: none"> <li>0 BML message is the first block of a message.</li> <li>1 BML message is not the first block of a message.</li> </ul> </li> </ul>

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
			Bit 38: Continuation block flag. 0 Final or only message. 1 Another message will follow.
			Bit 37: Operation flag. 0 Read operation. 1 Write operation.
			Bit 36: Error flag. 0 Recovered error. 1 Unrecovered error.

The following shows the relationship between the Not First Block Flag (bit 39 of word 3) and the Continuation Block Flag (bit 38 of word 3).

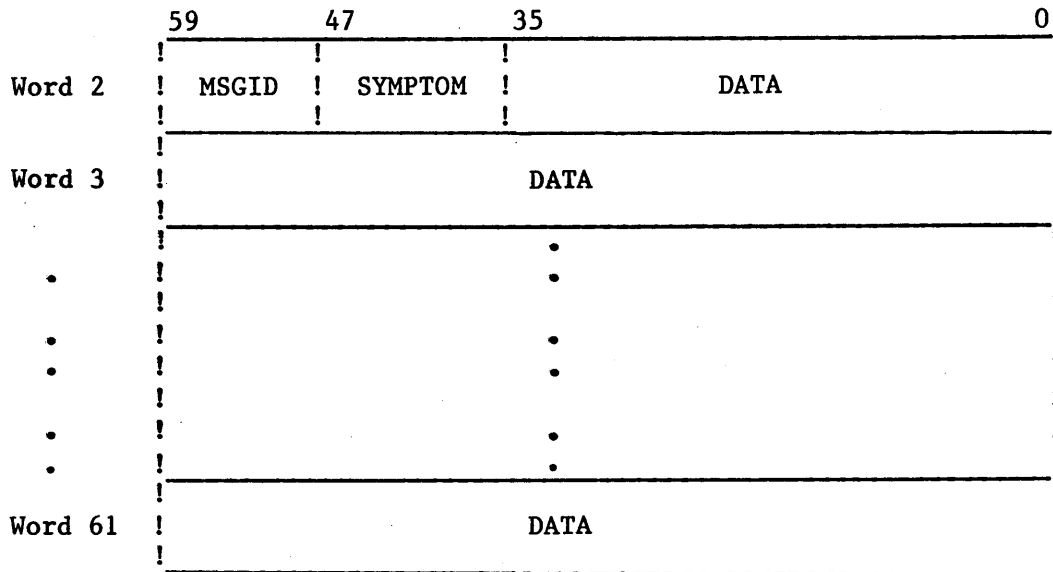
<u>Bit 39</u>	<u>Bit 38</u>	<u>Description</u>
0	0	The current BML message consists of one and only one block.
0	1	The current message is the first block of a multi-block message.
1	0	The current message is the last block of a multi-block message.
1	1	The current block is not the first block and is not the last block of a multi-block message.

CHR	3	35-30	Channel number used to recover from an error. This may be different from the channel on which the error occurred.
RES	3	29-24	Reserved and zero-filled.

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
MID	3	23-12	Machine identifier indicating the mainframe that detected the error. The machine identifier is one or two left-justified, zero-filled, alphanumeric display code characters.
HUI	3	11-00	Hardware unique identifier. A binary value identifying which device of a type is being reported on. This is not a unique identifier on an entire system. The HUI is by device type. Its purpose is to enable differentiation of devices in a multimainframe environment even if the PATH description to the device is the same on each system. This allows running all BML files through the same HPA. This field is set to zero if no HUI exists.
DEVICE- DEPENDENT DATA			The data in these fields depends on the message type indicated in the MSGID and SYMPTOM fields.

SYSTEM SOFTWARE MESSAGES

All system software messages (octal MSGIDs between 0400B and 0477B) conform to the detailed format given below. Words 0 and 1 are described earlier in this section under General BML Message Structure.



<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
MSGID	2	59-48	Message identifier in the range from 0400B to 0477B.
SYMPTOM	2	47-36	Binary number indicating the error or special condition causing the entry to be logged. This field is unique for each MSGID.
DATA			The data in these fields depends on the message type indicated in the MSGID and SYMPTOM fields.

## QSS SOFTWARE MESSAGES

All QSS software messages (octal MSGIDs in the range from 0600B to 0677B) conform to the detailed message format described earlier in this section under System Software Messages.

## QSE MESSAGES

All QSE hardware messages (octal MSGIDs in the range from 0700B to 0777B) conform to the detailed message format described earlier in this section under Hardware Error/Usage Messages.





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MSGID codes and corresponding devices are as follows. Device mnemonics for mass storage equipment are in parentheses.

<u>MSGID</u>	<u>Device</u>
0001B	Reserved
0002B	7054/844-2x (DI)
0003B	7054/844-4x (DJ)
0004B	7154/844-2x (DK)
0005B	7154/844-4x, 7155/844-4x (DL)
0006B	819 Disk (DV/DW)
0007B	7155/885-1x (Half Track) (DM)
0010B	3330-1 (DX)
0011B	3330-11 (DY)
0012B	3350 (DZ)
0013B	33502 (DA)
0014B	7155-401/885-42 (DB)
0015B	Reserved
0016B	Reserved
0017B	7155/885-1x (Full Track) (DQ)
0020B	405 Card Reader
0021B	415 Card Punch
0022B	512 Printer
0023B	580-12 Printer
0024B	580-16 Printer
0025B	580-20 Printer
0026B	580-12/PFC Printer
0027B	580-16/PFC Printer
0030B	580-20/PFC Printer
0031B	5870 Printer Subsystem
0032B	5970 Printer Subsystem (Not Supported)
0033B-0041B	Reserved
0042B	667 Tape
0043B	Reserved
0044B	677 Tape
0045B	FSC 7-Track
0046B-0051B	Reserved
0052B	669 Tape
0053B	698 Tape
0054B	679 Tape
0055B	Reserved
0056B	FSC 9-Track
0057B	639 Tape
0060B	6671 Multiplexer
0061B	6676 Multiplexer
0062B	2550-100/6671
0063B	2550-100/6676

MSGIDDevice

0064B	2550 NPU
0065B	MDI
0066B	Reserved
0067B	6683 Coupler
0070B	ECS I-DC135 DDP
0071B	ECS I-Coupler
0072B	ECS II-DC135 DDP
0073B	ECS II-Coupler
0074B	ECS I-DC145 DDP
0075B	ECS II-DC145 DDP
0076B	LCME Coupler
0077B	Unified Extended Memory (UEM)
0100B	MSS/MST
0101B	MSS/CSU
0102B	MSS/Subsystem
0103B	MSS/MSA
0104B	MSS/Coupler
0105B	MSE-FSC Error
0106B	MSE-7990 Error
0107B	MSE-Usage Data
0110B	7255/834 Disk (DD)
0111B	7255/836 Disk (DG)
0112B-0114B	Reserved
0115B	7165/895 (Full Track) (DC)
0116B-0119B	Reserved
0120B	887 Disk (4K byte sector)
0121B	887 Disk (16K byte sector)
0122B-0167B	Reserved
0170B	ESM-Coupler (ESM mode)
0171B	ESM-Low Speed Port (ESM mode)
0172B-0177B	Reserved
0200B	SCR-Models 171, 172, 173, 174, and 175
0201B	SCR-Models 720, 730, 740, 750, and 760
0202B	SCR-Model 176A
0203B	SCR-Model 176B
0204B	SCR-Model 865
0205B	SCR-Model 875
0206B	Channel Status
0207B	ESM-Coupler (ECS mode)
0210B	ESM-Low Speed Port (ECS mode)
0211B	ESM
0212B	IOU-Models 810, 815, 825, and 830
0213B	IOU-Model 835
0214B	IOU-Models 840, 845, 850, 855, and 860
0215B-0221B	Reserved
0222B	Memory-Models 810, 815, 825, and 830
0223B	Memory-Model 835
0224B	Memory-Models 840, 845, 850, 855, and 860
0225B-0231B	Reserved
0232B	Processor-Models 810, 815, 825, and 830

MSGIDDevice

0233B	Processor-Model 835
0234B	Processor-Models 840, 845, 850, 855, and 860
0235B-0237B	Reserved
0240B	Dual State
0241B-0247B	Reserved
0250B	Maintenance Registers
0251B	Diagnostic PP
0252B	Diagnostic MALET
0253B	Diagnostic Other
0254B-0277B	Reserved
0300B	Local NAD
0301B	Remote NAD
0310B	CYBERPLUS
0320B	MAP III/MAP IV
0400B	Software Initialization
0401B	Hardware Initialization
0402B	On-line Software Reconfiguration
0403B	On-line Hardware Reconfiguration
0404B	Operator Action
0405B	Maintenance Action
0406B	Binary Maintenance Log
0407B	Hardware Configuration
0410B	Mainframe Status
0411B	Software Error
0412B-0477B	Reserved



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The following list provides a brief description for common symptom codes.

<u>Symptom Code</u>	<u>Description</u>
0001B	Channel active.
0002B	Channel inactive.
0003B	Channel full.
0004B	Channel empty.
0005B	Incomplete data transfer.
0006B	External reject.
0007B	Internal reject.
0010B	Transmission parity.
0011B	Channel stays active after inactivate.
0012B	Cannot connect.
0013B	Channel stays inactive after activate.
0014B	Channel downed by operator.
0015B	Channel downed by system.
0016B	Channel upped by operator.
0017B	Channel upped by system.
0020B-0021B	Reserved.
0022B	Conversion memory error.
0023B	Channel ill.
0024B	Channel parity.
0025B	Function reject.
0026B	6681 internal/external reject.
0027B	Equipment turned off by operator.
0030B	Equipment turned off by system.
0031B	Equipment turned on by operator.
0032B	Equipment turned on by system.
0033B	Equipment downed by operator.
0034B	Equipment downed by system.
0035B	Equipment upped by operator.
0036B	Equipment upped by system.
0037B	Reserved.
0040B	Read parity.
0041B	Write parity.
0042B	No EOP on I/O.
0043B	Unit not ready.
0044B	Unit hung busy.
0045B	Memory parity error loading.
0046B	Memory parity error data.
0047B	Firmware load (controller stop).
0050B	Firmware dead (function timeout).
0051B	Cannot autoloading.
0052B	Off equipment.
0053B	On equipment.
0054B	Controlware serial number.

Symptom CodeDescription

0055B	Restart controlware.
0056B	Device reserved.
0057B	Abnormal end operation interrupt.
0060B	Cumulative status.
0061B	Temperature abnormal.
0062B	Sync error.
0063B	RAM parity error.
0064B	Diagnostic error.
0065B	Memory flag.
0066B	Channel reserved.
0067B	Data verification error.
0070B-0073B	Reserved.
0074B	Examine general status.
0075B	Examine detail status.
0076B	Undefined error.
0077B	Copyright.

The following entries list meanings associated with selected combinations of MSGID and symptom codes. Device mnemonics for equipment are in parentheses in the MSGID column.

<u>MSGID</u>	<u>Symptom Code</u>	<u>Meaning</u>
7054/844-2x (DI)		
0002B	0015B	Channel downed by system (detected by 1MV).
	0024B	Channel parity error (detected by 6DI).
	0030B	Device turned off by system (detected by 1MV).
	0034B	Device downed by system (detected by 1MV).
	0040B	Read parity error (detected by 6DI).
	0041B	Write parity error (detected by 6DI).
	0043B	Device not ready (detected by 6DI).
	0050B	Firmware dead (detected by 6DI).
	0051B	Cannot autoloader controller (detected by 6DI).
	0056B	Unit reserve error (detected by 6DI).
	0063B	RAM parity error (detected by 6DI).
	0067B	Data verification error (detected by 1MV).
	0100B	Address error (detected by 6DI).
	0102B	Status error (detected by 6DI).
0103B	Controller reserve error (detected by 6DI).	
0105B	Track flawed (detected by 1MV).	
7054/844-4x (DJ)		
0003B	0015B	Channel downed by system (detected by 1MV).
	0024B	Channel parity error (detected by 6DI).
	0030B	Device turned off by system (detected by 1MV).
	0034B	Device downed by system (detected by 1MV).
	0040B	Read parity error (detected by 6DI).
	0041B	Write parity error (detected by 6DI).
	0043B	Device not ready (detected by 6DI).
	0050B	Firmware dead (detected by 6DI).
	0051B	Cannot autoloader controller (detected by 6DI).
	0056B	Unit reserve error (detected by 6DI).
	0063B	RAM parity error (detected by 6DI).
	0067B	Data verification error (detected by 1MV).
	0100B	Address error (detected by 6DI).
	0102B	Status error (detected by 6DI).
0103B	Controller reserve error (detected by 6DI).	
0105B	Track flawed (detected by 1MV).	

<u>MSGID</u>	<u>Symptom Code</u>	<u>Meaning</u>
7154/844-2x (DK)		
0004B	0015B	Channel downed by system (detected by 1MV).
	0024B	Channel parity error (detected by 6DI).
	0030B	Device turned off by system (detected by 1MV).
	0034B	Device downed by system (detected by 1MV).
	0040B	Read parity error (detected by 6DI).
	0041B	Write parity error (detected by 6DI).
	0043B	Device not ready (detected by 6DI).
	0050B	Firmware dead (detected by 6DI).
	0051B	Cannot autoloader controller (detected by 6DI).
	0056B	Unit reserve error (detected by 6DI).
	0063B	RAM parity error (detected by 6DI).
	0067B	Data verification error (detected by 1MV).
	0100B	Address error (detected by 6DI).
	0102B	Status error (detected by 6DI).
	0103B	Controller reserve error (detected by 6DI).
	0105B	Track flawed (detected by 1MV).
7154/844-4X (DL)		
0005B	0015B	Channel downed by system (detected by 1MV).
	0024B	Channel parity error (detected by 6DI).
	0030B	Device turned off by system (detected by 1MV).
	0034B	Device downed by system (detected by 1MV).
	0040B	Read parity error (detected by 6DI).
	0041B	Write parity error (detected by 6DI).
	0043B	Device not ready (detected by 6DI).
	0050B	Firmware dead (detected by 6DI).
	0051B	Cannot autoloader controller (detected by 6DI).
	0056B	Unit reserve error (detected by 6DI).
	0063B	RAM parity error (detected by 6DI).
	0067B	Data verification error (detected by 1MV).
	0100B	Address error (detected by 6DI).
	0102B	Status error (detected by 6DI).
	0103B	Controller reserve error (detected by 6DI).
	0105B	Track flawed (detected by 1MV).
819 Disk (DW)		
0006B	0015B	Channel downed by system (detected by 1MV).
	0030B	Device turned off by system (detected by 1MV).
	0034B	Device downed by system (detected by 1MV).
	0067B	Data verification error (detected by 1MV).
	0105B	Track flawed (detected by 1MV).
	1040B	Ready parity error (detected by 6DE).
	1041B	Write parity error (detected by 6DE).



<u>MSGID</u>	<u>Symptom Code</u>	<u>Meaning</u>
819 Disk (DW)		
0006B	1100B	Address error (detected by 6DE).
	3501B	Unrecovered data error (detected by 1HP).
	3502B	Recovered data error (detected by 1HP).
	3503B	Hardware error (detected by 1HP).
	3504B	Software error (detected by 1HP).
7155/885-1x (Half Track) (DM)		
0007B	0015B	Channel downed by system (detected by 1MV).
	0024B	Channel parity error (detected by 6DI).
	0030B	Device turned off by system (detected by 1MV).
	0034B	Device downed by system (detected by 1MV).
	0040B	Read parity error (detected by 6DI).
	0041B	Write parity error (detected by 6DI).
	0043B	Device not ready (detected by 6DI).
	0050B	Firmware dead (detected by 6DI).
	0051B	Cannot autoloader controller (detected by 6DI).
	0056B	Unit reserve error (detected by 6DI).
	0063B	RAM parity error (detected by 6DI).
	0067B	Data verification error (detected by 1MV).
	0100B	Address error (detected by 6DI).
	0102B	Status error (detected by 6DI).
	0103B	Controller reserve error (detected by 6DI).
0105B	Track flawed (detected by 1MV).	
3330-1 (DX)		
0010B	0015B	Channel downed by system (detected by 1MV).
	0024B	Channel parity error (detected by 6DI).
	0030B	Device turned off by system (detected by 1MV).
	0034B	Device downed by system (detected by 1MV).
	0040B	Read parity error (detected by 6DI).
	0041B	Write parity error (detected by 6DI).
	0043B	Device not ready (detected by 6DI).
	0050B	Firmware dead (detected by 6DI).
	0051B	Cannot autoloader controller (detected by 6DI).
	0056B	Unit reserve error (detected by 6DI).
	0063B	RAM parity error (detected by 6DI).
	0067B	Data verification error (detected by 1MV).
	0100B	Address error (detected by 6DI).
	0102B	Status error (detected by 6DI).
	0103B	Controller reserve error (detected by 6DI).
0105B	Track flawed (detected by 1MV).	

<u>MSGID</u>	<u>Symptom Code</u>	<u>Meaning</u>
3330-11 (DY)		
0011B	0015B	Channel downed by system (detected by 1MV).
	0024B	Channel parity error (detected by 6DI).
	0030B	Device turned off by system (detected by 1MV).
	0034B	Device downed by system (detected by 1MV).
	0040B	Read parity error (detected by 6DI).
	0041B	Write parity error (detected by 6DI).
	0043B	Device not ready (detected by 6DI).
	0050B	Firmware dead (detected by 6DI).
	0051B	Cannot autoloader controller (detected by 6DI).
	0056B	Unit reserve error (detected by 6DI).
	0063B	RAM parity error (detected by 6DI).
	0067B	Data verification error (detected by 1MV).
	0100B	Address error (detected by 6DI).
	0102B	Status error (detected by 6DI).
	0103B	Controller reserve error (detected by 6DI).
0105B	Track flawed (detected by 1MV).	
3350 (DZ)		
0012B	0015B	Channel downed by system (detected by 1MV).
	0024B	Channel parity error (detected by 6DI).
	0030B	Device turned off by system (detected by 1MV).
	0034B	Device downed by system (detected by 1MV).
	0040B	Read parity error (detected by 6DI).
	0041B	Write parity error (detected by 6DI).
	0043B	Device not ready (detected by 6DI).
	0050B	Firmware dead (detected by 6DI).
	0051B	Cannot autoloader controller (detected by 6DI).
	0056B	Unit reserve error (detected by 6DI).
	0063B	RAM parity error (detected by 6DI).
	0067B	Data verification error (detected by 1MV).
	0100B	Address error (detected by 6DI).
	0102B	Status error (detected by 6DI).
	0103B	Controller reserve error (detected by 6DI).
0105B	Track flawed (detected by 1MV).	
33502 (DA)		
0013B	0015B	Channel downed by system (detected by 1MV).
	0024B	Channel parity error (detected by 6DI).
	0030B	Device turned off by system (detected by 1MV).
	0034B	Device downed by system (detected by 1MV).
	0040B	Read parity error (detected by 6DI).
	0041B	Write parity error (detected by 6DI).
	0043B	Device not ready (detected by 6DI).
	0050B	Firmware dead (detected by 6DI).
	0051B	Cannot autoloader controller (detected by 6DI).

<u>MSGID</u>	<u>Symptom Code</u>	<u>Meaning</u>
33502 (DA)		
0013B	0056B	Unit reserve error (detected by 6DI).
	0063B	RAM parity error (detected by 6DI).
	0067B	Data verification error (detected by 1MV).
	0100B	Address error (detected by 6DI).
	0102B	Status error (detected by 6DI).
	0103B	Controller reserve error (detected by 6DI).
	0105B	Track flawed (detected by 1MV).
7155-401/885-42 (DB)		
0014B	0015B	Channel downed by system (detected by 1MV).
	0024B	Channel parity error (detected by 6DI).
	0030B	Device turned off by system (detected by 1MV).
	0034B	Device downed by system (detected by 1MV).
	0040B	Read parity error (detected by 6DI).
	0041B	Write parity error (detected by 6DI).
	0043B	Device not ready (detected by 6DI).
	0050B	Firmware dead (detected by 6DI).
	0051B	Cannot autoloader controller (detected by 6DI).
	0056B	Unit reserve error (detected by 6DI).
	0063B	RAM parity error (detected by 6DI).
	0067B	Data verification error (detected by 1MV).
	0100B	Address error (detected by 6DI).
	0102B	Status error (detected by 6DI).
	0103B	Controller reserve error (detected by 6DI).
	0105B	Track flawed (detected by 1MV).
	1100B	Address error (detected by 6DE).
	3024B	Channel parity error on input (detected by 1HP).
	3040B	Read parity error (detected by 1HP).
	3041B	Write parity error (detected by 1HP).
	3043B	Device not ready (detected by 1HP).
	3050B	Firmware dead (detected by 1HP).
	3051B	Cannot autoloader controller (detected by 1HP).
	3056B	Unit reserve error (detected by 1HP).
	3063B	RAM parity error (detected by 1HP).
	3074B	General status (detected by 1HP).
	3075B	Detailed status (detected by 1HP).
	3100B	Address error (detected by 1HP).
	3102B	Status error (detected by 1HP).
	3103B	Controller reserve error (detected by 1HP).

<u>MSGID</u>	<u>Symptom Code</u>	<u>Meaning</u>
7155/885-1x (Full Track) (DQ)		
0017B	0015B	Channel downed by system (detected by 1MV).
	0024B	Channel parity error (detected by 6DI).
	0030B	Device turned off by system (detected by 1MV).
	0034B	Device downed by system (detected by 1MV).
	0040B	Read parity error (detected by 6DI).
	0041B	Write parity error (detected by 6DI).
	0043B	Device not ready (detected by 6DI).
	0050B	Firmware dead (detected by 6DI).
	0051B	Cannot autoloading controller (detected by 6DI).
	0056B	Unit reserve error (detected by 6DI).
	0063B	RAM parity error (detected by 6DI).
	0067B	Data verification error (detected by 1MV).
	0100B	Address error (detected by 6DI).
	0102B	Status error (detected by 6DI).
	0103B	Controller reserve error (detected by 6DI).
	0105B	Track flawed (detected by 1MV).
405 Card Reader (CR)		
0020B	0005B	Incomplete data transfer.
	0010B	Transmission parity error.
	0024B	Channel parity error.
	0025B	Function reject.
	0027B	Equipment turned off by operator.
	0030B	Equipment turned off by system.
	0031B	Equipment turned on by operator.
	0032B	Equipment turned on by system.
	0044B	Controller hung busy.
	0050B	Function timeout.
	0100B	Accounting data.
	0101B	Compare error.
415 Card Punch (CP)		
0021B	0005B	Incomplete data transfer.
	0010B	Transmission parity error.
	0024B	Channel parity error.
	0025B	Function reject.
	0027B	Equipment turned off by operator.
	0030B	Equipment turned off by system.
	0031B	Equipment turned on by operator.
	0032B	Equipment turned on by system.
	0044B	Controller hung busy.
	0050B	Function timeout.
	0100B	Accounting data.
	0101B	Compare error.
	0102B	Feed failure.

<u>MSGID</u>	<u>Symptom Code</u>	<u>Meaning</u>
512 Printer (LQ)		
0022B	0005B	Incomplete data transfer.
	0010B	Transmission parity error.
	0024B	Channel parity error.
	0025B	Function reject.
	0027B	Equipment turned off by operator.
	0030B	Equipment turned off by system.
	0031B	Equipment turned on by operator.
	0032B	Equipment turned on by system.
	0044B	Controller hung busy.
	0050B	Function timeout.
	0100B	Accounting data.
	0101B	Printer error.
	0103B	Print error total.
580-12 Printer (LR)		
0023B	0005B	Incomplete data transfer.
	0010B	Transmission parity error.
	0024B	Channel parity error.
	0025B	Function reject.
	0027B	Equipment turned off by operator.
	0030B	Equipment turned off by system.
	0031B	Equipment turned on by operator.
	0032B	Equipment turned on by system.
	0044B	Controller hung busy.
	0050B	Function timeout.
	0100B	Accounting data.
	0101B	Printer error.
	0103B	Print error total.
580-16 Printer (LS)		
0024B	0005B	Incomplete data transfer.
	0010B	Transmission parity error.
	0024B	Channel parity error.
	0025B	Function reject.
	0027B	Equipment turned off by operator.
	0030B	Equipment turned off by system.
	0031B	Equipment turned on by operator.
	0032B	Equipment turned on by system.
	0044B	Controller hung busy.
	0050B	Function timeout.
	0100B	Accounting data.
	0101B	Printer error.
	0103B	Print error total.

<u>MSGID</u>	<u>Symptom Code</u>	<u>Meaning</u>
580-20 Printer (LT)		
0025B	0005B	Incomplete data transfer.
	0010B	Transmission parity error.
	0024B	Channel parity error.
	0025B	Function reject.
	0027B	Equipment turned off by operator.
	0030B	Equipment turned off by system.
	0031B	Equipment turned on by operator.
	0032B	Equipment turned on by system.
	0044B	Controller hung busy.
	0050B	Function timeout.
	0100B	Accounting data.
	0101B	Printer error.
	0103B	Print error total.
580-120 Printer (LR)		
0026B	0005B	Incomplete data transfer.
	0010B	Transmission parity error.
	0024B	Channel parity error.
	0025B	Function reject.
	0027B	Equipment turned off by operator.
	0030B	Equipment turned off by system.
	0031B	Equipment turned on by operator.
	0032B	Equipment turned on by system.
	0044B	Controller hung busy.
	0050B	Function timeout.
	0100B	Accounting data.
	0101B	Printer error.
	0102B	PFC error.
0103B	Print error total.	
580-160 Printer (LS)		
0027B	0005B	Incomplete data transfer.
	0010B	Transmission parity error.
	0024B	Channel parity error.
	0025B	Function reject.
	0027B	Equipment turned off by operator.
	0030B	Equipment turned off by system.
	0031B	Equipment turned on by operator.
	0032B	Equipment turned on by system.
	0044B	Controller hung busy.
	0050B	Function timeout.
	0100B	Accounting data.
	0101B	Printer error.
	0102B	PFC error.
0103B	Print error total.	

<u>MSGID</u>	<u>Symptom Code</u>	<u>Meaning</u>
580-200 Printer (LT)		
0030B	0005B	Incomplete data transfer.
	0010B	Transmission parity error.
	0024B	Channel parity error.
	0025B	Function reject.
	0027B	Equipment turned off by operator.
	0030B	Equipment turned off by system.
	0031B	Equipment turned on by operator.
	0032B	Equipment turned on by system.
	0044B	Controller hung busy.
	0050B	Function timeout.
	0100B	Accounting data.
0101B	Printer error.	
0102B	PFC error.	
0103B	Print error total.	
5870 Printer Subsystem (LX)		
0031B	0005B	Incomplete data transfer.
	0024B	Channel parity error.
	0027B	Equipment turned off by operator.
	0030B	Equipment turned off by system.
	0031B	Equipment turned on by operator.
	0032B	Equipment turned on by system.
	0050B	Function timeout.
	0100B	Accounting data.
	0103B	Printer error total.
	0113B	CCC/NIP status error.
5970 Printer Subsystem (LY) (Reserved for future use)		
0032B	0005B	Incomplete data transfer.
	0024B	Channel parity error.
	0027B	Equipment turned off by operator.
	0030B	Equipment turned off by system.
	0031B	Equipment turned on by operator.
	0032B	Equipment turned on by system.
	0050B	Function timeout.
	0100B	Accounting data.
	0103B	Printer error total.
	0113B	CCC/NIP status error.

<u>MSGID</u>	<u>Symptom Code</u>	<u>Meaning</u>
MTS 7-Track		
0042B	0100B	Corrected tape errors.
ATS 7-Track		
0044B	0100B	Corrected tape errors.
FSC 7-Track		
0045B	0100B	Corrected tape errors.
MTS 9-Track		
0052B	0100B	Corrected tape errors.
CMTS 9-Track		
0053B	0100B	Corrected tape errors.
ATS 9-Track		
0054B	0100B	Corrected tape errors.
FSC 9-Track		
0056B	0100B	Corrected tape errors.
ISMT 9-Track		
0057B	0100B	Corrected tape errors.
MDI		
0065B	0051B	Cannot load.
6683 Satellite Coupler		
0067B	0005B	Receive block length failure.
	0011B	Hardware/software failure.
	0076B	Undefined error.
	0101B	Invalid coupler status.
	0102B	Channel left active.
	0103B	Send transmission broken.
	0104B	Receive block invalid.
	0105B	Invalid control/length byte.
	0106B	Coupler/channel test failed.



<u>MSGID</u>	<u>Symptom Code</u>	<u>Meaning</u>
ECS I-DC135 DDP (DP)		
0070B	0015B	Channel downed by system (detected by 1MV).
	0030B	Device turned off by system (detected by 1MV).
	0034B	Device downed by system (detected by 1MV).
	0067B	Data verification error (detected by 1MV).
	0105B	Track flawed (detected by 1MV).
	0440B	Read parity error (detected by 6DP).
	0441B	Write parity error (detected by 6DP).
	0450B	Firmware dead (detected by 6DP).
	0500B	Address error (detected by 6DP).
	0502B	Status error (detected by 6DP).
	1040B	Read parity error (detected by 6DE).
	1041B	Write parity error (detected by 6DE).
	1043B	Device not ready (detected by 6DE).
	1100B	Address error (detected by 6DE).
	2040B	Read parity error (detected by 1MC).
	2041B	Write parity error (detected by 1MC).
2440B	Read parity error (detected by ELM).	
2441B	Write parity error (detected by ELM).	
ECS I-COUPLER (DE)		
0071B	0015B	Channel downed by system (detected by 1MV).
	0030B	Device turned off by system (detected by 1MV).
	0034B	Device downed by system (detected by 1MV).
	0067B	Data verification error (detected by 1MV).
	0105B	Track flawed (detected by 1MV).
	1040B	Read parity error (detected by 6DE).
	1041B	Write parity error (detected by 6DE).
	1043B	Device not ready (detected by 6DE).
	1100B	Address error (detected by 6DE).
	2040B	Read parity error (detected by 1MC).
	2041B	Write parity error (detected by 1MC).
	2440B	Read parity error (detected by ELM).
	2441B	Write parity error (detected by ELM).
ECS II-DC135 DDP (DP)		
0072B	0015B	Channel downed by system (detected by 1MV).
	0030B	Device turned off by system (detected by 1MV).
	0034B	Device downed by system (detected by 1MV).
	0067B	Data verification error (detected by 1MV).
	0105B	Track flawed (detected by 1MV).
	0440B	Read parity error (detected by 6DP).
	0441B	Write parity error (detected by 6DP).
	0450B	Firmware dead (detected by 6DP).
	0500B	Address error (detected by 6DP).
	0502B	Status error (detected by 6DP).
1040B	Read parity error (detected by 6DE).	

<u>MSGID</u>	<u>Symptom Code</u>	<u>Meaning</u>
ECS II-DC135 DDP (DP)		
0072B	1041B	Write parity error (detected by 6DE).
	1043B	Device not ready (detected by 6DE).
	1100B	Address error (detected by 6DE).
	2040B	Read parity error (detected by 1MC).
	2041B	Write parity error (detected by 1MC).
	2440B	Read parity error (detected by ELM).
	2441B	Write parity error (detected by ELM).
ECS II-COUPLER (DE)		
0073B	0015B	Channel downed by system (detected by 1MV).
	0030B	Device turned off by system (detected by 1MV).
	0034B	Device downed by system (detected by 1MV).
	0067B	Data verification error (detected by 1MV).
	0105B	Track flawed (detected by 1MV).
	1040B	Read parity error (detected by 6DE).
	1041B	Write parity error (detected by 6DE).
	1043B	Device not ready (detected by 6DE).
	1100B	Address error (detected by 6DE).
	2040B	Read parity error (detected by 1MC).
	2041B	Write parity error (detected by 1MC).
	2440B	Read parity error (detected by ELM).
	2441B	Write parity error (detected by ELM).
	ECS I-DC145 DDP (DP)	
0074B	0015B	Channel downed by system (detected by 1MV).
	0030B	Device turned off by system (detected by 1MV).
	0034B	Device downed by system (detected by 1MV).
	0067B	Data verification error (detected by 1MV).
	0105B	Track flawed (detected by 1MV).
	0440B	Read parity error (detected by 6DP).
	0441B	Write parity error (detected by 6DP).
	0450B	Firmware dead (detected by 6DP).
	0500B	Address error (detected by 6DP).
	0502B	Status error (detected by 6DP).
	1040B	Read parity error (detected by 6DE).
	1041B	Write parity error (detected by 6DE).
	1043B	Device not ready (detected by 6DE).
	1100B	Address error (detected by 6DE).
	2040B	Read parity error (detected by 1MC).
	2041B	Write parity error (detected by 1MC).
	2440B	Read parity error (detected by ELM).
2441B	Write parity error (detected by ELM).	

<u>MSGID</u>	<u>Symptom Code</u>	<u>Meaning</u>
ECS II-DC145 DDP (DP)		
0075B	0015B	Channel downed by system (detected by 1MV).
	0030B	Device turned off by system (detected by 1MV).
	0034B	Device downed by system (detected by 1MV).
	0067B	Data verification error (detected by 1MV).
	0105B	Track flawed (detected by 1MV).
	0440B	Read parity error (detected by 6DP).
	0441B	Write parity error (detected by 6DP).
	0450B	Firmware dead (detected by 6DP).
	0500B	Address error (detected by 6DP).
	0502B	Status error (detected by 6DP).
	1040B	Read parity error (detected by 6DE).
	1041B	Write parity error (detected by 6DE).
	1043B	Device not ready (detected by 6DE).
	1100B	Address error (detected by 6DE).
	2040B	Read parity error (detected by 1MC).
	2041B	Write parity error (detected by 1MC).
	2440B	Read parity error (detected by ELM).
	2441B	Write parity error (detected by ELM).
LCME Coupler (DP)		
0076B	0015B	Channel downed by system (detected by 1MV).
	0030B	Device turned off by system (detected by 1MV).
	0034B	Device downed by system (detected by 1MV).
	0067B	Data verification error (detected by 1MV).
	0105B	Track flawed (detected by 1MV).
	1040B	Read parity error (detected by 6DE).
	1041B	Write parity error (detected by 6DE).
	1043B	Device not ready (detected by 6DE).
	1100B	Address error (detected by 6DE).
	2040B	Read parity error (detected by 1MC).
	2041B	Write parity error (detected by 1MC).
	2440B	Read parity error (detected by ELM).
2441B	Write parity error (detected by ELM).	
UEM (DE)		
0077B	0015B	Channel downed by system (detected by 1MV).
	0030B	Device turned off by system (detected by 1MV).
	0034B	Device downed by system (detected by 1MV).
	0067B	Data verification error (detected by 1MV).
	0105B	Track flawed (detected by 1MV).
	1500B	Address error (detected by 6DX).

<u>MSGID</u>	<u>Symptom Code</u>	<u>Meaning</u>
MSS/MST (CT)		
0100B	0100B	Nonexistent device.
	0110B	Block number mismatch.
	0200B	Cannot assign EST.
	0320B	PRU format error.
	0323B	Error on advance.
	0325B	AGC gain check.
	0326B	Write protected.
	0330B	ISD power off.
	0332B	Advance command reject.
	0333B	General command reject.
	0334B	Could not clear device.
	0337B	Device unusable.
	0340B	False equipment check.
	0343B	False intervention required.
	0347B	Contaminated head check.
	0350B	Write current check.
	0351B	Permanent unit check.
	0352B	Cannot load into columns.
	0353B	Cannot unload tape.
	0354B	MST dropped ready.
	0355B	Equipment check (advance).
	0356B	MST equipment check.
	0360B	AGC check on write.
	0361B	Data check on write.
	0362B	AGC check on read.
	0363B	Data check on read.
	0364B	Write error (not write function).
	0365B	2 tracks corrected.
	0366B	Seek reserve reject.
	0367B	Read error (not read function).
	0370B	Cannot seek reserve device.
	0403B	EOS on write recovery.
	0407B	Device seized on other access.
	0410B	Write reconnect error.
	0412B	MST tachometer error.
	0413B	Busy during poll select.
	0414B	Data not written, no error.
	1200B	Usage information.
MSS/CSU (CS)		
0101B	0100B	Nonexistent device.
	0200B	Cannot assign EST.
	0320B	PRU format error.
	0327B	Nothing in input driver.
	0331B	Mount command reject.
	0333B	General command reject.
	0334B	Count not clear device.

<u>MSGID</u>	<u>Symptom Code</u>	<u>Meaning</u>
MSS/CSU (CS)		
0101B	0337B	Device unusable.
	0340B	False equipment check.
	0342B	CSU equipment check.
	0343B	False intervention required.
	0351B	Permanent unit check.
	0357B	Pick/put failure.
	0366B	Seek reserve reject.
	0371B	Picker positioning error.
	0372B	Picker positioning may be bad.
	0373B	False pick failure.
	0374B	Move xy pick failure.
	0375B	Cartridge xy empty.
	0376B	Put failure (to MST).
	0377B	Put to full xy.
	0400B	Unknown pick/put failure.
	1200B	Usage information.
MSS/SUBSYSTEM (CU)		
0102B	0101B	Request timed out.
	0102B	Read data error.
	0103B	Transfer length error.
	0114B	Channel timeout.
	0201B	Block read check bad.
	0202B	RD deadman timeout.
	0203B	WR deadman timeout.
	0205B	Data header error.
	0206B	CM buffer overrun.
	0207B	CM buffer underrun.
	0401B	Hardware overrun.
	0404B	Busout check.
	0405B	Busout check (load okay).
	0406B	Busout check (mount).
	0415B	Invalid file mark response.
	1200B	Usage Information.
MSS/MSA (CU)		
0103B	0104B	Cylinder address register failure.
	0105B	HD address reg failure.
	0112B	HOT interface.
	0113B	Bad 3 of 6 return.
	0301B	Busy or select alert 1.
	0302B	Check 2 error.
	0303B	No tag valid (read).
	0304B	Select alert 1 (read).
	0305B	Read (no synchronization in).
	0306B	No busy (start seek).

<u>MSGID</u>	<u>Symptom Code</u>	<u>Meaning</u>
MSS/MSA (CU)		
0103B	0307B	No read normal end.
	0310B	No select alert 1 (write).
	0311B	Select alert 2 (static).
	0312B	Write (no synchronization in).
	0313B	Write (no normal end).
	0314B	Select alert 1 (write).
	0315B	Write (no tag valid).
	0316B	Long busy tag timeout.
	0317B	Busy during select.
	0322B	False unit accept.
	0324B	MST not ready, command reject.
	0335B	Cannot read sense.
	0341B	MSA equipment check.
	0346B	Unknown device equipment check.
	0411B	Busy on CPU selection.
	1200B	Usage Information.
MSS/COUPLER (CU)		
0104B	0106B	Coupler overrun.
	0107B	Coupler overrun.
	0111B	Coupler parity error.
	0204B	Other coupler channel busy.
	1200B	Usage Information.
MSE-FSC ERRORS (SS)		
0105B	0001B	Invalid function.
	0002B	Data length error.
	0003B	Control word error.
	0004B	Buffer argument error.
	0005B	Header/trailer error.
	0006B	End of volume.
	0007B	Invalid unit number.
	0010B	Buffer timeout error.
	0011B	Tape bottom right.
	0012B	Terminate flag detected.
	0020B	Status error.
	0021B	Channel hung on input.
	0022B	Channel hung on output.
	0023B	Function timeout.
	0024B	No end of operation.
	0025B	Channel malfunction.
	0026B	Channel parity error.
	0027B	FSC memory parity error.
	0030B	FSC not running.
0031B	FSC abnormal.	
0032B	FSC diagnostic failure.	
0033B	Checksum error (CM driver).	

<u>MSGID</u>	<u>Symptom Code</u>	<u>Meaning</u>
MSE-7990 ERRORS (SS)		
0106B	0036B	Error log overflow.
	0060B	CTF, DTI/DTO errors.
	0100B	DRD,DRC,DIF,DTI/DTO errors device/diagnostic driver.
	0101B	Accessor errors, device/diagnostic driver.
	0103B	Device/path status change.
	0104B	ALT,DRD,DRC,DIF,DTI/DTO errors device/diagnostic driver.
	0107B	Device driver software error.
	0140B	CPU (memory hardware detected errors).
	0141B	Software errors.
MSE-USAGE (SS)		
0107B	1200B	Usage type data.
7255/834 Disk (DD)		
0110B	0015B	Channel downed by system (detected by 1MV).
	0024B	Channel parity error (detected by 6DJ).
	0030B	Device turned off by system (detected by 1MV).
	0034B	Device downed by system (detected by 1MV).
	0040B	Read parity error (detected by 6DJ).
	0041B	Write parity error (detected by 6DJ).
	0043B	Device not ready (detected by 6DJ).
	0050B	Firmware dead (detected by 6DJ).
	0051B	Cannot autoloader controller (detected by 6DJ).
	0056B	Unit reserve error (detected by 6DJ).
	0063B	RAM parity error (detected by 6DJ).
	0067B	Data verification error (detected by 1MV).
	0100B	Address error (detected by 6DJ).
	0102B	Status error (detected by 6DJ).
	0103B	Controller reserve error (detected by 6DJ).
0105B	Track flawed (detected by 1MV).	
0200B	On-line diagnostic message (detected by 6DJ).	
7255/836 Disk (DG)		
0111B	0015B	Channel downed by system (detected by 1MV).
	0024B	Channel parity error (detected by 6DJ).
	0030B	Device turned off by system (detected by 1MV).
	0034B	Device downed by system (detected by 1MV).
	0040B	Read parity error (detected by 6DJ).
	0041B	Write parity error (detected by 6DJ).
	0043B	Device not ready (detected by 6DJ).
	0050B	Firmware dead (detected by 6DJ).
	0051B	Cannot autoloader controller (detected by 6DJ).
	0056B	Unit reserve error (detected by 6DJ).

<u>MSGID</u>	<u>Symptom Code</u>	<u>Meaning</u>
7255/836 Disk (DG)		
0111B	0063B	RAM parity error (detected by 6DJ).
	0067B	Data verification error (detected by 1MV).
	0100B	Address error (detected by 6DJ).
	0102B	Status error (detected by 6DJ).
	0103B	Controller reserve error (detected by 6DJ).
	0105B	Track flawed (detected by 1MV).
	0200B	On-line diagnostic message (detected by 6DJ).
7165/895 Disk (DC)		
0115B	0015B	Channel downed by system (detected by 1MV).
	0024B	Channel parity error (detected by 6DI).
	0030B	Device turned off by system (detected by 1MV).
	0034B	Device downed by system (detected by 1MV).
	0040B	Read media error (detected by 6DI).
	0041B	Write media error (detected by 6DI).
	0043B	Device not ready (detected by 6DI).
	0050B	Firmware dead (detected by 6DI).
	0051B	Cannot autoloading controller (detected by 6DI).
	0056B	Unit reserve error (detected by 6DI).
	0063B	Controller memory error (detected by 6DI).
	0067B	Data verification error (detected by 1MV).
	0100B	Address error (detected by 6DI).
	0102B	Status error (detected by 6DI).
	0103B	Controller reserve error (detected by 6DI).
	0105B	Track flawed (detected by 1MV).
	1040B	Read parity error (detected by 6DE).
	1041B	Write parity error (detected by 6DE).
	1100B	Address error (detected by 6DE).
	4005B	Incomplete data transfer (detected by 1XM).
	4023B	Channel failure (detected by 1XM).
	4024B	Channel parity error (detected by 1XM).
	4040B	Read media error (detected by 1XM).
	4041B	Write media error (detected by 1XM).
	4043B	Device not ready (detected by 1XM).
	4050B	Firmware dead (detected by 1XM).
	4051B	Cannot autoloading controller (detected by 1XM).
	4056B	Drive reserve error (detected by 1XM).
	4063B	Controller memory error (detected by 1XM).
	4100B	Address error (detected by 1XM).
4102B	Status error (detected by 1XM).	
4103B	Controller reserve error (detected by 1XM).	



<u>MSGID</u>	<u>Symptom Code</u>	<u>Meaning</u>
887 (4K byte sector)		
0120B		
	0015B	Channel downed.
	0030B	Equipment turned off.
	0100B	Driver detected error.
	0103B	First failure data - Disk error register image.
	0104B	First failure data - Disk error log.
	0105B	Error recovery summary.
	0106B	Level I diagnostic results.
	0107B	Level II diagnostic results.
887 (16K byte sector)		
0121B		
	0015B	Channel downed.
	0030B	Equipment turned off.
	0100B	Driver detected error.
	0103B	First failure data - Disk error register image.
	0104B	First failure data - Disk error log.
	0105B	Error recovery summary.
	0106B	Level I diagnostic results.
	0107B	Level II diagnostic results.
SCR Models 171, 172, 173, 174, and 175 (SR)		
0200B	0100B	Single bit, corrected occurrence.
	0101B	Single bit, summary table.
SCR Models 720, 730, 740, 750, and 760 (SR)		
0201B	0100B	Single bit, corrected occurrence.
	0101B	Single bit, summary table.
SCR-Model 176A (SR)		
0202B	0100B	Single bit, corrected occurrence.
	0101B	Single bit, summary table.
	0104B	LCME single bit, summary table.

<u>MSGID</u>	<u>Symptom Code</u>	<u>Meaning</u>
SCR-Model 176B (SR)		
0203B	0100B	Single bit, corrected occurrence.
	0101B	Single bit, summary table.
	0104B	LCME single bit, summary table.
SCR-Model 865 (RR)		
0204B	0100B	Single bit, corrected occurrence.
	0101B	Single bit, summary table.
SCR-Model 875 (RR)		
0205B	0100B	Single bit, corrected occurrence.
	0101B	Single bit, summary table.
Channel Status (CH)		
0206B	0014B	Channel downed by operator.
	0015B	Channel downed by system.
	0016B	Channel upped by operator.
	0017B	Channel upped by system.
ESM-COUPLER		
0207B	0015B	Channel downed by system (detected by 1MV).
	0030B	Device turned off by system (detected by 1MV).
	0034B	Device downed by system (detected by 1MV).
	0067B	Data verification error (detected by 1MV).
	0105B	Track flawed (detected by 1MV).
	0440B	Read parity error (detected by 6DP).
	0441B	Write parity error (detected by 6DP).
	0450B	Firmware dead (detected by 6DP).
	0500B	Address error (detected by 6DP).
	0502B	Status error (detected by 6DP).
	1040B	Read parity error (detected by 6DE).
	1041B	Write parity error (detected by 6DE).
	1043B	Device not ready (detected by 6DE).
	1100B	Address error (detected by 6DE).
	2040B	Read parity error (detected by 1MC).
	2041B	Write parity error (detected by 1MC).
2440B	Read parity error (detected by ELM).	
2441B	Write parity error (detected by ELM).	

<u>MSGID</u>	<u>Symptom Code</u>	<u>Meaning</u>
ESM-LOW SPEED PORT		
0210B	0015B	Channel downed by system (detected by 1MV).
	0030B	Device turned off by system (detected by 1MV).
	0034B	Device downed by system (detected by 1MV).
	0067B	Data verification error (detected by 1MV).
	0105B	Track flawed (detected by 1MV).
	0440B	Read parity error (detected by 6DP).
	0441B	Write parity error (detected by 6DP).
	0450B	Firmware dead (detected by 6DP).
	0500B	Address error (detected by 6DP).
	0502B	Status error (detected by 6DP).
	1040B	Read parity error (detected by 6DE).
	1041B	Write parity error (detected by 6DE).
	1043B	Device not ready (detected by 6DE).
	1100B	Address error (detected by 6DE).
	2040B	Read parity error (detected by 1MC).
	2041B	Write parity error (detected by 1MC).
	2440B	Read parity error (detected by ELM).
	2441B	Write parity error (detected by ELM).

ESM

0211B †      0100B      ESM SECEDED error.

IOU-Models 810, 815, 825, and 830

0212B      0100B      IOU error.  
           0110B      Virtual state uncorrected IOU.  
           0111B      Virtual state uncorrected IOU (system monitor unit).  
           0112B      Express deadstart dump.  
           0200B      Critical error log.

IOU-Model 835

0213B †      0100B      IOU error.  
           0110B      Virtual state uncorrected IOU.  
           0111B      Virtual state uncorrected IOU (system monitor unit).  
           0112B      Express deadstart dump.  
           0200B      Critical error log.

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†Not issued after NOS 2.4.2 level 642. See MSGID 0250B for all mainframe errors.

<u>MSGID</u>	<u>Symptom Code</u>	<u>Meaning</u>
IOU-Models 840, 845, 850, 855, and 860		
0214B †	0100B	IOU error.
	0110B	Virtual state uncorrected IOU.
	0111B	Virtual state uncorrected IOU (system monitor unit).
	0112B	Express deadstart dump.
	0200B	Critical error log.
MEMORY-Models 810, 815, 825, and 830		
0222B †	0100B	Memory corrected.
	0101B	Single bit summary table.
	0102B	Single bit summary table.
	0104B	Uncorrected error.
	0105B	Express deadstart dump.
	0110B	Virtual state CM error.
	0200B	Critical error log.
MEMORY-Model 835		
0223B †	0100B	Memory corrected.
	0101B	Single bit summary table.
	0102B	Single bit summary table.
	0104B	Uncorrected error.
	0105B	Express deadstart dump.
	0110B	Virtual state CM error.
	0200B	Critical error log.
MEMORY-Models 840, 845, 850, 855, and 860		
0224B †	0100B	Memory corrected.
	0101B	Single bit summary table.
	0102B	Single bit summary table.
	0104B	Uncorrected error.
	0105B	Express deadstart dump.
	0110B	Virtual state CM error.
	0200B	Critical error log.
PROCESSOR-Models 810, 815, 825 and 830		
0232B †	0100B	Processor corrected error.
	0113B	Express deadstart dump.
	0141B	Real state processor detected uncorrected error (DUE) with process damaged.
	0142B	Real state processor detected uncorrected error (DUE) with process not damaged and software retry exhausted.
	0144B	Virtual state process detected uncorrected error (DUE) with process damaged.

†Not issued after NOS 2.4.2 level 642. See MSGID 0250B for all mainframe errors.

<u>MSGID</u>	<u>Symptom Code</u>	<u>Meaning</u>
PROCESSOR-Models 810, 815, 825 and 830		
0232B †	0145B	Virtual state process detected uncorrected error (DUE) with process not damaged and software retry exhausted.
	0161B	Real state processor detected uncorrected error (DUE) with process not damaged and software retry successful.
	0164B	Virtual state process detected uncorrected error (DUE) with process not damaged and software retry successful.
	0200B	Critical error log.
PROCESSOR-Model 835		
0233B †	0100B	Processor corrected error.
	0113B	Express deadstart dump.
	0141B	Real state processor detected uncorrected error (DUE) with process damaged.
	0142B	Real state processor detected uncorrected error (DUE) with process not damaged and software retry exhausted.
	0144B	Virtual state process detected uncorrected error (DUE) with process damaged.
	0145B	Virtual state process detected uncorrected error (DUE) with process not damaged and software retry exhausted.
	0161B	Real state processor detected uncorrected error (DUE) with process not damaged and software retry successful.
	0164B	Virtual state process detected uncorrected error (DUE) with process not damaged and software retry successful.
	0200B	Critical error log.
PROCESSOR-Models 840, 845, 850, 855, and 860		
0234B †	0100B	Processor corrected error.
	0113B	Express deadstart dump.
	0141B	Real state processor detected uncorrected error (DUE) with process damaged.
	0142B	Real state processor detected uncorrected error (DUE) with process not damaged and software retry exhausted.
	0144B	Virtual state process detected uncorrected error (DUE) with process damaged.
	0145B	Virtual state process detected uncorrected error (DUE) with process not damaged and software retry exhausted.

†Not issued after NOS 2.4.2 level 642. See MSGID 0250B for all mainframe errors.

<u>MSGID</u>	<u>Symptom Code</u>	<u>Meaning</u>
PROCESSOR-Models 840, 845, 850, 855, and 860		
0234B†	0161B	Real state processor detected uncorrected error (DUE) with process not damaged and software retry successful.
	0164B	Virtual state process detected uncorrected error (DUE) with process not damaged and software retry successful.
	0200B	Critical error log.
DUAL STATE		
0240B	0110B	CM assigned to NOS/VE.
	0111B	CM returned to NOS.
	0112B	PP assigned to NOS/VE.
	0113B	PP returned to NOS.
	0114B	CPP assigned to NOS/VE.
	0115B	CPP returned to NOS.
	0120B	Deadstart PP error.
	0121B	Idle PP error.
	0122B	Idle CPP error.
	MAINTENANCE REGISTERS (Mainframe errors)	
0250B	0001B	Deadstart error log IOU error.
	0002B	Express deadstart dump IOU error.
	0003B	Corrected IOU error.
	0004B	Uncorrected IOU error (NIO PP halt).
	0005B	12/16 IOU conversion error (NIO PP).
	0006B	Fatal IOU error.
	0007B	Uncorrected channel error (NIO PP).
	0010B	Fatal IOU error (CIO PP).
	0011B	Uncorrected IOU error (CIO PP halt)
	0012B	12/16 IOU conversion error (CIO PP).
	0013B	Uncorrected channel error (CIO PP).
	0401B	Deadstart error log memory error.
	0402B	Express deadstart dump memory error.
	0403B	Corrected memory error.
	0404B	Uncorrected memory error.
	0405B	Multiple odd bit memory error.
	1001B	Deadstart error log processor error.
	1002B	Express deadstart dump processor error.
	1003B	Corrected processor error.
	1004B	Uncorrected processor error.
1005B	Retry in progress error.	
1006B	Repaired error.	
1007B	Unrepaired error.	
1010B	Fatal CPU halt.	
1011B	Fatal CPU error (CPU error exit mode 20).	

† Not issued after NOS 2.4.2 level 642. See MSGID 0250B for all mainframe errors.

<u>MSGID</u>	<u>Symptom Code</u>	<u>Meaning</u>
MAINTENANCE REGISTERS (Mainframe errors)		
0250B	1012B	Fatal CPU error (CPU error exit mode 67).
	1013B	Fatal CPU recovery error.
	1014B	Corrected processor error with cache reload.
	1015B	Fatal CPU uncorrected error.
	3401B	Environment warning.
	3402B	Long power warning.
	3403B	Short power warning.
	3404B	Environment warning clear.
	3405B	Long power warning clear.
	3406B	Short power warning clear.
	3407B	Element counter buffer.
	3410B	SECDED ID table.
LOCAL NAD (NC)		
0300B	0100B	Local NAD error log.
	2100B	Local NAD connection error.
	2101B	NAD hardware fault.
	2102B	NAD microcode disaster halt.
	2110B	Function timeout.
	2111B	Channel inactive after activate.
	2112B	Data timeout.
	2113B	Prime timeout.
	2114B	Flag timeout.
	2115B	Transfer error.
	2116B	Abnormal path status.
	2117B	Abnormal response code.
	2120B	Control message length error.
	2121B	Parameter length error.
	2122B	Transfer length error.
	2140B	Local read error (block error).
	2141B	Local read error (host ABN error).
	2142B	Local read error (block too large).
	2143B	Local read error (data length error).
	2144B	Local read error (block fragment without EOR/EOI).
	2145B	Local read error (network ABN error).
	2146B	Local read error (block not 60-bit multiple).
	2150B	Local write error (block error).
2151B	Local write error (host ABN error).	
2152B	Local write error (block too large).	
2153B	Local write error (data length error).	
2154B	Local write error (block fragment without EOR/EOI).	
2155B	Local write error (network ABN error).	
2156B	Local write error (block not 60-64 multiple).	

<u>MSGID</u>	<u>Symptom Code</u>	<u>Meaning</u>
REMOTE NAD (NC)		
0301B	0100B	Remote NAD error log.
	2160B	Header length error.
	2161B	Bad data block length.
	2162B	Bad PRU data block.
	2163B	Abnormal response.
	2164B	Connect in progress timeout.
	2170B	Remote read error (block error).
	2171B	Remote send error (host ABN error).
	2172B	Remote send error (block too large).
	2173B	Remote read error (data length error).
	2174B	Remote read error (block fragment without EOR/EOI).
	2175B	Remote read error (network ABN error).
	2176B	Remote read error (block not 60-bit multiple).
MAP III/MAP IV		
0320B	0101B	No response to function.
	0102B	Fatal MAP or system error.
	0103B	Checkword or channel parity error.
	0104B	Channel full after output.
	0105B	Timeout on channel input.
	0106B	Timeout on channel output.
	0107B	Channel full before output.
	0110B	Channel active before function.
	0111B	Function busy timeout.
	0112B	Channel empty before input.
	0113B	Parity error in one or more MAP memories or ECS/ESM.
SOFTWARE INITIALIZATION		
0400B	0100B	System title.
	0101B	System version name.
HARDWARE INITIALIZATION		
0401B	0100B	Pack serial number (7x5x controller, ISD adapter, FSC adapter).
	0101B	Controlware revision level (7x5x controller, ISD adapter, FSC adapter).
	0102B	Operator initiated load (7x5x controller, ISD adapter, FSC adapter).
	0103B	System initiated load (7x5x controller, ISD adapter, FSC adapter).
	0104B	COS revision level.
	0105B	Operator initiated load (COS).
	0106B	System initiated load (COS).



<u>MSGID</u>	<u>Symptom Code</u>	<u>Meaning</u>
HARDWARE INITIALIZATION		
0401B	0107B	887 attributes
	0110B	MDI initialized.
	0111B	NIP/CCC peripheral microcode loaded.
	0112B	NIP/CCC peripheral microcode load error.
	0113B	NIP/CCC status error.
	0114B	Controller did not take all controlware.
	0115B	General status.
	0116B	Function timeout.
	0117B	No general status received.
DAYFILE		
0406B	0101B	BML created.
	0102B	BML accessed.
	0103B	BML terminated.
	0105B	BML read error.
	0107B	BML data lost.
	0113B	BML accessed by HPA.
	0114B	BML messages lost (CPUMTR).
PROCESSOR INITIALIZATION		
0407B	0100B	Microcode/EI names.
MAINFRAME STATUS		
0410B	0100B	Summary of error counters.
SOFTWARE ERROR		
0411B	0100B	Conditional hang.



The following entries describe the format of messages issued to the BML file. MSGID and SYMPTOM codes are listed in octal. Parentheses indicate hexadecimal numbers.

! ROTATING MASS STORAGE	! MSGID 0002B-0014B, 0017B,
!	! 0070B-0077B, 0110B,
!	! 0111B, 0115B, 0207B,
!	! 0210B
!	!
! 819, 834, 836, 844-2x, 844-4x,	! SYMPTOM 0015B, 0030B, 0034B,
! 885-1x, 885-42, 895, 3330-1,	! 0067B
! 3330-11, 3350, 33502	!
!	!

IMV issues the following message as a result of a device verification failure.

	59	47	35	29	23	17	11	0
Word 2	MSGID	SYMPTOM	PP	CH	0	UN		0
Word 3	EST	0	0			MID		0

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
MSGID	2	59-48	Message identifier.
			0002B 844-2x (DI).
			0003B 844-4x (DJ).
			0004B 844-2x (DK).
			0005B 844-4x (DL).
			0006B 819 (DW).
			0007B 885-1x (DM).
			0010B 3330-1 (DX).
			0011B 3330-11 (DY).
			0012B 3350 (DZ).
			0013B 33502 (DA).

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
			0014B 885-42 (DB).
			0017B 885-1x (DQ).
			0070B ECS I-DC135 DDP (DP).
			0071B ECS I-Coupler (DE).
			0072B ECS II-DC135 DDP (DP).
			0073B ECS II-Coupler (DE).
			0074B ECS I-DC145 DDP (DP).
			0075B ECS II-DC145 DDP (DP).
			0076B LCME-Coupler (DP).
			0077B UEM (DE).
			0110B 834 (DD).
			0111B 836 (DG).
			0115B 895 (DC).
			0207B ESM-Coupler (DE).
			0210B ESM-Low speed port (DE).
SYMPTOM	2	47-36	Symptom code. 0015B Channel downed by system (detected by 1MV). 0030B Device turned off by system (detected by 1MV). 0034B Device downed by system (detected by 1MV). 0067B Data verification error (detected by 1MV).
PP	2	35-30	PP that detected the error.
CH	2	29-24	Channel on which the error was detected.
UN	2	17-12	Physical unit number of the unit on which the error was detected.
EST	3	59-48	EST ordinal of the device.
MID	3	23-12	Machine identifier in display code.

ROTATING MASS STORAGE	MSGID 0002B-0014B, 0017B, 0070B-0077B, 0110B, 0111B, 0115B, 0207B, 0210B
MEDIA ERROR	SYMPTOM 0105B

IMV issues the following message when a storage media error has been detected.

	59	47	35	29	23	17	11	0
Word 2	MSGID	0105B	PP	CH	0	UN		0
Word 3	EST	0	0		MID			0
Word 4	0		CYL		TRK			SEC

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
MSGID	2	59-48	Message identifier. 0002B 844-2x (DI). 0003B 844-4x (DJ). 0004B 844-2x (DK). 0005B 844-4x (DL). 0006B 819 (DW). 0007B 885-1x (DM). 0010B 3330-1 (DX). 0011B 3330-11 (DY). 0012B 3350 (DZ). 0013B 33502 (DA). 0014B 885-42 (DB). 0017B 885-1x (DQ). 0070B ECS I-DC135 DDP (DP). 0071B ECS I-Coupler (DE). 0072B ECS II-DC135 DDP (DP). 0073B ECS II-Coupler (DE). 0074B ECS I-DC145 DDP (DP). 0075B ECS II-DC145 DDP (DP). 0076B LCME-Coupler (DP). 0077B UEM (DE). 0110B 834 (DD). 0111B 836 (DG). 0115B 895 (DC). 0207B ESM-Coupler (DE). 0210B ESM-Low Speed port (DP).

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
PP	2	35-30	PP that detected the error.
CH	2	29-24	Channel on which the error was detected.
UN	2	17-12	Physical unit number of the unit on which the error was detected.
EST	3	59-48	EST ordinal of the device.
MID	3	23-12	Machine identifier in display code.
CYL	4	35-24	Cylinder containing the media error.
TRK	4	23-12	Physical track containing the media error.
SEC	4	11-0	Physical sector containing the media error.

! ROTATING MASS STORAGE	! MSGID	0002B, 0003B, 0004B, 0005B,!
!	!	0007B, 0010B, 0011B, 0012B,!
!	!	0013B, 0014B, 0017B
!	!	!
! 844-2x, 844-4x, 885-1x,	! SYMPTOM	0024B, 0040B, 0041B, 0043B,!
! 7155-401/885-42, 895, 3330-1,	!	0050B, 0051B, 0056B, 0063B,!
! 3330-11, 3350, 33502	!	0100B, 0102B, 0103B, 3024B,!
!	!	3040B, 3041B, 3043B, 3050B,!
!	!	3051B, 3056B, 3063B, 3100B,!
!	!	3102B, 3103B
!	!	!

6DI and 1HP will issue the following pair of BML messages once per rotating mass storage error. The pair is issued whether the error is recovered or unrecovered. This ensures all errors are reported to the last general and detailed status taken.

The first message has the following form.

	59	47	41	35	29	23	17	11	0
Word 2	MSGID	SYMPTOM	PP	CH	0	UN		0	
Word 3	EST	RTY	FLG	CHR	0	MID		0	
Word 4	DETAILED STATUS (Words 1-5)								
Word 5	DETAILED STATUS (Words 6-10)								
Word 6	DETAILED STATUS (Words 11-15)								
Word 7	DETAILED STATUS (Words 16-20)								

The continuation message has the following form.

	59	47	41	35	29	23	17	11	0
Word 2	MSGID	SYMPTOM			PP	CH	0	UN	0
Word 3	EST	RTY	FLG	CHR	0	MID		0	
Word 4	FLAGS	0			FUNC			GS	

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
MSGID	2	59-48	Message identifier. 0002B 844-2x (DI). 0003B 844-4x (DJ). 0004B 844-2x (DK). 0005B 844-4x (DL). 0007B 885-1x (DM). 0010B 3330-1 (DX). 0011B 3330-11 (DY). 0012B 3350 (DZ). 0013B 33502 (DA). 0014B 7155-401/885-42 (DB). 0017B 885-1x (DQ). 0115B 895 (DC).
SYMPTOM	2	47-36	Symptom code. 0024B Channel parity error (detected by 6DI). 0040B Read parity error (detected by 6DI). 0041B Write parity error (detected by 6DI). 0043B Device not ready (detected by 6DI). 0050B Firmware dead (detected by 6DI). 0051B Cannot autoload controller (detected by 6DI). 0056B Unit reserve error (detected by 6DI). 0063B RAM parity error (detected by 6DI).



<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description (Continued)</u>
			0100B Address errors (detected by 6DI).
			0102B Status errors (detected by 6DI).
			0103B Controller reserve error (detected by 6DI).
			3024B Channel parity error on input.
			3040B Read parity error (detected by 1HP).
			3041B Write parity error (detected by 1HP).
			3043B Device not ready (detected by 1HP).
			3050B Firmware dead.
			3051B Cannot autoload controller.
			3056B Unit reserve error (detected by 1HP).
			3063B RAM parity error.
			3100B Address error (detected by 1HP).
			3102B Status error (detected by 1HP).
			3103B Controller reserve error (detected by 1HP).
PP	2	35-30	PP that detected the error.
CH	2	29-24	Channel on which the error was detected. Not meaningful for symptom code 0100B or 3100B (address error).
UN	2	17-12	Physical unit number of the unit on which the error was detected. Not meaningful for symptom code 0100B or 3100B (address error).
EST	3	59-48	EST ordinal of the device.
RTY	3	47-42	Retry count.
FLG	3	41-36	Flag field.
		(41-40)	Reserved (zero).
		(39)	Set if second message of pair; clear if first message of pair.
		(38)	Set if first message of pair; clear if second message of pair.
		(37)	Set if write operation; clear if read operation.
		(36)	Set if unrecovered error, clear if recovered error.

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u> (Continued)
CHR	3	35-30	Channel used for recovery. Not meaningful for symptom code 0100B or 3100B (address errors).
MID	3	23-12	Machine identifier in display code.
DETAILED STATUS	4-7	59-0	Detailed status. See the CDC 7155 Disk Storage Subsystem Reference Manual, 7155-401 Disk Storage Subsystem Hardware Reference Manual, and 65206-2 FSC Hardware Reference Manual for more information on the format of detailed status. If all four words are zero, the detailed status is not available.

There is no detailed status in the case of an address error (SYMPTOM 0100B or 3100B). Instead, word 4 contains the address in error in the format.

	59		35		23		11		0
Word 4	!	0	!	C	!	T	!	S	!

where:

C = Cylinder.  
T = Track.  
S = Sector.

FLAGS	4	59-48 (59-50) (49) (48)	Flag field. Reserved (zero). Set if control module controlware reload occurred. Set if channel controlware reload occurred.
FUNC	4	23-12	Last function issued before a function timeout. Valid only for symptom codes 0024B, 0050B, 0051B, 0063B, 3024B, 3050B, 3051B, and 3063B.
GS	4	11-0	General status. See the CDC 7155 Disk Storage Subsystem Reference Manual, 7155-401 Disk Storage Subsystem Hardware Reference Manual, and 65206-2 FSC Hardware Reference Manual for more information on the format of general status.

! ROTATING MASS STORAGE	! MSGID 0006B
! 819	! SYMPTOM 1040B, 1041B, 1100B

6DE issues the following message when the PIOM monitor function reports an unrecoverable error on an 819 device even though CPUMTR also reports the error to the BML. This message is issued solely to report that a PP attempted to read the sector in error. Since CPUMTR reads data from these disks in large blocks, sectors may be read which no PP will ever need.

	59	47	41	35	29	23	11	5	0
Word 2	0006B	SYMPTOM	PP				0		
Word 3	EST	RTY	FLG		0		MID		0
Word 4	0	STATUS	0	UN		CYL	TK		SC

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
SYMPTOM	2	47-36	Symptom code. 1040B Read parity error (detected by 6DE). 1041B Write parity error (detected by 6DE). 1100B Address error (detected by 6DE).
PP	2	35-30	PP that detected the error.
EST	3	59-48	EST ordinal of the device.
RTY	3	47-42	Number of attempted retries.
FLG	3	41-36 (41-38) (37)  (36)	Flag field. Reserved (zero). Set if write operation; clear if read operation. Set if unrecovered error; clear if recovered error. Currently, this is always set since all errors reported are unrecovered.

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description (Continued)</u>
MID	3	23-12	Machine identifier in display code.
STATUS	4	47-36	Status returned from CPUMTR when error occurred. 1: Unrecoverable hardware error (UHES). 4: Unrecoverable parity error (UPES).
UN	4	29-24	Unit number.
CYL	4	23-12	Cylinder.
TK	4	11-6	Track.
SC	4	5-0	Sector.

ROTATING MASS STORAGE	MSGID 0006B
819	SYMPTOM 3501B, 3502B, 3503B, 3504B

The first message has the following form.

	59	47	41	35	29	23	17	11	0
Word 2	0006B	SYMPTOM	FP	CH	0	UN		0	
Word 3	EST	RTY	FLG	CHR			0		
Word 4	PPID	COUNT		C1		C2		C3	
Word 5	C4	C5		C6		C7		C8	
Word 6	C9	D1		D2		D3		D4	
Word 7	D5	E1		E2		E3		E1	

Continuation messages have the following form.

	59	47	41	35	29	23	17	11	0
Word 2	0006B	SYMPTOM	FP	CH	0	UN		0	
Word 3	EST	RTY	FLG	FP			0		
Word 4	PPID	0		E2		E3		E1	
Word 5	E2	E3		E1		E2		E3	
Word 6	E1	E2		E3		E1		E2	
Word 7	E3	E1		E2		E3		0	

<u>Field</u>	<u>Location</u>	<u>Description</u>
SYMPTOM	47-36	Symptom code. 3501B Unrecovered data error. 3502B Recovered data error. 3503B Hardware error. 3504B Software error.
FP	35-30	First level PP (FLPP) number.
CH	29-24	FLPP data channel (2 or 6).
UN	17-12	Unit number.
EST	59-48	EST ordinal.
RTY	47-42	Retry count.
FLG	41-36 (41-40) (39)  (38)  (37)  (36)	Flag field. Reserved (zero). Set if second message of pair; clear if first message of pair. Set if first message of pair; clear if second message of pair. Set if write operation; clear if read operation. Set if unrecovered error; clear if recovered error.
CHR	35-30	Recovery channel.
PPID	59-48	Input register address.
COUNT	47-36	Error data byte count.
C1	11 10 9 8 7 6 5 4 3 2 1 0	Request aborted. Unrecovered data transfer error. Operation completed successfully. Controller dies (no resume on control channel). No resume to record flag sent to disk. Slave aborted the request. Unit never comes on-cylinder. Unit down. Channel down. Request parameter error. Hardware error. Partner died.

<u>Field</u>	<u>Location</u>	<u>Description</u> (Continued)
C2	11-6	Function code. 0: Read. 1: Write. 2: Write check.
	5	Write position verify.
	4-0	Physical unit number. Bits 0-1: Physical unit address. Bit 2: 0-Primary controller. 1-Secondary controller.
C3	9-0	Cylinder address.
C4	11-0	Device type. 0: DV device. 1: DW device.
	11-0	Total number of PP error packet words.
C6	9-6	Head group.
	4-0	Starting sector.
C7	6-0	Sector count. Number of sectors to transfer for request.
C8	11-10	Previous request on this unit.
	9-0	Previous cylinder address.
C9	9-6	Previous head group.
	4-0	Previous starting sector.
D1	11	Slave encountered error.
	10	Error during read/write of data. See controller status for type of error.
	9	Not-on-cylinder status occurred without previous position function.
	8	Unused.
	7	Subsystem busy.
	6	Error correction attempted. Fields E1, E2, and E3 are defined by F1, F2, and F3 below. These fields can be repeated.

<u>Field</u>	<u>Location</u>	<u>Description</u> (Continued)
	5	Unit not ready (maximum includes fields E1 and E2).
	4	Bad header address. Unit, track, head or sector in header is not desired position (includes fields E1 and E2).
	3	Cylinder address in cylinder status is not desired cylinder (includes field E1).
	2	Head address in head status is not desired head (includes field E1).
	1	Unit number in controller status is not desired unit or controller error during seek.
	0	Seek error.
D2	11-0	Subsystem status.
D3	11-0	Controller status (if controller error).
D4	9-0	Retry count. From this value the succeeding offset position or read strobe position can be computed.
D5	9-6	Head group expected.
	4-0	Sector address expected.

The format of the E1, E2, and E3 fields depends on the data returned in D1. See the description of D1 to determine which definition of E1, E2, and E3 applies.

<u>Field</u>	<u>Location</u>	<u>Description</u>
E1	11-0	Cylinder and/or head status, if bad. First word of header, if bad unit fault status.
E2	11-0	Interlock status or head and sector in header, if bad.
F1		Error code 1 status.
F2		Error code 2 status.
F3		Error code 3 status.



! ROTATING MASS STORAGE	! MSGID 0014B
! 7155-401/885-42	! SYMPTOM 1100B

6DE issues the following message when the PIOM monitor function reports an unrecoverable error on a DB device even though CPUMTR also reports the error to the BML. This message is issued solely to report that a PP attempted to read the sector in error. Since CPUMTR reads data from these disks in large blocks, sectors may be read which no PP will ever need.

	59	47	41	35	29	23	11	5	0
Word 2	0014B	0100B	PP				0		
Word 3	EST	RTY	FLG	0		MID		0	
Word 4	0	STATUS	0	UN		CYL	TK	SC	

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
PP	2	35-30	PP that detected the error.
EST	3	59-48	EST ordinal of the device.
RTY	3	47-42	Number of retries attempted.
FLG	3	41-36 (41-38) (37) (36)	Flag field. Reserved (zero). Set if write operation, clear if read operation. Set if unrecovered error, clear if recovered error. Currently, this is always set, since all errors reported are unrecovered.

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u> (Continued)
MID	3	23-12	Machine identifier in display code.
STATUS	4	47-36	Status returned from CPUMTR when the error occurred.  1: Unrecoverable hardware error (UHES). 4: Unrecoverable parity error (UPES).
UN	4	29-24	Unit number.
CYL	4	23-12	Cylinder.
TK	4	11-6	Track.
SC	4	5-0	Sector.

UNIT RECORD EQUIPMENT	MSGID 0020B, 0021B, 0022B, 0023B, 0024B, 0025B, 0026B, 0027B, 0030B, 0031B, 0032B
INCOMPLETE DATA TRANSFER	SYMPTOM 0005B

	59	47	41	35	29	23	17	11	0
Word 2	MSGID	0005B	PP	CH	EQ			0	
Word 3	EST	RTY	FLG	0		MID		0	
Word 4	BYTE	0		FUNC				0	

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
MSGID	2	59-48	Message identifier. 0020B 405 0021B 415 0022B 512 0023B 580-12 0024B 580-16 0025B 580-20 0026B 580-120 0027B 580-160 0030B 580-200 0031B 5870 0032B 5970 (not supported)
PP	2	35-30	PP that detected the error.
CH	2	29-24	Channel on which the error was detected.
EQ	2	23-18	Equipment number.
EST	3	59-48	EST ordinal of the equipment.
RTY	3	47-42	Number of retries attempted.

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
FLG	3	41-36	Flag field. Bit 36 0 - Recovered error. 1 - Unrecovered error.
MID	3	23-12	Machine identifier.
BYTE	4	59-48	Byte count not transferred.
FUNC	4	35-24	Function code.

UNIT RECORD EQUIPMENT	MSGID 0020B, 0021B, 0022B, 0023B, 0024B, 0025B, 0026B, 0027B, 0030B
TRANSMISSION PARITY ERROR	SYMPTOM 0010B

	59	47	35	29	23	17	11	0
Word 2	MSGID	0010B	PP	CH	EQ			0
Word 3	EST		0			MID		0
Word 4	DCCS	EQPS		FUNC				0

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
MSGID	2	59-48	Message identifier. 0020B 405 0021B 415 0022B 512 0023B 580-12 0024B 580-16 0025B 580-20 0026B 580-120 0027B 580-160 0030B 580-200
PP	2	35-30	PP that detected the error.
CH	2	29-24	Channel on which the error was detected.
EQ	2	23-18	Equipment number.
EST	3	59-48	EST ordinal of the equipment.
MID	3	23-12	Machine identifier.
DCCS	4	59-48	DCC status.
EQPS	4	47-36	Equipment status.
FUNC	4	35-24	Function code.

UNIT RECORD EQUIPMENT	MSGID 0020B, 0021B, 0022B, 0023B, 0024B, 0025B, 0026B, 0027B, 0030B, 0031B, 0032B
CHANNEL PARITY ERROR	SYMPTOM 0024B

	59	47	41	35	29	23	17	11	0
Word 2	MSGID	0024B	PP	CH	EQ			0	
Word 3	EST	RTY	FLG	0		MID		0	
Word 4	0			FUNC				0	

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
MSGID	2	59-48	Message identifier. 0020B 405 0021B 415 0022B 512 0023B 580-12 0024B 580-16 0025B 580-20 0026B 580-120 0027B 580-160 0030B 580-200 0031B 5870 0032B 5970 (not supported)
PP	2	35-30	PP that detected the error.
CH	2	29-24	Channel on which the error was detected.
EQ	2	23-18	Equipment number.
EST	3	59-48	EST ordinal of the equipment.
RTY	3	47-42	Number of retries attempted.

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
FLG	3	41-36	Flag field. Bit 36 0 - Recovered error. 1 - Unrecovered error.
MID	3	23-12	Machine identifier.
FUNC	4	35-24	Function code.

UNIT RECORD EQUIPMENT	MSGID 0020B, 0021B, 0022B, 0023B, 0024B, 0025B, 0026B, 0027B, 0030B
FUNCTION REJECT	SYMPTOM 0025B

	59	47	35	29	23	17	11	0
Word 2	MSGID	0025B	PP	CH	EQ		0	
Word 3	EST		0		MID		0	
Word 4	DCCS	EQPS	FUNC				0	

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
MSGID	2	59-48	Message identifier. 0020B 405 0021B 415 0022B 412 0023B 580-12 0024B 580-16 0025B 580-20 0026B 580-120 0027B 580-160 0030B 580-200
PP	2	35-30	PP that detected the error.
CH	2	29-24	Channel on which the error was detected.
EQ	2	23-18	Equipment number.
EST	3	59-48	EST ordinal of the equipment.
MID	3	23-12	Machine identifier.
DCCS	4	59-48	DCC status.
EQPS	4	47-36	Equipment status.
FUNC	4	35-24	Function code.



UNIT RECORD EQUIPMENT	MSGID 0020B, 0021B, 0022B, 0023B, 0024B, 0025B, 0026B, 0027B, 0030B, 0031B, 0032B
EQUIPMENT ON/OFF	SYMPTOM 0027B, 0030B, 0031B, 0032B

	59	47	35	29	23	17	11	0
Word 2	MSGID	SYMPTOM	PP	CH	EQ		0	
Word 3	EST		0		MID		0	

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
MSGID	2	59-48	Message identifier 0020B 405 0021B 415 0022B 512 0023B 580-12 0024B 580-16 0025B 580-20 0026B 580-120 0027B 580-160 0030B 580-200 0031B 5870 0032B 5970 (not supported)
SYMPTOM	2	47-36	Symptom code. 0027B Equipment turned off by operator. 0030B Equipment turned off by system. 0031B Equipment turned on by operator. 0032B Equipment turned on by system.
PP	2	35-30	PP that detected the error.
CH	2	29-24	Channel on which the error was detected.

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
EQ	2	23-18	Equipment number.
EST	3	59-48	EST ordinal of the equipment.
MID	3	23-12	Machine identifier.

UNIT RECORD EQUIPMENT	MSGID 0020B, 0021B, 0022B, 0023B, 0024B, 0025B, 0026B, 0027B, 0030B
CONTROLLER HUNG BUSY	SYMPTOM 0044B

	59	47	35	29	23	17	11	0
Word 2	MSGID	0044B	PP	CH	EQ		0	
Word 3	EST	0			MID		0	
Word 4	0		FUNC				0	

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
MSGID	2	59-48	Message identifier. 0020B 405 0021B 415 0022B 512 0023B 580-12 0024B 580-16 0025B 580-20 0026B 580-120 0027B 580-160 0030B 580-200
PP	2	35-30	PP that detected the error.
CH	2	29-24	Channel on which the error was detected.
EQ	2	23-18	Equipment number.
EST	3	59-48	EST ordinal of the equipment.
MID	3	23-12	Machine identifier.
FUNC	4	35-24	Function code.

UNIT RECORD EQUIPMENT	MSGID 0020B, 0021B, 0022B, 0023B, 0024B, 0025B, 0026B, 0027B, 0030B, 0031B, 0032B
FUNCTION TIMEOUT	SYMPTOM 0050B

	59	47	35	29	23	17	11	0
Word 2	MSGID	0050B	PP	CH	EQ		0	
Word 3	EST	0			MID		0	
Word 4	0		FUNC				0	

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
MSGID	2	59-48	Message identifier. 0020B 405 0021B 415 0022B 512 0023B 580-12 0024B 580-16 0025B 580-20 0026B 580-120 0027B 580-160 0030B 580-200 0031B 5870 0032B 5970 (not supported)
PP	2	35-30	PP that detected the error.
CH	2	29-24	Channel on which the error was detected.
EQ	2	23-18	Equipment number.
EST	3	59-48	EST ordinal of the equipment.
MID	3	23-12	Machine identifier.
FUNC	4	35-24	Function code.

UNIT RECORD EQUIPMENT	MSGID 0020B, 0021B, 0022B, 0023B, 0024B, 0025B, 0026B, 0027B, 0030B, 0031B, 0032B
ACCOUNTING DATA	SYMPTOM 0100B

	59	47	35	29	23	17	11	0
Word 2	MSGID	0100B	0	CH	EQ		0	
Word 3	EST		0		MID		0	
Word 4	COUNT							

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
MSGID	2	59-48	Message identifier. 0020B 405 0021B 415 0022B 512 0023B 580-12 0024B 580-16 0025B 580-20 0026B 580-120 0027B 580-160 0030B 580-200 0031B 5870 0032B 5970 (not supported)
CH	2	29-24	Channel on which the error was detected.
EQ	2	23-18	Equipment number.
EST	3	59-48	EST ordinal of the equipment.
MID	3	23-12	Machine identifier.
COUNT	4	59-00	Integer count of lines printed, cards read, or cards punched.

UNIT RECORD EQUIPMENT	MSGID 0020B, 0021B
COMPARE ERROR	SYMPTOM 0101B

	59	47	35	29	23	17	11	0
Word 2	MSGID	0101B	PP	CH	EQ		0	
Word 3	EST		0			MID		0
Word 4	DCCS	EQPS					0	

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
MSGID	2	59-48	Message identifier. 0020B 405 0021B 415
PP	2	35-30	PP that detected the error.
CH	2	29-24	Channel on which the error was detected.
EQ	2	23-18	Equipment number.
EST	3	59-48	EST ordinal of the equipment.
MID	3	23-12	Machine identifier.
DCCS	4	59-48	DCC status.
EQPS	4	47-36	Equipment status.

UNIT RECORD EQUIPMENT	MSGID 0021B
FEED FAILURE	SYMPTOM 0102B

	59	47	35	29	23	17	11	0
Word 2	0021B	0102B	PP	CH	EQ		0	
Word 3	EST		0			MID		0
Word 4	DCCS	EQPS					0	

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
PP	2	35-30	PP that detected the error.
CH	2	29-24	Channel on which the error was detected.
EQ	2	23-18	Equipment number.
EST	3	59-48	EST ordinal of the equipment.
MID	3	23-12	Machine identifier.
DCCS	4	59-48	DCC status.
EQPS	4	47-36	Equipment status.

UNIT RECORD EQUIPMENT	MSGID 0026B, 0027B, 0030B
PFC ERROR	SYMPTOM 0102B

	59	47	35	29	23	17	11	0
Word 2	MSGID	0102B	PP	CH	EQ			0
Word 3	EST		0			MID		0
Word 4	DCCS	EQPS		0		STAT		0

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
MSGID	2	59-48	Message identifier. 0026B 580-120 0027B 580-160 0030B 580-200
PP	2	35-30	PP that detected the error.
CH	2	29-24	Channel on which the error was detected.
EQ	2	23-18	Equipment number.
EST	3	59-48	EST ordinal of the equipment.
MID	3	23-12	Machine identifier.
DCCS	4	59-48	DCC status.
EQPS	4	47-36	Equipment status.
STAT	4	23-12	Maintenance status.



UNIT RECORD EQUIPMENT	MSGID 0022B, 0023B, 0024B, 0025B, 0026B, 0027B, 0030B, 0031B, 0032B
PRINT ERROR TOTAL	SYMPTOM 0103B

	59	47	35	29	23	17	11	0
Word 2	MSGID	0103B	PP	CH	EQ			0
Word 3	EST		0			MID		0
Word 4	COUNT							

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
MSGID	2	59-48	Message identifier. 0020B 405 0021B 415 0022B 512 0023B 580-12 0024B 580-16 0025B 580-20 0026B 580-120 0027B 580-160 0030B 580-200 0031B 5870 0032B 5970 (not supported)
PP	2	35-30	PP that detected the error.
CH	2	29-24	Channel on which the error was detected.
EQ	2	23-18	Equipment number.
EST	3	59-48	EST ordinal of the equipment.
MID	3	23-12	Machine identifier.
COUNT	4	59-00	Number of print errors.

UNIT RECORD EQUIPMENT	MSGID 0022B, 0023B, 0024B, 0025B, 0026B, 0027B, 0030B
PRINT ERROR	SYMPTOM 0101B

	59	47	41	35	29	23	17	11	0
Word 2	MSGID	0101B	PP	CH	EQ			0	
Word 3	EST	RTY	FLG	0		MID		0	
Word 4	DCCS	EQPS				0			

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
MSGID	2	59-48	Message identifier. 0022B 512 0023B 580-12 0024B 580-16 0025B 580-20 0026B 580-120 0027B 580-160 0030B 580-200
PP	2	35-30	PP that detected the error.
CH	2	29-24	Channel on which the error was detected.
EQ	2	23-18	Equipment number.
EST	3	59-48	EST ordinal of the equipment.
RTY	3	47-42	Number of retries attempted.
FLG	3	41-36	Flag Field. Bit 36 0 - Recovered error. 1 - Unrecovered error.
MID	3	23-12	Machine identifier.
DCCS	4	59-48	DCC status.
EQPS	4	47-36	Equipment status.

TAPE UNIT	MSGID 0042B, 0044B, 0045B, 0052B, 0053B, 0054B, 0056B, 0057B
CORRECTED TAPE ERRORS	SYMPTOM 0100B

This message is issued by MAGNET/LMT when a tape is returned or unloaded. This message indicates how many errors were encountered on the tape.

	59	47	41	35	29	23	17	11	0
Word 2	MSGID	0100B		PP	CH	EQ	UN		0
Word 3	EST					0			
Word 4		VSN				0		RN	
Word 5		LDE		WE		0		RE	

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
MSGID	2	59-48	Message identifier. 0042B MTS 7-Track 0044B ATS 7-Track 0045B FSC 7-Track 0052B MTS 9-Track 0053B CMTS 9-Track 0054B ATS 9-Track 0056B FSC 9-Track 0057B ISMT 9-Track
PP	2	35-30	PP number.
CH	2	29-24	Channel number.
EQ	2	23-18	Equipment number.
UN	2	17-12	Unit number.
EST	3	59-48	EST ordinal.
VSN	4	59-24	Volume serial number.
RN	4	11-0	Reel number.
LDE	5	59-42	Late data errors.
WE	5	41-24	Corrected write errors.
RE	5	17-0	Corrected read errors.

MDI	MSGID 0065B
INITIALIZATION ERROR	SYMPTOM 0051B

This BML message is issued if an unrecovered error occurs while initializing an MDI, the CDCNET component known as a mainframe device interface.

	59	47	41	35	29	23	11	0
Word 2	0065B	0051B	0	CH			0	
Word 3	EST	0	FLG	0		MID		0
Word 4				DS				
Word 5				DS				
Word 6				DS				
Word 7		DS		0		VER		GS

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
CH	2	29-24	Channel on which the error was detected.
EST	3	59-48	EST ordinal of the equipment.
LG	3	41-36 (37)	Flag field. Set to indicate unrecovered error.
ID	3	23-12	Machine identifier.
DS	4	59-0	MCI detailed status.
	5	59-0	MCI detailed status.
	6	59-0	MCI detailed status.
	7	59-32	MCI detailed status.
VER	7	27-12	Version number of the software to be loaded.
GS	7	11-0	MCI general status.

6683 SATELLITE COUPLER	MSGID 0067B
RECEIVE BLOCK LENGTH ERROR	SYMPTOM 0005B

The following message is issued to report errors with the 6683 Satellite Coupler.

	59	47	35	29	23	17	11	0
Word 2	0067B	0005B	PP	CH	EQ		0	
Word 3	EST				0			
Word 4		0				BN		BE

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
PP	2	35-30	PP that detected the error.
CH	2	29-24	Channel on which the error was detected.
EQ	2	23-18	Equipment number.
EST	3	59-48	EST ordinal of the equipment.
BN	4	23-12	Octal number of bytes not received.
BE	4	11-0	Octal number of bytes expected.

6683 SATELLITE COUPLER	MSGID 0067B
ERROR CONDITION	SYMPTOM 0011B, 0076B, 0102B, 0103B 0104B, 0105B, 0106B

The following message is issued to report errors with the 6683 Satellite Coupler.

	59	47	35	29	23	17	11	0
Word 2	0067B	SYMPTOM	PP	CH	EQ		0	
Word 3	EST				0			

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
SYMPTOM	2	47-36	Symptom code. 0011B Hardware/software failure. 0076B Undefined error. 0102B Channel left active. 0103B Send transmission broken. 0104B Receive block invalid. 0105B Invalid control/length byte. 0106B Coupler/channel test failed.
PP	2	35-30	PP number.
CH	2	29-24	Channel number.
EQ	2	23-18	Equipment number of 6683.
EST	3	59-48	EST ordinal of 6683.

```

!-----!
! 6683 SATELLITE COUPLER      ! MSGID   0067B
!-----!
! INVALID COUPLER STATUS     ! SYMPTOM 0101B
!-----!

```

The following message is issued to report errors with the 6683 Satellite Coupler.

```

      59      47      35      29      23      17      11      0
Word 2 ! 0067B ! 0101B ! PP ! CH ! EQ !      0
Word 3 ! EST  !      !      !      ! 0
Word 4 !      !      !      !      !      ! ES

```

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
PP	2	35-30	PP that detected the error.
CH	2	29-24	Channel on which the error was detected.
EQ	2	23-18	Equipment number.
EST	3	59-48	EST ordinal of the equipment.
ES	4	11-0	Bad status as returned by the coupler.

EXTENDED MEMORY (ECS I, ECS II)	MSGID	0070B, 0072B, 0074B, 0075B
ERROR DETECTED BY 6DP	SYMPTOM	0440B, 0441B, 0450B, 0500B, 0502B

6DP issues the following message when a PP detects an error while transferring data to or from extended memory via a DDP.

	59	47	41	35	29	23	11	0
Word 2	MSGID	SYMPTOM	PP	CH			0	
Word 3	EST	RTY	FLG	CHR	0	MID	0	
Word 4	FLAGS	STATUS	WCNT			EM ADDR		
Word 5	FIRST DATA							
Word 6	SECOND DATA							

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
MSGID	2	59-48	Message identifier. The error can occur only on the DDP path. 0070B ECS I (DC135 DDP). 0072B ECS II (DC135 DDP). 0074B ECS I (DC145 DDP). 0075B ECS II (DC145 DDP).
SYMPTOM	2	47-36	Symptom code. 0440B Read parity error (detected by 6DP). 0441B Write parity error (detected by 6DP). 0450B Firmware dead (detected by 6DP). 0500B Address error (detected by 6DP). 0502B Status error (detected by 6DP).



<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u> (Continued)
PP	2	35-30	PP that detected the error.
CH	2	29-24	Channel on which the error was detected. Not meaningful for symptom code 0500B (address errors).
EST	3	59-48	EST ordinal of the device.
RTY	3	47-42	Number of retries attempted.
FLG	3	41-36 (41-38) (37) (36)	Flag Field. Reserved. Set if write operation; clear if read operation. Set if unrecovered error; clear if recovered error.
CHR	3	35-30	Channel used for recovery. Not meaningful for symptom code 0500B.
MID	3	23-12	Machine identifier in display code.
FLAGS	4	59-48 (59-50) (49) (48)	Flag Field. Reserved. Set if SECOND DATA is present; clear if not. Set if FIRST DATA is present; clear if not.
STATUS	4	47-36	Status received back from a 5004 DDP function. This status is taken immediately after a single word read or write. The status indicates whether the operation was or was not successful. If unsuccessful, the status attempts to explain the problem.
WCNT	4	35-24	If WCNT is greater than 1, it is the number of words in the block being transferred when the error occurred. EM ADDR is the address of the beginning of that transfer. If WCNT is equal to 1, EM ADDR is the actual address where the error occurred.
EM ADDR	4	23-0	Transfer address or error address in extended memory.

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u> (Continued)
FIRST DATA	5	59-0	This field shows bad data received on the initial read of recovered read parity errors. Data received on the initial read of unrecovered read parity errors is also shown, but it is not known if the data is bad or good. This field also shows data for write parity errors the driver tried to write to EM.
SECOND DATA	6	59-0	This field shows good data received on the retry of recovered read parity errors, and bad data received on the retry of unrecovered read parity errors. This field is not used for write parity errors.

EXTENDED MEMORY	MSGID	0070B, 0071B, 0072B, 0073B, 0074B, 0075B, 0076B
ERRORS DETECTED BY 6DE	SYMPTOM	1040B, 1041B, 1043B, 1100B

6DE issues the following message when the PIOM monitor function has reported an unrecoverable error on a DE or DP device. The PIOM function returns the status in the STATUS field.

	59	47	41	35	29	23	11	0
Word 2	MSGID	SYMPTOM	PP			0		
Word 3	EST	RTY	FLG		0	MID		0
Word 4	RESERVED	STATUS		WCNT		EM ADDR		

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
MSGID	2	59-48	<p>Message identifier. The error occurred on the coupler path to extended memory, even if the device is defined with a DDP.</p> <p>0070B ECS I (DC135 DDP).  0071B ECS I (Coupler).  0072B ECS II (DC135 DDP).  0073B ECS II (Coupler).  0074B ECS I (DC145 DDP).  0075B ECS II (DC145 DDP).  0076B LCME.</p>
SYMPTOM	2	47-36	<p>Symptom code.</p> <p>1040B Read parity error (detected by 6DE).  1041B Write parity error (detected by 6DE).  1043B Drive not ready (detected by 6DE).  1100B Address error (detected by 6DE).</p>

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u> (Continued)
PP	2	35-30	PP that detected the error.
EST	3	59-48	EST ordinal of the device.
RTY	3	47-42	Number of retries attempted.
FLG	3	41-36 (41-38) (37)  (36)	Flag field. Reserved. Set if write operation; clear if read operation. Set if unrecovered error; clear if recovered error. Currently, this is always set, since all errors reported are unrecovered.
MID	3	23-12	Machine identifier in display code.
STATUS	4	47-36	Status returned from CPUMTR when error occurred. 1 Unrecoverable hardware error (UHES). 4 Unrecoverable parity error (UPES).
WCNT	4	35-24	When greater than 1, WCNT is the number of words being transferred when the error occurred. EM ADDR is the address of the beginning of that transfer. When equal to 1, EM ADDR is the actual address where the error occurred.
EM ADDR	4	23-0	Transfer address or error address in extended memory.

EXTENDED MEMORY ECS I, ECS II, LCME	MSGID 0070B, 0071B, 0072B, 0073B, 0074B, 0075B, 0076B
ERRORS DETECTED BY 1MC AND ELM	SYMPTOM 2040B, 2041B, 2440B, 2441B

Both 1MC and ELM issue the following message when an extended memory parity error occurs. 1MC reports errors detected by CPUMTR, and ELM reports errors detected by user programs while writing to or reading from user extended memory.

	59	47	41	35	23	17	11	0
Word 2	MSGID	SYMPTOM		0				
Word 3	EST	RTY	FLG	0	MID	0		
Word 4	FLAGS	RESERVED		WCNT	EM ADDR			
Word 5	FIRST DATA							
Word 6	SECOND DATA							
Word 7	0			CM ADDR				

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
MSGID	2	59-48	<p>Message identifier. The error occurred on the coupler path to extended memory, even if the device is defined with a DDP.</p> <p>0070B ECS I (DC135 DDP).  0071B ECS I (Coupler).  0072B ECS II (DC135 DDP).  0073B ECS II (Coupler).  0074B ECS I (DC145 DDP).  0075B ECS II (DC145 DDP).  0076B LCME.</p>

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u> (Continued)
SYMPTOM	2	47-36	Symptom code. 2040B Read parity error (detected by 1MC). 2041B Write parity error (detected by 1MC). 2440B Read parity error (detected by ELM). 2441B Write parity error (detected by ELM).
EST	3	59-48	EST ordinal of the device.
RTY	3	47-42	Number of retries attempted.
FLG	3	41-36 (41-38) (37)  (36)	Flag field. Reserved. Set if write operation; clear if read operation. Set if unrecovered error; clear if recovered error.
MID	3	23-12	Machine identifier in display code.
FLAGS	4	59-48 (59-50) (49)  (48)	Flag field. Reserved. Set if SECOND DATA is present; clear if not. Set if FIRST DATA is present; clear if not.
WCNT	4	35-24	When greater than 1, WCNT is the number of words being transferred when the error occurred. EM ADDR is the address of the beginning of that transfer. When equal to 1, EM ADDR is the actual address where the error occurred.
EM ADDR	4	23-0	Transfer address or error address in extended memory.

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description (Continued)</u>
FIRST DATA	5	59-0	This field shows bad data received on the initial read of recovered read parity errors. Data received on the initial read of unrecovered read parity errors is also shown, but it is not known if the data is bad or good. This field also shows data for write parity errors the driver tried to write to EM.
SECOND DATA	6	59-0	This field shows good data received on the retry of recovered read parity errors, and bad data received on the retry of unrecovered read parity errors. This field is not used for write parity errors.
CM ADDR	7	17-0	Address in central memory to which or from which the EM transfer was supposed to occur.

EXTENDED MEMORY (UEM)	MSGID 0077B
ERRORS DETECTED BY 6DX	SYMPTOM 1500B

6DX issues the following message when an address error occurs while attempting to read or write UEM.

	59	47	41	35	29	23	11	0
Word 2	0077B	1500B	PP			0		
Word 3	EST	RTY	FLG		0	MID		0
Word 4		0		WCNT		EM ADDR		

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
PP	2	35-30	PP that detected the error.
EST	3	59-48	EST ordinal of the device.
RTY	3	47-42	Number of retries attempted.
FLG	3	41-36 (40-38) (37) (36)	Flag field. Reserved. Set if write operation; clear if read operation. Set if unrecovered error; clear if recovered error.
MID	3	23-12	Machine identifier in display code.
WCNT	4	35-24	When greater than 1, WCNT is the number of words being transferred when the error occurred. EM ADDR is the address of the beginning of that transfer. When equal to 1, the EM ADDR is the actual address where the error occurred.
EM ADDR	4	23-0	Transfer address or error address in extended memory.



MSS	MSGID 0100B, 0101B, 0102B, 0103B, 0104B
USAGE	SYMPTOM 1200B

The following message is issued whenever a BML is created or recovered.

	59	47	41	35	29	23	17	11	5	0
Word 2	MSGID	1200B	PP	CH	CP	MSA	MST	0		
Word 3	EST	RES	MID	MSD	ESTC	CSU	CUN			
Word 4			CSN				XY			
Word 5	HEAD	TAPE	NPP	BW	BR	BS				
Word 6		0	RE	WE	SM					

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
MSGID	2	59-48	Message identifier. 0100B MST. 0101B CSU. 0102B MSS subsystem. 0103B MSA. 0104B Coupler.
PP	2	35-30	PP number.
CH	2	29-24	Channel number.
CP	2	23-18	Coupler number.
MSA	2	17-12	MSA unit number.
MST	2	11-6	MST unit number.
EST	3	59-48	EST ordinal of equipment in error.

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u> (Continued)
RES	3	47-36	Reserved for CDC.
MID	3	35-32	MSA MSID.
MSD	3	31-24	MST MSID.
ESTC	3	23-12	EST ordinal of CSU.
CSU	3	11-5	CSU MSID.
CUN	3	4-0	CSU unit number.
CSN	4	59-12	Cartridge serial number.
XY	4	11-0	X and Y locations.
HEAD	5	59-48	Number of head changes.
TAPE	5	47-42	Number of tape passes.
NPP	5	41-36	Number of picks and puts.
BW	5	35-24	Number of blocks written.
BR	5	23-12	Number of block read.
BS	5	11-0	Block size/100.
RE	6	35-24	Number of read errors.
WE	6	23-12	Number of write errors.
SM	6	11-0	Count of selection moves.

MSS	MSGID 0100B, 0101B, 0102B, 0103B, 0104B
ERROR CONDITIONS	SEE SECTION 4

The following message is issued whenever a BML is created or recovered.

	59	47	41	35	29	23	17	11	5	0
Word 2	MSGID	SYMPTOM	PP	CH	CP	MSA	DEV	0		
Word 3	EST	RTY	FLG	CHR		0				
Word 4	EO	SEC	MID	MSD	C	CHPC		XY		
Word 5		CSN						XYL		
Word 6	LCT	LCS	CT			CS		LCT		
Word 7	LCTM	CWC	PES			OC		IC		
Word 8	CBS	BN	SN			MIDS		DRM		
Word 9	0					MSDA				
Word 10						MSDA				
Word 11						MSDA				
Word 12						MCSA				
Word 13						MCSA				
Word 14						MCSA				

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
MSGID	2	59-48	Message identifier. 0100B MST. 0101B CSU. 0102B MSS subsystem. 0103B MSA. 0104B Coupler.
SYMPTOM	2	47-35	Symptom code. See Section 4.
PP	2	35-30	PP number.
CH	2	29-24	Channel number.
CP	2	23-18	Coupler unit number.
MSA	2	17-12	MSA unit number.
DEV	2	11-6	Unit number of MST or CSU reflected by EST entry.
EST	3	59-48	EST ordinal of equipment in error.
RTY	3	47-42	Retry count.
FLG	3	41-36	Status flag. Bit 37: Set if write operation. Clear if read operation. Bit 36: Set if unrecovered error. Clear if recovered error.
CHR	3	35-30	Channel used for recovery operation.
EO	4	59-48	Error type overflow word.
SEC	4	47-36	Secondary error code.
MID	4	35-32	MSA MSID.
MSD	4	31-24	The unit MSID (MST or CSU) reflected by EST ordinal.
CHPC	4	23-12	The channel program element that failed.
XY	4	11-0	X,Y location from which software asked the cartridge to be loaded.
CSN	5	59-12	Cartridge serial number.

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u> (Continued)
XYL	5	11-0	Actual cartridge X,Y coordinates from cartridge label. Set to 7777B if the cartridge was entered via an I/O drawer or has no label.
LCT	6	59-48	Last coupler function issued at time of error.
LCS	6	47-36	Last coupler status.
CT	6	35-24	CTL tag status (bug in).
CS	6	23-12	Last CTL tag.
LCT	6	11-0	CTL tag modifier (bug out).
LCTM	7	59-48	Last coupler tag issued at time of error.
CWC	7	47-36	Coupler buffer word counter status.
PES	7	35-24	Coupler buffer parity error status.
OC	7	23-12	Coupler buffer output counter.
IC	7	11-0	Coupler buffer input counter.
CBS	8	59-48	Block size written or read from cartridge divided by 0100B.
BN	8	47-36	Cartridge block number at time of error.
SN	8	35-24	Stream number at time of error.
MIDS	8	23-12	MST ID that wrote the cartridge.
DRM	8	11-0	Recovery method used by MSS driver.
MSDA	9	39-0	MSA sense data.
MSDA	10	59-0	MSA sense data.
MSDA	11	59-0	MSA sense data.
MCSD	12	59-0	MST/CSU sense data.
MCSD	13	59-0	MST/CSU sense data.
MCSD	14	59-0	MST/CSU sense data.

! MSE (7990)	! MSGID 0105B
! FSC ERRORS	! SYMPTOM 0001B, 0002B, 0003B, 0004B !
	! 0005B, 0006B, 0007B, 0010B !
	! 0011B, 0012B, 0020B, 0021B !
	! 0022B, 0023B, 0024B, 0025B !
	! 0026B, 0027B, 0030B, 0031B !
	! 0032B, 0033B

The following message is issued whenever a BML is created or recovered.

	59	47	35	29	23	11	5	0
Word 2	0105B	SYMPTOM	0	CH	0	UN	DRD	
Word 3	EST		0		MID		0	
Word 4			0					
Word 5			0					
Word 6		GS				DS		
Word 7			DS					
.			.					
.			.					
.			.					
Word 10			DS					

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
SYMPTOM	2	47-36	Symptom code.
			0001B Invalid function.
			0002B Data length error.
			0003B Control word error.
			0004B Buffer argument error.
			0005B Header/trailer error.
			0006B End of volume.
			0007B Invalid unit number.
			0010B Buffer timeout error.

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description (Continued)</u>
			0011B Tape bottom right.
			0012B Terminate flag detected.
			0020B Status error.
			0021B Channel hung on input.
			0022B Channel hung on output.
			0023B Function timeout.
			0024B No end of operation.
			0025B Channel malfunction.
			0026B Channel parity error.
			0027B FSC memory parity error.
			0030B FSC not running.
			0031B FSC abnormal.
			0032B FSC diagnostic failure.
			0033B Checksum error (CM drivers).
CH	2	29-24	Primary channel used.
UN	2	11-6	Unit number of an SM.
DRD	2	5-0	DRD unit number.
EST	3	59-48	EST ordinal of controller.
MID	3	23-12	Machine identifier.
GS	6	59-24	FSC general status and detailed status origin words.
DS	6	23-0	First two bytes of 7990 detail status.
DS	7-10	59-0	Reminder of 7990 detailed status. The 7990 detailed status consists of 18-8 bit parcels. Each parcel is packed into a 12-bit byte.

MSE (7990)	MSGID 0106B
FSC ERRORS	SYMPTOM 0036B, 0060B, 0100B, 0101B 0103B, 0104B, 0107B, 0140B 0141B

The following message is issued whenever a BML is created or recovered.

	59	47	35	29	23	11	0
Word 2	0106B	SYMPTOM	0	CH		0	
Word 3	EST		0		MID		0
Word 4	7990 ERROR LOG MESSAGE						
Word 5	7990 ERROR LOG MESSAGE						
.	.						
.	.						
.	.						
Word 20	7990 ERROR LOG MESSAGE						
Word 21	7990 ERROR LOG MESSAGE						0

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
SYMPTOM	2	47-36	Symptom code. 0036B Error log overflow. 0060B CIF, DTI/DTO errors. 0100B DRD,DRC,DIF,DTI/DTO errors (device/diagnostic driver). 0101B Accessor errors (drive/diagnostic driver). 0103B Drive/path status change. 0104B ALT DRD, DRC, DIF, DTI/DTO errors (device/diagnostic driver).



<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u> (Continued)
			0107B Device driver software error.
			0140B CPU/memory hardware detected errors.
			0141B Software errors.
CH	2	29-24	Primary channel used.
EST	3	59-48	EST ordinal of the controller.
MID	3	23-12	Machine identifier.

MSE (7990)	MSGID 0107B
USAGE	SYMPTOM 1200B

The following message is issued whenever a BML is created or recovered.

	59	47	41	35	29	23	11	5	0
Word 2	0107B	1200B	0	CH	0	UN	DRD		
Word 3	EST		0		MID		0		
Word 4	0	X	Y				0		
Word 5	CCOD			CSND					
Word 6	BUFFERED LOG								
.	.								
.	.								
.	.								
Word 25	BUFFERED LOG								

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
CH	2	29-24	Primary channel used.
UN	2	11-6	SM unit number.
DRD	2	5-0	DRD unit number.
EST	3	59-48	EST ordinal of the controller.
MID	3	23-12	Machine identifier in display code.
X	4	38-34	Vertical coordinate cartridge location.
Y	4	33-30	Horizontal coordinate cartridge location.
CCOD	5	59-48	Identifier letter of the cartridge maker (I=IBM).
CSND	5	47-0	Cartridge serial number in display code.

! ROTATING MASS STORAGE	! MSGID	! 0110B, 0111B	!
! 7255/834	! SYMPTOM	! 0024B, 0040B, 0041B, 0043B	!
! 7255/836	!	! 0050B, 0051B, 0056B, 0063B	!
!	!	! 0100B, 0102B, 0103B	!

6DJ will issue the following pair of BML messages once per 834/836 mass storage error. The message pair is issued when the error is either recovered or goes unrecovered, so that the last general and detailed status taken before recovery or giving up are the ones reported.

The first message has the following form.

	59	47	41	35	29	23	17	11	0
Word 2	MSGID	SYMPTOM	PP	CH	0	UN	0		
Word 3	EST	RTY	FLG	CHR	0	MID	0		
Word 4	DETAILED STATUS (Words 1-5)								
Word 5	DETAILED STATUS (Words 6-10)								
Word 6	DETAILED STATUS (Words 11-15)								
Word 7	DETAILED STATUS (Words 16-20)								

The continuation message has the following form.

	59	47	41	35	29	23	17	11	0
Word 2	MSGID	SYMPTOM	PP	CH	0	UN	0		
Word 3	EST	RTY	FLG	CHR	0	MID	0		
Word 4	FLAGS		0			FUNC	GS		

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
MSGID	2	59-48	Message identifier. 0110B 834. 0111B 836.
SYMPTOM	2	47-36	Symptom code. 0024B Channel parity error (detected by 6DJ). 0040B Read parity error (detected by 6DJ). 0041B Write parity error (detected by 6DJ). 0043B Device not ready (detected by 6DJ). 0050B Firmware dead (detected by 6DJ). 0051B Cannot autoloading controller (detected by 6DJ). 0056B Unit reserve error (detected by 6DJ). 0063B RAM parity error (detected by 6DJ). 0100B Address error (detected by 6DJ). 0102B Status error (detected by 6DJ). 0103B Controller reserve error (detected by 6DJ).
PP	2	35-30	PP that detected the error.
CH	2	29-24	Channel on which the error was detected. Not meaningful for symptom code 0100B (address errors).
UN	2	17-12	Physical unit number of the unit on which the error was detected.
EST	3	59-48	EST ordinal of the device.
RTY	3	47-42	Number of retries attempted.
FLG	3	41-36 (41-40) (39) (38) (37)	Flag field. Reserved. Set if second message of pair; clear if first message of pair. Set if first message of pair; clear if second message of pair. Set if write operation; clear if read operation.



! ROTATING MASS STORAGE (834/836) !	! MSGID 0110B, 0111B !
! 1 DIAGNOSTIC RESULTS !	! SYMPTOM 0200B !

If an unrecoverable error meeting special criteria is detected on an 834 or 836 drive, a power up drive function is used to initiate the level 1 diagnostics in the control module. The NOS driver 6DJ will issue the following pair of messages to the BML after the power up drive (558) function is completed.

The first message has the following form.

	59	47	41	35	29	23	17	11	0
Word 2	MSGID	0200B	PP	CH	0	UN	0		
Word 3	EST	RTY	FLG	0		MID	0		
Word 4	DETAILED STATUS (Words 1-5)								
Word 5	DETAILED STATUS (Words 6-10)								
Word 6	DETAILED STATUS (Words 11-15)								
Word 7	DETAILED STATUS (Words 16-20)								

The continuation message has the following form.

	59	47	41	35	29	23	17	11	0
Word 2	MSGID	0200B	PP	CH	0	UN	0		
Word 3	EST	RTY	FLG	0		MID	0		
Word 4				0					GS

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
MSGID	2	59-48	Message identifier. 0110B 834. 0111B 836.
PP	2	35-30	PP that detected the error.
CH	2	29-24	Channel on which the error was detected.
UN	2	17-12	Physical unit number of the unit on which the error was detected.
EST	3	59-48	EST ordinal of the device.
RTY	3	47-42	Number of retries attempted.
FLG	3	41-36 (41-40) (39) (38) (37) (36)	Flag field. Reserved. Set if second message of pair; clear if first message of pair. Set if first message of pair; clear if second message of pair. Set if write operation; clear if read operation. Set if unrecovered error; clear if recovered error.
MID	3	23-12	Machine identifier in display code.
DETAILED STATUS	4-7	59-0	Detailed status. See 834 or 836 Intelligent Small Disk Subsystem Hardware Reference Manual for more information on the format of detailed status after Level 1 diagnostics have been run.
GS	4	11-0	General status. If zero, then no errors were detected. See the 834 or 836 Intelligent Small Disk Subsystem Hardware Reference Manual for more information on the format of general status after Level 1 diagnostics have been run.

ROTATING MASS STORAGE	MSGID 0115B
7165/895	SYMPTOM 4003B, 4004B, 4005B, 4013B, 4024B, 4050B, 4074B, 4105B

The following message will be logged in the Binary Maintenance Log whenever an abnormality is discovered by the 895 driver (1XM) while functioning the Cyber Channel Coupler.

	59	47	41	35	29	23	17	11	0
Word 2	0115B	SYMPTOM	PP	CH	0	UN	0		
Word 3	EST	RTY	FLG	CHR	0	MID	0		
Word 4	FLAGS	IE	IF	IGS	GS				
Word 5	DETAILED STATUS BYTES 0 - 4								
Word 6	DETAILED STATUS BYTES 5 - 11								
Word 7	DETAILED STATUS BYTES 12 - 16								
Word 8	DETAILED STATUS BYTES 17 - 23								

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
SYMPTOM	2	47-36	Symptom code. 4003B Channel full. 4004B Channel empty. 4005B Incomplete data transfer. 4013B Channel stays inactive after activate. 4024B Channel parity error. 4050B Firmware dead. 4074B General status. 4105B Track flawed.



<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
PP	2	35-30	PP that detected the error.
CH	2	29-24	Channel on which the error was detected.
UN	2	17-12	Physical unit number of the drive being accessed when the error occurred.
EST	3	59-48	EST ordinal of the logical device.
RTY	3	47-42	Number of retries attempted.
FLG	3	41-36 (41-38) (37)  (36)	Flag field. Reserved. Set if write operation; clear if read operation. Set if unrecovered error.
CHR	3	35-30	Channel used for recovery.
MID	3	23-12	Machine identifier of the mainframe on which the error occurred.
FLAGS	4	59-48 (59-52) (51)  (50)  (49)  (48)	Flag field. Reserved. Set if isolation general status is reported. Set if detailed status is not obtainable. Set if general status is not obtainable. Set if channel controlware reload occurred or zero-word autoloading is issued.
IE	4	47-36	Initial error code. Symptom code of initial error.
IF	4	35-24	Initial function that received an error.

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
IGS	4	23-12	Isolation general status. After a zero-word autoloading, if general status contains a 5xxx value, xxx may help to isolate the error to a board. This field contains the 5xxx value when flag bit 51 is set.
GS	4	11-0	Value of general status after an error was encountered.

The detailed status byte information is defined in the CYBER Channel Coupler ERS.

ROTATING MASS STORAGE	MSGID	0115B
7165/895	SYMPTOM	0024B, 0040B, 0041B, 0043B, 0050B, 0051B, 0056B, 0063B, 0102B, 0103B, 0105B

The NOS driver, 6DI, will issue the following pair of BML messages once per rotating mass storage error. The message pair is issued when the error is either recovered or goes unrecovered, so that the last general and detailed status taken before recovery or giving up are the ones reported.

The first message has the following form.

	59	47	41	35	29	23	17	11	0
Word 2	0115B	SYMPTOM	PP	CH	0	UN	0		
Word 3	EST	RTY	FLG	CHR	0	MID	0		
Word 4	DETAILED STATUS								
Word 5	DETAILED STATUS								
Word 6	DETAILED STATUS								
Word 7	DETAILED STATUS								

The continuation message has the following form.

	59	47	41	35	29	23	17	11	0
Word 2	0115B	SYMPTOM	PP	CH	0	UN	0		
Word 3	EST	RTY	FLG	CHR	0	MID	0		
Word 4	FLAGS	RESERVED				FUNC	GS		

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
SYMPTOM	2	47-36	Symptom code. 0024B Channel parity error. 0040B Read parity error. 0041B Write parity error. 0043B Device not ready. 0050B Firmware dead. 0051B Cannot autoload controller. 0056B Unit reserve error. 0063B RAM parity error. 0100B Address error. 0102B Status error. 0103B Controller reserve error. 0105B Media error.
PP	2	35-30	PP that detected the error.
CH	2	29-24	Channel on which the error was detected.
UN	2	17-12	Physical unit number of the drive being accessed when the error occurred.
EST	3	59-48	EST ordinal of the logical device.
RTY	3	47-42	Number of retries attempted.
FLG	3	41-36 (41-40) (39) (38) (37) (36)	Flag field. Reserved. Set if second message of pair; clear if first message of pair. Set if first message of pair; clear if second message of pair. Set if write operation; clear if read operation. Set if unrecovered error; clear if recovered error.
CHR	3	35-30	Channel used to attempt recovery.
MID	3	23-12	Machine identifier of mainframe on which the error occurred.
FLAGS	4	59-48	Bits (59-49) = unused. Bit (48) = 1 if channel controlware reload occurred.

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
FUNC	4	23-12	Last function issued before a function timeout. (Valid only for symptom codes 0024B, 0050B, 0051B, and 0063B.)
GS	4	11-0	General status.

The general status and detailed status byte information are defined in the CYBER Channel Coupler ERS.

! ROTATING MASS STORAGE	! MSGID 0115B
! 7165/895	! SYMPTOM 1040B, 1041B, 1100B

The NOS driver, 6DE issues the following message when the PIOM monitor function reports an unrecoverable error on a DC device even though CPUMTR also reports the error to the BML. This message is issued solely to report that a PP attempted to read the sector in error. Since CPUMTR reads data from these disks in large blocks, sectors may be read which no PP will ever need.

	59	47	41	35	29	23	11	5	0
Word 2	! 0115B	! SYMPTOM	! PP	!	!	!	!	!	!
Word 3	! EST	! RTY !	! FLG	!	!	!	!	!	!
Word 4	! RESERVED	! STATUS	!	!	!	!	!	!	!

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
SYMPTOM	2	47-36	Symptom code. 1040B Read parity error. 1041B Write parity error. 1100B Address error.
PP	2	35-30	PP that detected the error.
EST	3	59-48	EST ordinal of the logical device.
RTY	3	47-42	Number of retries attempted.
FLG	3	41-36 (41-38) (37)  (36)	Flag field. Reserved. Set if write operation; clear if read operation. Set if unrecovered error; should never be clear.

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
MID	3	23-12	Machine identifier of mainframe on which the error occurred.
STATUS	4	47-36	Status returned from CPUMTR when the error occurred. 1 = Unrecoverable hardware error (UHES). 4 = Unrecoverable parity error (UPES).
UN	4	29-24	Unit number.
CYL	4	23-12	Cylinder.
TK	4	11-6	Track.
SC	4	5-0	Sector.

```

-----
!           !
! ROTATING MASS STORAGE      ! MSGID: 0120B, 0121B      !
!           !
-----
!           !
! CHANNEL DOWN BY SYSTEM     ! SYMPTOM: 0015B        !
!           !
-----

```

The following message is issued to the BML by IMP whenever LHY downs a channel as a result of attempting to recover from an uncorrected error.

```

          59          47          35   29   23   17   11   5   0
-----
WORD 2  !   MSGID   ! SYMPTOM ! CPP ! CCH ! EQ ! UN ! PT ! 0 !
        !           !         !     !     !   !   !   !   !
-----
WORD 3  !   EST     !         !     !     !   !   ! 0 !
        !           !         !     !     !   !   !   !
-----

```

<u>FIELD</u>	<u>WORD</u>	<u>LOCATION</u>	<u>DESCRIPTION</u>
MSGID	2	59-48	Message ID. 0120B 887 (4K byte sector) 0121B 887 (16K byte sector)
SYMPTOM	2	47-36	Symptom Code. 0015B Channel downed by system.
CPP	2	35-30	Concurrent PP that reported the error.
CCH	2	29-24	Concurrent channel used to obtain status.
EQ	2	23-18	Equipment number of disk (always 0).
UN	2	17-12	Unit number of disk.
PT	2	11-6	Concurrent channel port. 0 Port A 1 Port B
EST	3	59-48	EST ordinal of failing device.
MID	3	23-12	Machine ID.



```

-----
!
!   ROTATING MASS STORAGE           !   MSGID:  0120B, 0121B           !
!
!-----
!
!   EQUIPMENT TURNED OFF BY SYSTEM !   SYMPTOM:  0030B           !
!
!-----

```

The following message is issued to the BML by LHY whenever the system turns off equipment as a result of attempting to recover from an uncorrected error.

```

          59          47          35   29   23   17   11   5   0
-----
WORD 2  !   MSGID   ! SYMPTOM ! CPP ! CCH ! EQ ! UN ! PT ! 0 !
!-----
WORD 3  !   EST     !         0   !   MID   !         0   !
!-----

```

<u>FIELD</u>	<u>WORD</u>	<u>LOCATION</u>	<u>DESCRIPTION</u>
MSGID	2	59-48	Message ID. 0120B 887 (4K byte sector) 0121B 887 (16K byte sector)
SYMPTOM	2	47-36	Symptom Code. 0030B Equipment turned off.
CPP	2	35-30	Concurrent PP that reported the error.
CCH	2	29-24	Concurrent channel used to obtain status.
EQ	2	23-18	Equipment number of disk (always 0).
UN	2	17-12	Unit number of disk.
PT	2	11-6	Concurrent channel port. 0 Port A 1 Port B
EST	3	59-48	EST ordinal of failing device.
MID	3	23-12	Machine ID.

```

-----
!
!   ROTATING MASS STORAGE   !   MSGID:  0120B, 0121B   !
!
-----
!
!   ERRORS DETECTED        !   SYMPTOM:  0100B, 0105B   !
!   BY THE 887 DRIVER 1HY  !
!
-----

```

The following BML message will be issued by the 887 driver, 1HY, whenever an error is encountered by the disk. Additional BML messages containing first failure data may follow this BML message. The EST and RTRY field may be used to group the messages.

	59	47	42	35	29	23	17	11	6	0
WORD 2	MSGID	SYMPTOM	CPP	CCH	EQ	UN	PT	0		
WORD 3	EST	RTRY	FLG	0		MID		0		
WORD 4	INITIAL FAULT	T-REG FAULT	STATUS FAULT		REC FAULT		FINAL FAULT			
WORD 5	0	RBC	STC		CYL	TK	SC			
WORD 6	ES	IDLE		BSR		LSC				
WORD 7	LSC	LCF	ERROR	0		OPER				
WORD 10	0	F	CONTROL			0				
WORD 11	0				TREG					
WORD 12	DS0	DS1		DS2		DS3				
WORD 13	DS3	DS4		DS5		DS6		SS0		
WORD 14	SS0	SS1		SS2		SS3		SS4		
WORD 15	SS4	SS5		SS6		SS7				

<u>FIELD</u>	<u>WORD</u>	<u>LOCATION</u>	<u>DESCRIPTION</u>
MSGID	2	59-48	Message ID. 0120B = 887 (4K byte sector) 0121B = 887 (16K byte sector)
SYMPTOM	2	47-36	Symptom Code. 0100B = Driver detected error - recovery in progress. 0105B = Driver detected uncorrected error.
CPP	2	35-30	Concurrent PP that reported the error.
CCH	2	29-24	Concurrent channel used to obtain status. (Channel number is biased by 40B).
EQ	2	23-18	Equipment number of disk (always 0).
UN	2	17-12	Unit number of disk.
PT	2	11-6	Concurrent channel port. 0 Port A 1 Port B
EST	3	59-48	EST ordinal of failing device.
RTRY	3	47-42	Number of retries already performed by the 887 driver.
FLG	3	41-36	Flag field. (39) Always clear to indicate last block of message. (38) Always clear to indicate first block of message. (37) Clear if read operation. Set if write operation. (36) Set if unrecovered error. Clear if recovery in progress.
MID	3	23-12	Machine ID.
INITIAL FAULT	4	59-48	Initial driver fault code. This code indicates the condition which the driver detected. The initial fault code is based solely on where the driver was when it detected the error. No analysis of first failure data has been performed. (Refer to the CYBER Systems Peripheral Diagnostic Reference Manual for a description of the fault codes.)

<u>FIELD</u>	<u>WORD</u>	<u>LOCATION</u>	<u>DESCRIPTION</u>
T-REG FAULT	4	47-36	If zero, the T-REG field contains valid T-Register information. If non-zero, the T-REG field does not contain valid T-Register information. In this situation, the T-REG FAULT field contains the fault code that was generated when the T-Register could not be read.
STATUS FAULT	4	35-24	If zero, first failure status was successfully retrieved from the disk. The status includes the disk status (function word 80-86), device status (function words 90-92), the disk error register image, and the disk error log. If an error is encountered by the error processor while this information was being obtained, the fault code associated with this failure will be placed in the STATUS FAULT field. If the STATUS FAULT field is non-zero, the disk status and device status will not be present. The error processor will continue processing the initial error that was encountered.
REC FAULT	4	23-12	If zero, no error was encountered while recovering a specific type of disk error (not ready, media, etc.). If negative zero, no specific error recovery was required or performed for the error that was encountered. If non-zero, specific error recovery failed. In this situation, this field contains the fault code associated with the failure.
FINAL FAULT	4	11-0	This is the final fault code the driver has associated with the initial failure. It is based on the initial fault code. However, additional analysis of the first failure data has been performed to generate the FINAL FAULT.

<u>FIELD</u>	<u>WORD</u>	<u>LOCATION</u>	<u>DESCRIPTION</u>
RBC	5	47-36	Residue byte count associated with incomplete channel transfers. This field contains the number of bytes that have not been transferred. This field applies when an Incomplete Data Transfer fault code is reported.
STC	5	35-24	Consecutive sector transfer count since the initial seek. This information is always valid. When used in conjunction with the initial seek parameters, it can be determined where the disk was transferring data to at the time of the failure. This field may be zero if the error was encountered while spinning up or down the drive, or in executing level 1 or level 2 diagnostics.
CYL	5	23-12	Cylinder number of initial seek.
TK	5	11-6	Track number of initial seek.
SC	5	5-0	Sector number of initial seek.
ES	6	59-44	First word of disk status (function word 80) that was last read from the disk.
IDLE	6	43-28	Channel idle status associated with the channel.
BSR	6	27-12	Bit significant response.
LSC	6	11-0	Last command given to the disk before the error was detected.
LSC	7	59-56	Last command given to the disk before the error was detected.
LCF	7	55-40	Last function issued to the channel before error was detected.
ERROR	7	39-24	Error register associated with the channel.

<u>FIELD</u>	<u>WORD</u>	<u>LOCATION</u>	<u>DESCRIPTION</u>
OPER	7	15-0	Operational status register associated with the channel.
F	10	55-52	Channel flags associated with the channel.
		(55)	Active flag
		(54)	Full flag
		(53)	Error flag
		(52)	Channel flag
CONTROL	10	51-36	Control register associated with the channel.
TREG	11	48-0	T-register associated with the channel. This field contains valid data only if the T-REG FAULT field is zero.
DS0	12	59-44	First word of disk status (function word 80).
DS1	12	43-28	Second word of disk status (function word 81).
DS2	12	27-12	Third word of disk status (function word 82).
DS3	12	11-0	Fourth word of disk status (function word 83).
DS3	13	59-56	Fourth word of disk status (function word 83).
DS4	13	55-40	Fifth word of disk status (function word 84).
DS5	13	39-24	Sixth word of disk status (function word 85).
DS6	13	23-8	Seventh word of disk status (function word 86).
SS0	13	7-0	First word of drive status (function word 90).
SS0	14	59-52	First word of drive status (function word 90).
SS1	14	51-36	Second word of drive status (function word 91).
SS2	14	35-20	Third word of drive status (function word 92).

<u>FIELD</u>	<u>WORD</u>	<u>LOCATION</u>	<u>DESCRIPTION</u>
SS3	14	19-4	Fourth word of drive status (function word 93).
SS4	14	3-0	Fifth word of drive status (function word 94).
SS4	15	59-48	Fifth word of drive status (function word 94).
SS5	15	47-32	Sixth word of drive status (function word 95).
SS6	15	31-16	Seventh word of drive status (function word 96).
SS7	15	15-0	Eighth word of drive status (function word 97).

Refer to the CDC Intelligent Hydra Drive Hardware Maintenance manual, Volume 2 of 4 for the format of the BSR, IDLE, and LSC fields. Refer to the CYBER 840A, 850A and 860A Computer Systems Hardware Reference manual, Volume 2 for the format of the LCF field.

```

-----
!   ROTATING MASS STORAGE   !   MSGID:  0120B, 0121B   !
!                           !   !                           !
!-----
!   DISK ERRORS - FIRST FAILURE ! SYMPTOM:  0103B   !
!   DATA (ERROR REGISTER IMAGE) !   !                           !
!-----

```

The following BML message will be issued by the 887 driver, 1HY, whenever an error is reported by the disk and the error register image has changed since the last time it has been logged. The driver assumes the disk is reporting an error when Check End is set and System Intervention Status or Manual Intervention Status is present.

	59	47	41	35	29	23	17	11	5	0
WORD 2	MSGID	SYMPTOM	CPP	CCH	EQ	UN	PT	0		
WORD 3	EST	RTRY!	FLG	0		MID		0		
WORD 4	ERROR REGISTER IMAGE									
WORD 5	ERROR REGISTER IMAGE									
WORD 6	ERROR REGISTER IMAGE									
WORD 7	ERROR REGISTER IMAGE									
WORD 8	ERROR REGISTER IMAGE									
WORD 9	ERROR REGISTER IMAGE									
WORD 10	ERROR REGISTER IMAGE									
WORD 11	ERROR REGISTER IMAGE									



```

-----
!                                     !
WORD 12 !                               !
!                                     !
!-----!
!                                     !
WORD 13 !                               !
!                                     !
!-----!
!                                     !
WORD 14 !                               !
!                                     !
!-----!
!                                     !
WORD 15 !                               !
!                                     !
!-----!
!                                     !
WORD 17 !                               !
!                                     !
!-----!

```

<u>FIELD</u>	<u>WORD</u>	<u>LOCATION</u>	<u>DESCRIPTION</u>
MSGID	2	59-48	Message ID. 0120B 887 (4K byte sector) 0121B 887 (16K byte sector)
SYMPTOM	2	47-36	Symptom Code. 0103B Disk error.
CPP	2	35-30	Concurrent PP that reported the error.
CCH	2	29-24	Concurrent channel used to obtain status.
EQ	2	23-18	Equipment number of disk (always 0).
UN	2	17-12	Unit number of disk.
PT	2	11-6	Concurrent channel port. 0 Port A 1 Port B
EST	3	59-48	EST ordinal of failing device.
RTRY	3	47-42	Number of retries already performed by the 887 driver. Each unsuccessful retry will result in a BML message.

<u>FIELD</u>	<u>WORD</u>	<u>LOCATION</u>	<u>DESCRIPTION</u>
FLG	3	41-36 (39) (38) (37)	Flag field. Always clear to indicate first block of message. Always clear to indicate last block of message. Clear if read operation. Set if write operation.
MID	3	23-12	Machine ID.

Refer to the CDC Intelligent Hydra Drive Hardware Reference Manual for the format of the Error Register Image.

The Error Register may not be valid or be associated with the error being reported in the disk Status Block.



	59	30	0
WORD 11	ERROR ENTRY 6	ERROR ENTRY 7	
WORD 12	ERROR ENTRY 7	ERROR ENTRY 8	
WORD 13	ERROR ENTRY 8	ERROR ENTRY 9	
WORD 14	ERROR ENTRY 9	ERROR ENTRY 10	
WORD 15	ERROR ENTRY 10	ERROR ENTRY 11	
WORD 16	ERROR ENTRY 11	0	

FIELD	WORD	LOCATION	DESCRIPTION
MSGID	2	59-48	Message ID. 0120B 887 (4K byte sector) 0121B 887 (16K byte sector)
SYMPTOM	2	47-36	Symptom Code. 0104B Disk error log.
CPP	2	35-30	Concurrent PP that reported the error.
CCH	2	29-24	Concurrent channel used to obtain status.
EQ	2	23-18	Equipment number of disk (always 0).
UN	2	17-12	Unit number of disk.
PT	2	11-6	Concurrent channel port. 0 Port A 1 Port B
EST	3	59-48	EST ordinal of failing device.
FLG	3	41-36 (39) (38)	Flag field. Always clear to indicate first block of message. Always clear to indicate last block of message.
MID	3	23-12	Machine ID.

Refer to the CDC Intelligent Hydra Drive Hardware Maintenance Manual, Volume 2 of 4 for the format of the error log entries.

```

-----
!           !           !
!   ROTATING MASS STORAGE   !   MSGID: 0120B, 0121B   !
!           !           !
-----
!           !           !
!   ERROR RECOVERY SUMMARY   !   SYMPTOM: 0105B   !
!           !           !
-----

```

The following BML message will be issued by the 887 driver, 1HY, whenever the error recovery process has completed processing an error. This message is intended to indicate that an error was recovered.

```

          59          47          35   29   23   17   11   5   0
-----
WORD 2   !   MSGID   !   SYMPTOM   ! CPP ! CCH ! EQ ! UN ! PT ! 0 !
          !           !           !     !     !   !   !   !   !
          -----
WORD 3   !   EST     ! RTRY! FLG !   0   ! MID   !   0   !
          !           !   !     !     !     !   !   !   !
          -----

```

FIELD	WORD	LOCATION	DESCRIPTION
MSGID	2	59-48	Message ID. 0120B 887 (4K byte sector) 0121B 887 (16K byte sector)
SYMPTOM	2	47-36	Symptom Code. 0105B Error processing summary
CPP	2	35-30	Concurrent PP that processed the error last.
CCH	2	29-24	Concurrent channel used to obtain status.
EQ	2	23-18	Equipment number of disk (always 0).
UN	2	17-12	Unit number of disk.
PT	2	11-6	Concurrent channel port. 0 Port A 1 Port B

FIELD	WORD	LOCATION	DESCRIPTION
-----	-----	-----	-----
EST	3	59-48	EST ordinal of failing disk.
RTRY	3	47-42	Number of retries already performed by the 887 driver.
FLG	3	41-36	Flag field.
		(39)	Always clear to indicate first block of message.
		(38)	Always clear to indicate last block of message.
		(37)	Clear if read operation. Set if write operation.
		(36)	Clear if recovered error. Set if unrecovered error.
MID	3	23-12	Machine ID.

! ROTATING MASS STORAGE !	! MSGID: 0120B, 0121B !
! HYDRA DIAGNOSTIC STATUS !	! SYMPTOM: 0106B, 0107B !

The following message is issued by lHY whenever it completes processing a level I or a level II diagnostic. The results of the diagnostics are found in the disk status logged as part of this message.

	59	46	34	22	10	0		
WORD 2	MSGID	SYMPTOM	CPP	CCH	EQ	UN	PT	0
WORD 3	EST	RTRY	FLG	0	MID		0	
WORD 4	STATUS							
WORD 5	STATUS						0	

<u>FIELD</u>	<u>WORD</u>	<u>LOCATION</u>	<u>DESCRIPTION</u>
MSGID	2	59-48	Message ID. 0120B = 887 (4K format) 0121B = 887 (16K format)
SYMPTOM	2	47-36	Symptom code. 0106B Level I diagnostic results. 0107B Level II diagnostic results.
CPP	2	35-30	Concurrent PP that processed the error last.
CCH	2	29-24	Concurrent channel used to obtain status. (Channel number is biased by 40B.)
EQ	2	23-18	Equipment number of disk (always 0).
UN	2	17-12	Unit number of disk.
PT	2	11-6	Concurrent channel port. 0 Port A 1 Port B
EST	3	59-48	EST ordinal of failing disk.

<u>FIELD</u>	<u>WORD</u>	<u>LOCATION</u>	<u>DESCRIPTION</u>
RTRY	3	47-42	Number of retries already performed by the 887 driver.
FLG	3	41-36	Flag field.
		(39)	Always clear to indicate first block of message.
		(38)	Always clear to indicate last block of message.
		(37)	Clear if read operation. Set if write operation.
		(36)	Clear if recovered error. Set if unrecovered error.
MID	3	23-12	Machine ID.
STATUS	4	59-0	Disk status block.
STATUS	5	59-12	Disk status block.



MAINFRAME (170 MODELS)	MSGID	0200B
SECDED SINGLE BIT CORRECTED ERROR	SYMPTOM	0100B

These messages are issued for the first occurrence of each unique single bit SECDED error. If channel 36 is not present, only the first message is issued.

The first message has the following form.

	59	47	41	35	29	23	0
Word 2	0200B	0100B	PP	16B		0	
Word 3	0	04				0	
Word 4	SCR, CHANNEL 16 (Bits 203-144)						
Word 5	SCR, CHANNEL 16 (Bits 143-84)						
Word 6	SCR, CHANNEL 16 (Bits 83-24)						
Word 7	SCR (Bits 23-0)		OP			0	

The continuation message has the following form.

	59	47	41	35	29	23	0
Word 2	0200B	0100B	PP	36B			0
Word 3		10					0
Word 4	SCR, CHANNEL 36 (Bits 203-144)						
Word 5	SCR, CHANNEL 36 (Bits 143-84)						
Word 6	SCR, CHANNEL 36 (Bits 83-24)						
Word 7	SCR (Bits 23-0)			OP			0

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
PP	2	35-30	PP that detected the error.
OP	7	35-24	Options installed. This field contains byte one of CMR word MABL.

! MAINFRAME (170 MODELS)	! MSGID 0200B
! SECDED SINGLE BIT SUMMARY TABLE	! SYMPTOM 0101B

The following message is repeated until all unique SECDED errors that were logged have been issued to the BML. The continuation flag in word 3 is set to zero for the last message in the sequence.

	59	47	41	35	29	23	5	0
Word 2	0200B	0101B	PP	16B			0	
Word 3	0	FLG					0	
Word 4		SID					0	CT
Word 5		SID					0	CT
Word 6		SID					0	CT
Word 7		SID					0	CT

<u>Field</u>	<u>Location</u>	<u>Description</u>
PP	35-30	PP that detected the error.
FLG	41-36 (39)	Flag Field. Not first block flag. 0 BML message is the first block of a message. 1 BML message is not the first block of a message.
	(38)	Continuation block flag. 0 Final or only message. 1 Another message will follow.
SID	59-24 (59-58) (57-44) (43-24)	SECDED identifier. SCR bits 191-190. SCR bits 53-40. Zero (unused).
CT	5-0	Error counter.

! MAINFRAME (MODELS 720, 730, ! 740, 750, AND 760	! MSGID 0201B
! SECDED SINGLE BIT CORRECTED ERROR	! SYMPTOM 0100B

These messages are issued for the first occurrence of each unique single bit SECDED error. If channel 36 is not present, only the first message is issued.

The first message has the following form.

	59	47	41	35	29	23	0
Word 2	0201B	0100B	PP	16B		0	
Word 3	0	04				0	
Word 4	SCR, CHANNEL 16 (Bits 203-144)						
Word 5	SCR, CHANNEL 16 (Bits 143-84)						
Word 6	SCR, CHANNEL 16 (Bits 83-24)						
Word 7	SCR (Bits 23-0)			OP		0	

The continuation message has the following form.

	59	47	41	35	29	23	0
Word 2	0201B	0100B	PP	36B			0
Word 3		10					0
Word 4	SCR, CHANNEL 36 (Bits 203-144)						
Word 5	SCR, CHANNEL 36 (Bits 143-84)						
Word 6	SCR, CHANNEL 36 (Bits 83-24)						
Word 7	SCR (Bits 23-0)			OP			0

<u>Field</u>	<u>Location</u>	<u>Description</u>
PP	35-30	PP that detected the error.
OP	35-24	Options installed. This field contains byte one of CMR word MABL.

! MAINFRAME (MODELS 720, 730, ! 740, 750, AND 760) !	! MSGID 0201B ! !
! SECDED SINGLE BIT SUMMARY TABLE !	! SYMPTOM 0101B ! !

The following message is repeated until all unique SECDED errors that were logged have been issued to the BML. The continuation flag in word 3 is set to zero for the last message in the sequence.

	59	47	41	35	29	23	5	0
Word 2	0201B	0101B	PP	16B			0	
Word 3	0	FLG					0	
Word 4		SID					0	CT
Word 5		SID					0	CT
Word 6		SID					0	CT
Word 7		SID					0	CT

<u>Field</u>	<u>Location</u>	<u>Description</u>
PP	35-30	PP that detected the error.
FLG	41-36 (39)	Flag field. Not first block flag. 0 BML message is the first block of a message. 1 BML message is not the first block of a message.
	(38)	Continuation block flag. 0 Final or only message. 1 Another message will follow.
SID	59-24 (59-58) (57-44) (43-24)	SECDED identifier. SCR bits 191-190. SCR bits 53-40. Zero (unused).
CT	5-0	Error counter.

! MAINFRAME (MODEL 176A)	! MSGID 0202B
! SECDED SINGLE BIT CORRECTED ERROR	! SYMPTOM 0100B

These messages are issued for the first occurrence of each unique single bit SECDED error. If channel 36 is not present, only the first message is issued.

The first message has the following form.

	59	47	41	35	29	23	0
Word 2	0202B	0100B	PP	16B			0
Word 3	0	04				0	
Word 4	SCR, CHANNEL 16 (Bits 203-144)						
Word 5	SCR, CHANNEL 16 (Bits 143-84)						
Word 6	SCR, CHANNEL 16 (Bits 83-24)						
Word 7	SCR (Bits 23-0)			OP			0

The continuation message has the following form.

	59	47	41	35	29	23	0
Word 2	0202B	0100B	PP	36B			0
Word 3		10					0
Word 4	SCR, CHANNEL 36 (Bits 203-184)						
Word 5	SCR, CHANNEL 36 (Bits 183-84)						
Word 6	SCR, CHANNEL 36 (Bits 83-24)						
Word 7	SCR (Bits 23-0)		OP				0

<u>Field</u>	<u>Location</u>	<u>Description</u>
PP	35-30	PP that detected the error.
OP	35-24	Options installed. This field contains byte one of CMR word MABL.



! MAINFRAME (MODEL 176A)	! MSGID 0202B
! SECDED SINGLE BIT SUMMARY TABLE	! SYMPTOM 0101B

The following message is repeated until all unique SECDED errors that were logged have been issued to the BML. The continuation flag in word 3 is set to zero for the last message in the sequence.

	59	47	41	35	29	23	5	0
Word 2	0202B	0101B	PP	16B			0	
Word 3	0	FLG				0		
Word 4		SID				0		CT
Word 5		SID				0		CT
Word 6		SID				0		CT
Word 7		SID				0		CT

<u>Field</u>	<u>Location</u>	<u>Description</u>
PP	35-30	PP that detected the error.
FLG	41-36 (39)	Flag field. Not first block flag. 0 BML message is the first block of a message. 1 BML message is not the first block of a message.
	(38)	Continuation block flag. 0 Final or only message. 1 Another message will follow.
SID	59-24 (59-48) (47-34) (33-24)	SECDED identifier. SCR bits 167-156. SCR bits 53-40. Zeros (unused).
CT	5-0	Error counter.

MAINFRAME (MODEL 176A)	MSGID 0202B
LCME SINGLE BIT SUMMARY TABLE	SYMPTOM 0104B

The following message is repeated until all LCME errors that were logged have been issued to the BML. The continuation flag in word 3 is set to zero for the last message in the sequence.

	59	47	41	35	29	23	5	0
Word 2	0202B	0104B	PP	16B			0	
Word 3	0	FLG				0		
Word 4		SID				0		CT
Word 5		SID				0		CT
Word 6		SID				0		CT
Word 7		SID				0		CT

<u>Field</u>	<u>Location</u>	<u>Description</u>
PP	35-30	PP that detected the error.
FLG	41-36 (39)	Flag field. Not first block flag. 0 BML message is the first block of a message. 1 BML message is not the first block of a message.
	(38)	Continuation block flag. 0 Final or only message. 1 Another message will follow.

<u>Field</u>	<u>Location</u>	<u>Description</u>
SID	59-23 (59-52) (51-50) (49-44) (43-24)	LCME ID. SCR bits 151-144. SCR bits 117-116. SCR bits 101-96. Zero (unused).
CT	5-0	Error counter.

MAINFRAME (MODEL 176B)	MSGID 0203B
LCME SINGLE BIT CORRECTED ERROR	SYMPTOM 0100B

These messages are issued for the first occurrence of each unique single bit SECEDED error. If channel 36 is not present, only the first message is issued.

The first message has the following form.

	59	47	41	35	29	23	0
Word 2	0203B	0100B	PP	16B			0
Word 3	0	04				0	
Word 4	SCR, CHANNEL 16 (Bits 203-144)						
Word 5	SCR, CHANNEL 16 (Bits 143-84)						
Word 6	SCR, CHANNEL 16 (Bits 83-24)						
Word 7	SCR (Bits 23-0)			OP			0

The continuation message has the following form.

	59	47	41	35	29	23	0
Word 2	0203B	0100B	PP	36B			0
Word 3		10				0	
Word 4	SCR, CHANNEL 36 (Bits 203-144)						
Word 5	SCR, CHANNEL 36 (Bits 143-84)						
Word 6	SCR, CHANNEL 36 (Bits 83-24)						
Word 7	SCR (Bits 23-0)		OP				0

<u>Field</u>	<u>Location</u>	<u>Description</u>
PP	35-30	PP that detected the error.
OP	35-24	Options installed. This field contains byte one of CMR word MABL.

MAINFRAME (MODEL 176B)	MSGID 0203B
SECDED SINGLE BIT SUMMARY TABLE	SYMPTOM 0101B

The following message is repeated until all SECDED single bit errors that were logged have been issued to the BML. The continuation flag in word 3 is set to zero for the last message in the sequence.

	59	47	41	35	29	23	5	0
Word 2	0203B	0101B	PP	16B			0	
Word 3	0	FLG				0		
Word 4		SID				0		CT
Word 5		SID				0		CT
Word 6		SID				0		CT
Word 7		SID				0		CT

<u>Field</u>	<u>Location</u>	<u>Description</u>
PP	35-30	PP that detected the error.
FLG	41-36 (39)	Flag field. Not first block flag. 0 BML message is the first block of a message. 1 BML message is not the first block of a message.
	(38)	Continuation block flag. 0 Final or only message. 1 Another message will follow.
SID	59-24 (59-48) (47-34) (33-24)	SECDED identifier. SCR bits 167-156. SCR bits 53-40. Zeros (unused).
CT	5-0	Error counter.

! MAINFRAME (MODEL 176B)	! MSGID 0203B
! LCME SINGLE BIT SUMMARY TABLE	! SYMPTOM 0104B

The following message is repeated until all LCME errors that were logged are reported to the BML. The continuation flag in word 3 is set to zero for the last message in the sequence.

	59	47	41	35	29	23	5	0
Word 2	0203B	0104B	PP	16B			0	
Word 3	0	FLG				0		
Word 4		SID				0		CT
Word 5		SID				0		CT
Word 6		SID				0		CT
Word 7		SID				0		CT

<u>Field</u>	<u>Location</u>	<u>Description</u>
PP	35-30	PP that detected the error.
FLG	41-36 (39)	Flag field. Not first block flag. 0 BML message is the first block of a message. 1 BML message is not the first block of a message.
	(38)	Continuation block flag. 0 Final or only message. 1 Another message will follow.
SID	59-24 (59-48) (47-34) (49-44) (33-24)	LCME identifier. SCR bits 151-144. SCR bits 117-116. SCR bits 101-96. Zeros (unused).
CT	5-0	Error counter.

! MAINFRAME (MODEL 865)	! MSGID 0204B
! SECDED SINGLE BIT CORRECTED ERROR	! SYMPTOM 0100B

These messages are issued for the first occurrence of each unique single bit SECDED error. If channel 36 is not present, only the first message is issued.

The first message has the following form.

	59	47	41	35	29	23	0
Word 2	0204B	0100B	PP	16B			0
Word 3	0	04				0	
Word 4	SCR, CHANNEL 16 (Bits 203-144)						
Word 5	SCR, CHANNEL 16 (Bits 143-84)						
Word 6	SCR, CHANNEL 16 (Bits 83-24)						
Word 7	SCR (Bits 23-0)			OP			0



The continuation message has the following form.

	59	47	41	35	29	23	0
Word 2	0204B	0100B	PP	36B			0
Word 3		10					0
Word 4	SCR, CHANNEL 36 (Bits 203-144)						
Word 5	SCR, CHANNEL 36 (Bits 143-84)						
Word 6	SCR, CHANNEL 36 (Bits 83-24)						
Word 7	SCR (Bits 23-0)		OP				0

<u>Field</u>	<u>Location</u>	<u>Description</u>
PP	35-30	PP that detected the error.
OP	35-24	Options installed. This field contains byte one of CMR word MABL.

! MAINFRAME (MODEL 865)	! MSGID 0204B
! SECDED SINGLE BIT SUMMARY STATUS	! SYMPTOM 0101B

The following message is repeated until all unique SECDED errors that were logged have been issued to the BML. The continuation flag in word 3 is set to zero for the last message in the sequence.

	59	47	41	35	29	23	5	0
Word 2	0204B	0101B	PP	16B			0	
Word 3	0	FLG				0		
Word 4		SID				0	CT	
Word 5		SID				0	CT	
Word 6		SID				0	CT	
Word 7		SID				0	CT	

<u>Field</u>	<u>Location</u>	<u>Description</u>
PP	35-30	PP that detected the error.
FLG	41-36 (39)	Flag field. Not first block flag. 0 BML message is the first block of a message. 1 BML message is not the first block of a message.
	(38)	Continuation block flag. 0 Final or only message. 1 Another message will follow.
SID	59-24 (59-58) (57-44) (43-24)	SECDED identifier. SCR bits 191-190. SCR bits 53-40. Zero (unused).
CT	5-0	Error counter.

MAINFRAME (MODEL 875)	MSGID 0205B
SECDED SINGLE BIT CORRECTED ERROR	SYMPTOM 0100B

These messages are issued for the first occurrence of each unique single bit SECDED error. If channel 36 is not present, only the first message is issued.

The first message has the following form.

	59	47	41	35	29	23	0
Word 2	0205B		0100B	PP	16B		0
Word 3	0		04				0
Word 4	SCR, CHANNEL 16 (Bits 203-144)						
Word 5	SCR, CHANNEL 16 (Bits 143-84)						
Word 6	SCR, CHANNEL 16 (Bits 83-24)						
Word 7	SCR (Bits 23-0)			OP			0

The continuation message has the following form.

	59	47	41	35	29	23	0
Word 2	0205B	0100B	PP	36B			0
Word 3		10					0
Word 4	SCR, CHANNEL 36 (Bits 203-144)						
Word 5	SCR, CHANNEL 36 (Bits 143-84)						
Word 6	SCR, CHANNEL 36 (Bits 83-24)						
Word 7	SCR (Bits 23-0)		OP				0

<u>Field</u>	<u>Location</u>	<u>Description</u>
PP	35-30	PP that detected the error.
OP	35-24	Options installed. This field contains byte one of CMR word MABL.

! MAINFRAME (MODEL 875)	! MSGID 0205B
! SECDED SINGLE BIT SUMMARY STATUS	! SYMPTOM 0101B

The following message is repeated until all unique SECDED errors that were logged have been issued to the BML. The continuation flag in word 3 is set to zero for the last message in the sequence.

	59	47	41	35	29	23	5	0
Word 2	0205B	0101B	PP	16B			0	
Word 3	0	FLG					0	
Word 4		SID					0	CT
Word 5		SID					0	CT
Word 6		SID					0	CT
Word 7		SID					0	CT

<u>Field</u>	<u>Location</u>	<u>Description</u>
PP	35-30	PP that detected the error.
FLG	41-36 (39)	Flag field. Not first block flag.
	(38)	0 BML message is the first block of a message. 1 BML message is not the first block of a message.
		Continuation block flag. 0 Final or only message. 1 Another message will follow.
SID	59-24 (59-58) (57-44) (43-24)	SECDED identifier. SCR bits 191-190. SCR bits 53-40. Zero (unused).
CT	5-0	Error counter.

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! CHANNEL STATUS      ! MSGID   0206B      !
!
! UP/DOWN STATUS     ! SYMPTOM 0014B, 0015B, 0016B, 0017B!
!

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      59      47      35      29      23      11      0
Word 2 ! 0206B ! SYMPTOM ! PP ! CH !           0 !
Word 3 !           0 !           !           ! MID !           0 !

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<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
SYMPTOM	2	47-36	Symptom code. 0014B Channel downed by operator. 0015B Channel downed by system. 0016B Channel upped by operator. 0017B Channel upped by system.
PP	2	35-30	PP that detected the error.
CH	2	29-24	Channel upped or downed.
MID	3	23-12	Machine identifier.

EXTENDED MEMORY (ESM)	MSGID 0210B
ERRORS DETECTED BY 6DP	SYMPTOM 0440B, 0441B, 0450B, 0500B 0502B

6DP issues the following message when a PP detects an error while transferring data to or from extended memory via a DDP.

	59	47	41	35	29	23	11	0
Word 2	0210	SYMPTOM	PP	CH			0	
Word 3	EST	RTY	FLG	CHR	0	MID		0
Word 4	FLAGS	STATUS	WCNT			EM ADDR		
Word 5	FIRST DATA							
Word 6	SECOND DATA							

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
SYMPTOM	2	47-36	Symptom code. 0440B Read parity error (detected by 6DP). 0441B Write parity error (detected by 6DP). 0450B Firmware dead (detected by 6DP). 0500B Address error (detected by 6DP). 0502B Status error (detected by 6DP).
PP	2	35-30	PP that detected the error.
CH	2	29-24	Channel on which the error was detected. Not meaningful for symptom code 0500B (address error).
EST	3	59-48	EST ordinal of the device.

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u> (Continued)
RTY	3	47-42	Number of retries attempted.
FLG	3	41-36 (41-38) (37)  (36)	Flag field. Reserved. Set if write operation; clear if read operation. Set if unrecovered error; clear if recovered error.
CHR	3	35-30	Channel used for recovery. Not meaningful for symptom code 0500B (address error).
MID	3	23-12	Machine identifier in display code.
FLAGS	4	59-48 (59-50) (49)  (48)	Flag field. Reserved. Set if SECOND DATA is present; clear if not. Set if FIRST DATA is present; clear if not.
STATUS	4	47-36	Status received back from a 5004 DDP function. This status is taken immediately after a single word read or write. The status indicates whether the operation was or was not successful. If unsuccessful, the status attempts to explain the problem.
WCNT	4	35-24	When greater than 1, WCNT is the number of words being transferred when the error occurred. EM ADDR is the address of the beginning of that transfer. When equal to 1, EM ADDR is the actual address where the error occurred.
EM ADDR	4	23-0	Transfer address or error address in extended memory.



<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u> (Continued)
FIRST DATA	5	59-0	This field shows bad data received on the initial read of recovered read parity errors. Data received on the initial read of unrecovered read parity errors is also shown, but it is not known if the data is bad or good. This field also shows data for write parity errors the driver tried to write to EM.
SECOND DATA	6	59-0	This field shows good data received on the retry of recovered read parity errors, and bad data received on the retry of unrecovered read parity errors. This field is not used for write parity errors.

! EXTENDED MEMORY (ESM)	! MSGID 0207B, 0210B
! ERRORS DETECTED BY 6DE	! SYMPTOM 1040B, 1041B, 1043B, 1100B

6DE issues the following message when the PIOM monitor function has reported an unrecoverable error on a DE or DP device. The status returned by the PIOM monitor function is found in the STATUS field.

	59	47	41	35	29	23	11	0
Word 2	MSGID	SYMPTOM	PP				0	
Word 3	EST	RTY	FLG		0	MID		0
Word 4	0	STATUS		WCNT			EM ADDR	

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
MSGID	2	59-48	Message identifier. The error occurred on the coupler path to extended memory, even though the device is defined to have a low speed port. 0207B ESM (coupler). 0210B ESM (low speed port).
SYMPTOM	2	47-36	Symptom code. 1040B Read parity error (detected by 6DE). 1041B Write parity error (detected by 6DE). 1043B Device not ready (detected by 6DE). 1100B Address error (detected by 6DE).
PP	2	35-30	PP that detected the error.
EST	3	59-48	EST ordinal of the device.
RTY	3	47-42	Number of retries attempted.

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u> (Continued)
FLG	3	41-36 (41-38) (37)  (36)	Flag field. Reserved. Set if write operation; clear if read operation. Set if unrecovered error; clear if recovered error. Currently, this is always set, since all errors reported are unrecovered.
MID	3	23-12	Machine identifier in display code.
STATUS	4	47-36	Status returned from CPUMTR when error occurred. 1 Unrecoverable hardware error (UHES). 4 Unrecoverable parity error (UPES).
WCNT	4	35-24	When greater than 1, WCNT is the number of words in the block transferred when the error occurred. EM ADDR is the address of the beginning of that transfer. When equal to 1, EM ADDR is the actual address where the error occurred.
EM ADDR	4	23-0	Transfer address or error address in extended memory.

EXTENDED MEMORY (ESM)	MSGID 0207B, 0210B
ERRORS DETECTED BY IMC AND ELM	SYMPTOM 2040B, 2041B, 2440B, 2441B

IMC and ELM each issue the following message when an extended memory parity error occurs. IMC reports errors detected by CPUMTR, and ELM reports errors detected by user programs when writing to or reading from user extended memory.

	59	47	41	35	23	17	11	0
Word 2	MSGID	SYMPTOM		0				
Word 3	EST	RTY	FLG	0	MID	0		
Word 4	FLAGS	RESERVED		WCNT	EM ADDR			
Word 5	FIRST DATA							
Word 6	SECOND DATA							
Word 7						CM ADDR		

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
MSGID	2	59-48	Message identifier. (The device code of the device on which an error has occurred.) The error occurred on the coupler path to extended memory, even if the device is defined with a DDP. 0207B ESM (coupler). 0210B ESM (low speed port).

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u> (Continued)
SYMPTOM	2	47-36	Symptom code. 2040B Read parity error (detected by IMC). 2041B Write parity error (detected by IMC). 2440B Read parity error (detected by ELM). 2441B Write parity error (detected by ELM).
EST	3	59-48	EST ordinal of the device.
RTY	3	47-42	Number of retries attempted.
FLG	3	41-36 (41-38) (37) (36)	Flag field. Reserved (zero). Set if write operation; clear if read operation. Set if unrecovered error; clear if recovered error.
MID	3	23-12	Machine identifier in display code.
FLAGS	4	59-48 (59-50) (49) (48)	Flag field. Reserved (zero). Set if SECOND DATA is present; clear if not. Set if FIRST DATA is present; clear if not.
WCNT	4	35-24	When greater than 1, WCNT is the number of words being transferred when the error occurred. EM ADDR is the address of the beginning of that transfer. When equal to 1, EM ADDR is the actual address where the error occurred.
EM ADDR	4	23-0	Transfer address or error address in extended memory.
FIRST DATA	5	59-0	This field shows bad data received on the initial read of recovered read parity errors. Data received on the initial read of unrecovered read parity errors is also shown, but it is not known if the data is bad or good. This field also shows data for write parity errors the driver tried to write to EM.

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u> (Continued)
SECOND DATA	6	59-0	This field shows good data received on the retry of recovered read parity errors, and bad data received on the retry of unrecovered read parity errors. This field is not used for write parity errors.
CM ADDR	7	17-0	Address in central memory to which or from which the EM transfer was supposed to occur.

EXTENDED MEMORY (ESM)	MSGID 0211B
SECDED	SYMPTOM 0100B

The first message is as follows.

	59	47	41	35	29	23	11	0
Word 2	0211B	0100B	PP	CH			0	
Word 3	0	04					0	
Word 4		A1					A2	A3
Word 5	A4	A5		A6			A7	A8
Word 6	A9	A10		A11			A12	A13
Word 7	A13	A15		A16			A17	A18

The continuation message is as follows.

	59	47	41	35	29	23	11	0
Word 2	0211B	0100B	PP	CH			0	
Word 3	0	14					0	
Word 4	B1	B2		B3			B4	B5
Word 5	B6	B7		B8			B9	B10
Word 6	B11	B12		B13			B14	B15
Word 7	B16	B17		B18			B19	B20

The continuation message is as follows.

	59	47	41	35	29	23	11	0
Word 2	0211B	0100B	PP	CH			0	
Word 3	0	14					0	
Word 4	C1	C2	C3	C4	C5			
Word 5	C6	C7	C8	C9	C10			
Word 6	C11	C12	C13	C14	C15			
Word 7	C16	C17	C18	C19	C20			

The continuation message is as follows.

	59	47	41	35	29	23	11	0
Word 2	0211B	0100B	PP	CH			0	
Word 3	0	14					0	
Word 4	D1	D2	D3	D4	D5			
Word 5	D6	D7	D8	D9	D10			
Word 6	D11	D12	D13	D14	D15			
Word 7	D16	D17	D18	D14	D20			



The continuation message is as follows.

	59	47	41	35	29	23	11	0
Word 2	0211B	0100B	PP	CH			0	
Word 3			10				0	
Word 4	E1	E2		E3			0	

<u>Field</u>	<u>Location</u>	<u>Description</u>
A1	59-24	Programmable single bit error counter.
A2	23-12	Double bit error 1 (valid bit, address bits 23-13).
A3	11-0	Double bit error 1 (address bits 12-4, 2-0).
A4	59-48	Double bit error 2 (valid bit, address bits 23-13).
A5	47-36	Double bit error 2 (address bits 12-4, 2-0).
	.	
	.	
	.	
A18	11-0	Double bit error 9 (valid bit, address bits 23-13).
B1	59-48	Double bit error 9 (address bits 12-4, 2-0).
B2	47-36	Double bit error 10 (valid bit, address bits 23-13).
B3	35-24	Double bit error 10 (address bits 12-4, 2-0).
	.	
	.	
	.	
B14	23-12	Double bit error 16 (valid bit, address bits 23-13).
B15	11-0	Double bit error 16 (address bits 12-4, 2-0).
B16	59-48	Single bit error 1 (syndrome bits, address bit 23).
B17	47-36	Single bit error 1 (address bits 22-17, 2-0).
	.	
	.	
	.	

<u>Field</u>	<u>Location</u>	<u>Description (Continued)</u>
B20	11-0	Single bit error 3 (syndrome bits, address bit 23).
C1	59-48	Single bit error 3 (address bits 22-17, 2-0).
	.	
	.	
C20	11-0	Single bit error 13 (syndrome bits, address bit 23).
D1	59-48	Single bit error 13 (address bits 22-17, 2-0).
	.	
	.	
D7	47-36	Single bit error 16 (address bits 22-17, 2-0).
D8	35-24	Single bit error 1 (counter bits).
	.	
	.	
D20	11-0	Single bit error 13 (counter bits).
E1	59-48	Single bit error 14 (counter bits).
E2	47-36	Single bit error 15 (counter bits).
E3	35-24	Single bit error 16 (counter bits).

! MAINFRAME ! (MODELS 810, 815, 825, AND 830) !	! MSGID 0212B !
! UNCORRECTED IOU ERRORS !	! SYMPTOM 0100B, 0110B, 0111B, 0112B ! 0200B !

This message is not issued after NOS 2.4.2. Refer to MSGID 0250B for mainframe-related BML messages issued after NOS 2.4.2.

The first message has the following form.

	59	47	41	35	29	23	0
Word 2	0212B	SYMPTOM	PP	17B	0		
Word 3	0	04			0		
Word 4	EID-Element Identifier (Bits 0-59)						
Word 5	SS-Status Summary (Bits 0-59)						
Word 6	OI-Options Installed (Bits 0-59)						
Word 7	DEC-Dependent Environment Control (Bits 0-59)						

The continuation message has the following form.

	59	47	41	35	29	23	11	0
Word 2	0212B	SYMPTOM	PP	17B			0	
Word 3	0	04				0		
Word 4	C1 1(10)	C2 00	C3 (00)	C4 (12)	22B	C4 (30)	60B	0
Word 5	SR-Status Register (Bits 0-59)							
Word 6	FS1-Fault Status 1 (Bits 0-59)							
Word 7	FS2-Fault Status 2 (Bits 0-59)							

The continuation message has the following form.

	59	47	41	35	29	23	11	0
Word 2	0212B	SYMPTOM	PP	17B			0	
Word 3	0	04				0		
Word 4	TM-Test Mode (Bits 0-59)							
Word 5	C5 (40)	C6 (80)	C7 (81)	C8 (A0)	100B	200B	201B	240B 0
Word 6	FSM-Fault Status Mask (Bits 0-59)							
Word 7	OSB-OS Bounds (Bits 0-59)							

The continuation message has the following form.

	59	47	41	35	29	23	11	0
Word 2	0212B	SYMPTOM		PP	17B		0	
Word 3	0		0			0		
Word 4				0				
Word 5				0				
Word 6	C9	30B	CA	41B			0	
	(18)		(21)					
Word 7				0				

<u>Field</u>	<u>Location</u>	<u>Description</u>
SYMPTOM	47-36	Symptom code. 0100B IOU error. 0110B Virtual state uncorrected IOU error. 0111B Virtual state uncorrected IOU error (SMU). 0112B Express deadstart dump. 0200B Critical error log.
PP	35-30	PP that detected the error.
C1	59-56	Element identifier (bits 60-63).
C2	47-44	Status summary (bits 60-63).
C3	35-31	Options installed (bits 60-63).
C4	23-20	Dependent environment control (bits 60-63).
C5	59-56	Status register (bits 60-63).
C6	47-44	Fault status 1 (bits 60-63).
C7	35-31	Fault status 2 (bits 60-63).
C8	23-20	Test mode (bits 60-63).
C9	59-56	Fault status mask (bits 60-63).
C10	47-44	OS bounds (bits 60-63).

! MAINFRAME ! (MODEL 835)	! MSGID 0213B
! UNCORRECTED IOU ERRORS	! SYMPTOM 0100B, 0110B, 0111B, 0112B ! 0200B

This message is not issued after NOS 2.4.2. Refer to MSGID 0250B for mainframe-related BML messages issued after NOS 2.4.2.

The first message has the following form.

	59	47	41	35	29	23	11	0
Word 2	0213B	SYMPTOM	PP	17B			0	
Word 3	0	04				0		
Word 4	EID-Element Identifier (Bits 0-59)							
Word 5	SS-Status Summary (Bits 0-59)							
Word 6	OI-Operations Installed (Bits 0-59)							
Word 7	DEC-Dependent Environment Control (Bits 0-59)							

The continuation message has the following form.

	59	47	41	35	29	23	11	0
Word 2	0213B	SYMPTOM	PP	17B			0	
Word 3	0	04			0			
Word 4	C1 ! 20B! !(10)!	C2 ! 00! !(00)!	C3 ! 22B! !(12)!	C4 ! 60B! !(30)!			0	
Word 5	SR-Status Register (Bits 0-59)							
Word 6	FS1-Fault Status 1 (Bits 0-59)							
Word 7	FS2-Fault Status 2 (Bits 0-59)							

The continuation message has the following form.

	59	47	41	35	29	23	11	0
Word 2	0213B	SYMPTOM	PP	17B			0	
Word 3	0	04			0			
Word 4	TM-Test Mode (Bits 0-59)							
Word 5	C5 ! 100B! !(40)!	C6 ! 200B! !(80)!	C7 ! 201B! !(81)!	C8 ! 240B! !(A0)!			0	
Word 6	FSM-Fault Status Mask (Bits 0-59)							
Word 7	OSB-OS Bounds (Bits 0-59)							

The continuation message has the following form.

	59	47	41	35	29	23	11	0
Word 2	0213B	SYMPTOM	PP	17B			0	
Word 3	0	0				0		
Word 4				0				
Word 5				0				
Word 6	C9	30B	CA	41B			0	
	!(18)!	!(21)!						
Word 7				0				

<u>Field</u>	<u>Location</u>	<u>Description</u>
SYMPTOM	47-36	Symptom code. 0100B IOU error. 0110B Virtual state uncorrected IOU error. 0111B Virtual state uncorrected IOU error (SMU). 0112B Express deadstart dump. 0200B Critical error log.
PP	35-30	PP that detected the error.
C1	59-56	Element identifier (bits 60-63).
C2	47-44	Status summary (bits 60-63).
C3	35-31	Options installed (bits 60-63).
C4	23-20	Dependent environment control (bits 60-63).
C5	59-56	Status register (bits 60-63).
C6	47-44	Fault status 1 (bits 60-63).
C7	35-31	Fault status 2 (bits 60-63).
C8	23-20	Test mode (bits 60-63).
C9	59-56	Fault status mask (bits 60-63).
C10	23-20	OS bounds (bits 60-63).



! MAINFRAME	! MSGID	0214B
! (MODELS 840, 845, 850, 855,	!	!
! AND 860)	!	!
! UNCORRECTED IOU ERRORS	! SYMPTOM	0100B, 0110B, 0111B, 0112B
!	!	0200B

This message is not issued after NOS 2.4.2. Refer to MSGID 0250B for mainframe-related BML messages issued after NOS 2.4.2.

The first message has the following form.

	59	47	41	35	29	23	0
Word 2	0214B	SYMPTOM	PP	17B			0
Word 3	0	04				0	
Word 4	EID-Element Identifier (Bits 0-59)						
Word 5	SS-Status Summary (Bits 0-59)						
Word 6	OI-Options Installed (Bits 0-59)						
Word 7	DEC-Dependent Environment Control (Bits 0-59)						

The continuation message has the following form.

	59	47	41	35	29	23	11	0
Word 2	0214B	SYMPTOM	PP	17B	0			
Word 3	0	04	0					
Word 4	C1 ! 20B! !(10)!	C2 ! 00! !(00)!	C3 ! 22B! !(12)!	C4 ! 60B! !(30)!	0			
Word 5	SR-Status Register (Bits 0-59)							
Word 6	FS1-Fault Status 1 (Bits 0-59)							
Word 7	FS2-Fault Status 2 (Bits 0-59)							

The continuation message has the following form.

	59	47	41	35	29	23	11	0
Word 2	0214B	SYMPTOM	PP	17B	0			
Word 3	0	04	0					
Word 4	TM-Test Mode (Bits 0-59)							
Word 5	C5 !100B! !(40)!	C6 ! 200B! !(80)!	C7 ! 201B! !(81)!	C8 !240B! !(A0)!	0			
Word 6	FSM-Fault Status Mask (Bits 0-59)							
Word 7	OSB-OS Bounds (Bits 0-59)							

The continuation message has the following form.

	59	47	41	35	29	23	11	0
Word 2	0214B	SYMPTOM		PP	17B		0	
Word 3	0		0			0		
Word 4				0				
Word 5				0				
Word 6	C9	30B	CA	41B			0	
	!(18)	!	!(21)	!				
Word 7				0				

<u>Field</u>	<u>Location</u>	<u>Description</u>
SYMPTOM	47-36	Symptom code. 0100B IOU error. 0110B Virtual state uncorrected IOU error. 0111B Virtual state uncorrected IOU error (SMU). 0112B Express deadstart dump. 0200B Critical error log.
PP	35-30	PP that detected the error.
C1	59-56	Element identifier (bits 60-63).
C2	47-44	Status summary (bits 60-63).
C3	35-31	Options installed (bits 60-63).
C4	23-20	Dependent environment control (bits 60-63).
C5	59-56	Status register (bits 60-63).
C6	47-44	Fault status 1 (bits 60-63).
C7	35-31	Fault status 2 (bits 60-63).
C8	23-20	Test mode (bits 60-63).
C9	59-56	Fault status mask (bits 60-63).
C10	47-44	OS bounds (bits 60-63).

! MAINFRAME ! (MODELS 810, 815, 825, AND 830)	! MSGID 0222B
! MEMORY CORRECTED ERROR	! SYMPTOM 0100B

This message is not issued after NOS 2.4.2. Refer to MSGID 0250B for mainframe-related BML messages issued after NOS 2.4.2.

The first message has the following form.

	59	47	41	35	29	23	11	0
Word 2	0222B	0100B	PP	17B			0	
Word 3	0	04				0		
Word 4	EID-Element Identifier (Bits 0-59)							
Word 5	SS-Status Summary (Bits 0-59)							
Word 6	OI-Options Installed (Bits 0-59)							
Word 7	EC-Environment Control (Bits 0-59)							

The continuation message has the following form.

	59	47	41	35	29	23	11	0
Word 2	0222B	0100B	PP	17B			0	
Word 3	0	04				0		
Word 4	C1 !(10)!	20B !(00)!	C2 !(00)!	00 !	C3 !(12)!	22B !	C4 !(20)!	40B !
Word 5	CEL-Corrected Error Log (Bits 0-59)							
Word 6	0							
Word 7	0							

The continuation message has the following form.

	59	47	41	35	29	23	11	0
Word 2	0222B	0100B	PP	17B			0	
Word 3	0	0				0		
Word 4	0							
Word 5	C5 !(A0)!	240B !				0		
Word 6	unused							
Word 7	unused							

<u>Field</u>	<u>Location</u>	<u>Description</u>
PP	35-30	PP that detected the error.
C1	59-56	Element identifier (bits 60-63).
C2	47-44	Status summary (bits 60-63).
C3	35-32	Options installed (bits 60-63).
C4	23-20	Environment control (bits 60-63).
C5	59-56	Corrected error log (bits 60-63).

```

!-----!
! MAINFRAME          ! MSGID   0222B  !
! (MODELS 810, 815, 825, AND 830) !
!-----!
! SECDED SINGLE BIT SUMMARY TABLE ! SYMPTOM 0101B !
!-----!

```

This message is not issued after NOS 2.4.2. Refer to MSGID 0250B for mainframe-related BML messages issued after NOS 2.4.2.

The following message is repeated until all SECDED errors that were logged are reported. The continuation flag in word 3 is set to zero for the last message in the sequence.

	59	47	41	35	29	23	11	5	0
Word 2	222B		101B	PP	17B		0		
Word 3	0		FLG				0		
Word 4		MRSA					0		CT
Word 5		MRSA					0		CT
Word 6		MRSA					0		CT
Word 7		MRSA					0		CT

<u>Field</u>	<u>Location</u>	<u>Description</u>
PP	35-30	PP that detected the error.
FLG	41-36	Flag field.
MRSA	59-24 (59-39)	Maintenance register SECDED address. Memory corrected error log register (MCEL) bits 13-33.
	(39-32)	Memory corrected error log register (MCEL) bits 42-49.
CT	5-0	Number of times the error was encountered.

```

! MAINFRAME ! MSGID 0222B !
! (MODELS 810, 815, 825, AND 830) !
! SECDED SINGLE BIT SUMMARY TABLE ! SYMPTOM 0102B !

```

This message is not issued after NOS 2.4.2. Refer to MSGID 0250B for mainframe-related BML messages issued after NOS 2.4.2.

The following message is repeated until all SECDED errors that were logged are reported. The continuation flag in word 3 is set to zero for the last message in the sequence.

	59	47	41	35	29	23	11	5	0
Word 2	0222B	102B	PP	17B		MS			
Word 3	0	FLG		MID		MD			
Word 4			MRSA			0	CT		
Word 5			MRSA			0	CT		
Word 6			MRSA			0	CT		
Word 7			MRSA			0	CT		

<u>Field</u>	<u>Location</u>	<u>Description</u>
PP	35-30	PP that detected the error.
MS	23-0	Memory size. This field contains bits 0-15 of the options installed register.
FLG	41-36	Flag field.
MID	23-12	Machine identifier.
MD	11-0	Memory model number from element identifier register.



<u>Field</u>	<u>Location</u>	<u>Description</u>
MRSA	59-12 (59-39)  (38-31)	Maintenance register SECDED address. CM address from memory corrected error log register (MCEL) bits 8-28. Syndrome code from memory corrected error log register (MCEL) bits 32-39.
CT	5-0	Number of times the error was encountered.

! MAINFRAME ! (MODELS 810, 815, 825, AND 830)	! MSGID 0222B
! MEMORY UNCORRECTED ERROR	! SYMPTOM 0104B, 0110B, 0200B

This message is not issued after NOS 2.4.2. Refer to MSGID 0250B for mainframe-related BML messages issued after NOS 2.4.2.

The first message has the following form.

	59	47	41	35	29	23	11	0
Word 2	0222B	SYMPTOM	PP	17B			0	
Word 3	0	04				0		
Word 4	EID-Element Identifier (Bits 0-59)							
Word 5	SS-Status Summary (Bits 0-59)							
Word 6	OI-Options Installed (Bits 0-59)							
Word 7	EC-Environment Control (Bits 0-59)							

The continuation message has the following form.

	59	47	41	35	29	23	11	0
Word 2	0222B	SYMPTOM	PP	17B			0	
Word 3	0	04				0		
Word 4	C1 !(10)	20B !(00)	C2 !(00)	00 !(00)	C3 !(12)	22B !(12)	C4 !(20)	40B !(20) 0
Word 5	UEL1-Uncorrectable Error Log (Bits 0-59)							
Word 6	UEL2-Uncorrectable Error Log 2 (Bits 0-59)							
Word 7	BR-Bounds Register (Bits 0-59)							

The continuation message has the following form.

	59	47	41	35	29	23	11	0
Word 2	0222B	SYMPTOM	PP	17B			0	
Word 3	0	0				0		
Word 4			zero					
Word 5	C5 !244B! !(A4)!	C6 !250B! !(A8)!	C7 !41B! !(21)!				0	
Word 6			0					
Word 7			0					

<u>Field</u>	<u>Location</u>	<u>Description</u>
SYMPTOM	47-36	Symptom code. 0104B Uncorrected error. 0110B Virtual state CM error. 0200B Critical error log.
PP	35-30	PP that detected the error.
C1	59-56	Element identifier (bits 60-63).
C2	47-44	Status summary (bits 60-63).
C3	35-32	Options installed (bits 60-63).
C4	23-20	Environment control (bits 60-63).
C5	59-56	Uncorrectable error log 1 (bits 60-63).
C6	47-44	Uncorrectable error log 2 (bits 60-63).
C7	35-32	Bounds register (bits 60-63).

MAINFRAME (MODELS 810, 815, 825, AND 830)	MSGID 0222B
EXPRESS DEADSTART DUMP	SYMPTOM 0105B

This message is not issued after NOS 2.4.2. Refer to MSGID 0250B for mainframe-related BML messages issued after NOS 2.4.2.

The following message is generated by DSDI from data dumped during an express deadstart dump. The message is written to a local file but not to the BML.

The first message has the following form.

	59	47	41	35	29	23	11	0
Word 2	0222B	0105B	0	17B			0	
Word 3	0	04				0		
Word 4	EID-Element Identifier (Bits 0-59)							
Word 5	SS-Status Summary (Bits 0-59)							
Word 6	OI-Options Installed (Bits 0-59)							
Word 7	EC-Environment Control (Bits 0-59)							

The continuation message has the following form.

	59	47	41	35	29	23	11	0
Word 2	0222B	0105B	0	17B			0	
Word 3	0	04				0		
Word 4	C1 !(10)!	20B !	C2 !(00)!	00 !	C3 !(12)!	22B !	C4 !(20)!	40B ! zero
Word 5	UEL1-Uncorrectable Error Log (Bits 0-59)							
Word 6	UEL2-Uncorrectable Error Log 2 (Bits 0-59)							
Word 7	BR-Bounds Register (Bits 0-59)							

The continuation message has the following form.

	59	47	41	35	29	23	11	0
Word 2	0222B	0105B	0	17B			0	
Word 3	0	0				0		
Word 4	CEL-Corrected Error Log (Bits 0-59)							
Word 5	C5 !244B! !(A4)!	C6 !250B! !(A8)!	C7 !41B! !(21)!	C8 !240B! !(A0)!			0	
Word 6	0							
Word 7	0							

<u>Field</u>	<u>Location</u>	<u>Description</u>
C1	59-56	Element identifier (bits 60-63).
C2	47-44	Status summary (bits 60-63).
C3	35-32	Options installed (bits 60-63).
C4	23-20	Environment control (bits 60-63).
C5	59-56	Uncorrectable error log 1 (bits 60-63).
C6	47-44	Uncorrectable error log 2 (bits 60-63).
C7	35-32	Bounds register (bits 60-63).
C8	23-20	Corrected error log (bits 60-63).

! MAINFRAME	! MSGID	0223B
! (MODEL 835)	!	!
! MEMORY CORRECTED ERROR	! SYMPTOM	0100B
!	!	!

This message is not issued after NOS 2.4.2. Refer to MSGID 0250B for mainframe-related BML messages issued after NOS 2.4.2.

The first message has the following form.

	59	47	41	35	29	23	11	0
Word 2	0223B	0100B	PP	17B			0	
Word 3	0	04				0		
Word 4	EID-Element Identifier (Bits 0-59)							
Word 5	SS-Status Summary (Bits 0-59)							
Word 6	OI-Options Installed (Bits 0-59)							
Word 7	EC-Environment Control (Bits 0-59)							



The continuation message has the following form.

	59	47	41	35	29	23	11	0
Word 2	0223B	0100B	PP	17B			0	
Word 3	0	04				0		
Word 4	C1 !(10)!	20B! !(00)!	C2 !	00 !	C3 !	22B !(12)!	C4 !	40B !(20)!
Word 5	CEL-Corrected Error Log (Bits 0-59)							
Word 6	0							
Word 7	0							

The continuation message has the following form.

	59	47	41	35	29	23	11	0
Word 2	0223B	0100B	PP	17B			0	
Word 3	0	0				0		
Word 4				0				
Word 5	C5	240B		0				
	(A0)							
Word 6				unused				
Word 7				unused				

<u>Field</u>	<u>Location</u>	<u>Description</u>
PP	35-30	PP that detected the error.
C1	59-56	Element identifier (bits 60-63).
C2	47-44	Status summary (bits 60-63).
C3	35-32	Options installed (bits 60-63).
C4	23-20	Environment control (bits 60-63).
C5	59-56	Corrected error log (bits 60-63).

! MAINFRAME ! (MODEL 835)	! MSGID 0223B
! SECDED SINGLE BIT SUMMARY TABLE	! SYMPTOM 0101B

This message is not issued after NOS 2.4.2. Refer to MSGID 0250B for mainframe-related BML messages issued after NOS 2.4.2.

The following message is repeated until all SECDED errors that were logged are reported. The continuation flag in word 3 is set to zero for the last message in the sequence.

	59	47	41	35	29	23	11	5	0
Word 2	0223B		0101B	PP	17B		0		
Word 3	0		FLG				0		
Word 4			MRSA				0		CT
Word 5			MRSA				0		CT
Word 6			MRSA				0		CT
Word 7			MRSA				0		CT

<u>Field</u>	<u>Location</u>	<u>Description</u>
PP	35-30	PP that detected the error.
FLG	41-36	Flag field.
MRSA	59-24 (59-39)	Maintenance register SECDED address. Memory corrected error log register (MCEL) bits 13-33.
	(39-32)	Memory corrected error log register (MCEL) bits 42-49.
CT	5-0	Number of times the error was encountered.

```

!-----!
! MAINFRAME      ! MSGID   0223B  !
! (MODEL 835)    !         !
!-----!
! SECDED SINGLE BIT SUMMARY TABLE ! SYMPTOM 0102B !
!-----!

```

This message is not issued after NOS 2.4.2. Refer to MSGID 0250B for mainframe-related BML messages issued after NOS 2.4.2.

The following message is repeated until all SECDED errors that were logged are reported. The continuation flag in word 3 is set to zero for the last message in the sequence.

```

      59      47      41      35      29      23      11      5      0
Word 2 ! 0223B ! 0102B ! PP ! 17B!          MS          !
      !         !         !         !         !         !         !
Word 3 !         ! FLG ! 0 ! MID ! MD          !
      !         !         !         !         !         !
Word 4 !         ! MRSA          ! 0 ! CT          !
      !         !         !         !         !         !
Word 5 !         ! MRSA          ! 0 ! CT          !
      !         !         !         !         !         !
Word 6 !         ! MRSA          ! 0 ! CT          !
      !         !         !         !         !         !
Word 7 !         ! MRSA          ! 0 ! CT          !
      !         !         !         !         !         !

```

<u>Field</u>	<u>Location</u>	<u>Description</u>
PP	35-30	PP that detected the error.
MS	23-0	Memory size. This field contains bits 0-15 of the options installed register.
FLG	41-36	Flag field.
MID	23-12	Machine identifier.
MD	11-0	Memory model number from element identifier register.

<u>Field</u>	<u>Location</u>	<u>Description</u>
MRSA	59-12 (59-39)  (39-32)	Maintenance register SECDED address. CM address from memory corrected error log register (MCEL) bits 13-33. Syndrome code from memory corrected error log register (MCEL) bits 42-49.
CT	5-0	Number of times the error was encountered.

! MAINFRAME ! (MODEL 835)	! MSGID 0223B
! MEMORY UNCORRECTED ERROR	! SYMPTOM 0104, 0110B, 0200B

This message is not issued after NOS 2.4.2. Refer to MSGID 0250B for mainframe-related BML messages issued after NOS 2.4.2.

The first message has the following form.

	59	47	41	35	29	23	11	0
Word 2	0223B	SYMPTOM	PP	17B			0	
Word 3	0	04				0		
Word 4	EID-Element Identifier (Bits 0-59)							
Word 5	SS-Status Summary (Bits 0-59)							
Word 6	OI-Options Installed (Bits 0-59)							
Word 7	EC-Environment Control (Bits 0-59)							

The continuation message has the following form.

	59	47	41	35	29	23	11	0
Word 2	0223B	SYMPTOM	PP	17B			0	
Word 3	0	04				0		
Word 4	C1 ! 20B !	C2 ! 00 !	C3 ! 22B !	C4 ! 140B !			0	
	!(10) !	!(00) !	!(12) !	!(20) !				
Word 5	UEL1-Uncorrectable Error Log (Bits 0-59)							
Word 6	UEL2-Uncorrectable Error Log 2 (Bits 0-59)							
Word 7	BR-Bounds Register (Bits 0-59)							

The continuation message has the following form.

	59	47	41	35	29	23	11	0
Word 2	0223B	SYMPTOM	PP	17B			0	
Word 3	0	0				0		
Word 4				0				
Word 5	C5 ! (A4)	244B ! (A4)	C6 ! (A8)	250B ! (A8)	C7 ! (21)	41B ! (21)	0	
Word 6				0				
Word 7				0				

<u>Field</u>	<u>Location</u>	<u>Description</u>
SYMPTOM	47-36	Symptom code. 0104B Uncorrected error. 0110B Virtual state CM error. 0200B Critical error log.
PP	35-30	PP that detected the error.
C1	59-56	Element identifier (bits 60-63).
C2	47-44	Status summary (bits 60-63).
C3	35-32	Options installed (bits 60-63).
C4	23-20	Environment control (bits 60-63).
C5	59-56	Uncorrectable error log 1 (bits 60-63).
C6	47-44	Uncorrectable error log 2 (bits 60-63).
C7	35-32	Bounds register (bits 60-63).

MAINFRAME (MODEL 835)	MSGID 0223B
EXPRESS DEADSTART DUMP	SYMPTOM 0105B

This message is not issued after NOS 2.4.2. Refer to MSGID 0250B for mainframe-related BML messages issued after NOS 2.4.2.

The following message is generated by DSDI from data dumped during an express deadstart dump. The message is written to a local file but not to the BML.

The first message has the following form.

	59	47	41	35	29	23	11	0
Word 2	0223B	0105B	0	17B			0	
Word 3	0	04				0		
Word 4	EID-Element Identifier (Bits 0-59)							
Word 5	SS-Status Summary (Bits 0-59)							
Word 6	OI-Options Installed (Bits 0-59)							
Word 7	EC-Environment Control (Bits 0-59)							



The continuation message has the following form.

	59	47	41	35	29	23	11	0
Word 2	0223B	0105B	0	17B	0			
Word 3	0	04			0			
Word 4	C1 ! 20B! !(10)!	C2 ! 00 ! !(00)!	C3 ! 22B ! !(12) !	C4 ! 40B! !(20)!	0			
Word 5	UEL1-Uncorrectable Error Log 1 (Bits 0-59)							
Word 6	UEL2-Uncorrectable Error Log 2 (Bits 0-59)							
Word 7	BR-Bounds Register (Bits 0-59)							

The continuation message has the following form.

	59	47	41	35	29	23	11	0
Word 2	0223B	0105B	0	17B	0			
Word 3	0	0			0			
Word 4	CEL-Corrected Error Log (Bits 0-59)							
Word 5	C5 ! 244B ! !(A4) !	C6 ! 250B ! !(A8) !	C7 ! 41B ! !(21) !	C8 ! 240B ! !(A0) !	0			
Word 6	0							
Word 7	0							

<u>Field</u>	<u>Location</u>	<u>Description</u>
C1	59-56	Element identifier (bits 60-63).
C2	47-44	Status summary (bits 60-63).
C3	35-32	Options installed (bits 60-63).
C4	23-20	Environment control (bits 60-63).
C5	59-56	Uncorrectable error log 1 (bits 60-63).
C6	47-44	Uncorrectable error log 2 (bits 60-63).
C7	35-32	Bounds register (bits 60-63).
C8	23-20	Corrected error log (bits 60-63).

MAINFRAME (MODELS 840, 845, 850, 855, AND 860)	MSGID 0224B
MEMORY CORRECTED ERROR	SYMPTOM 0100B

This message is not issued after NOS 2.4.2. Refer to MSGID 0250B for mainframe-related BML messages issued after NOS 2.4.2.

The first message has the following form.

	59	47	41	35	29	23	11	0
Word 2	0224B	0100B	PP	17B			0	
Word 3	0	04						0
Word 4	EID-Element Identifier (Bits 0-59)							
Word 5	SS-Status Summary (Bits 0-59)							
Word 6	OI-Options Installed (Bits 0-59)							
Word 7	EC-Environment Control (Bits 0-59)							

The continuation message has the following form.

	59	47	41	35	29	23	11	0
Word 2	0224B	0100B	PP	17B			0	
Word 3	0	04				0		
Word 4	C1 !(10)	20B !(00)	C2	00	C3 !(12)	22B	C4 !(20)	140B 0
Word 5	CEL-Corrected Error Log (Bits 0-59)							
Word 6	0							
Word 7	0							

The continuation message has the following form.

	59	47	41	35	29	23	0
Word 2	0224B	0100B	PP	17B		0	
Word 3	0	0			0		
Word 4			0				
Word 5	C5	240B (A0)	0				
Word 6			unused				
Word 7			unused				

<u>Field</u>	<u>Location</u>	<u>Description</u>
PP	35-30	PP that detected the error.
C1	59-56	Element identifier (bits 60-63).
C2	47-44	Status summary (bits 60-63).
C3	35-32	Options installed (bits 60-63).
C4	23-20	Environment control (bits 60-63).
C5	59-56	Corrected error log (bits 60-63).

```

!-----!
! MAINFRAME      ! MSGID   0224B  !
! (MODELS 840, 845, 850, 855, !         !
! AND 860)      !         !
!-----!
! SECDED SINGLE BIT SUMMARY TABLE ! SYMPTOM 0101B !
!-----!

```

This message is not issued after NOS 2.4.2. Refer to MSGID 0250B for mainframe-related BML messages issued after NOS 2.4.2.

The following message is repeated until all SECDED errors that were logged are reported. The continuation flag in word 3 is set to zero for the last message in the sequence.

```

      59      47      41      35      29      23      11      5      0
Word 2 ! 0224B ! 0101B ! PP ! 17B! ! 0 !
Word 3 ! 0 ! FLG ! 0 !
Word 4 ! MRSA ! 0 ! CT !
Word 5 ! MRSA ! 0 ! CT !
Word 6 ! MRSA ! 0 ! CT !
Word 7 ! MRSA ! 0 ! CT !

```

<u>Field</u>	<u>Location</u>	<u>Description</u>
PP	35-30	PP that detected the error.
FLG	41-36	Flag field.
MRSA	59-24 (59-39)	Maintenance register SECDED address. Memory corrected error log register (MCEL) bits 13-33.
	(39-32)	Memory corrected error log register (MCEL) bits 42-49.
CT	5-0	Number of times error encountered.

! MAINFRAME	! MSGID 0224B
! (MODELS 840, 845, 850, 855,	!
! AND 860)	!
!	!
! SECDED SINGLE BIT SUMMARY TABLE	! SYMPTOM 0102B
!	!

This message is not issued after NOS 2.4.2. Refer to MSGID 0250B for mainframe-related BML messages issued after NOS 2.4.2.

The following message is repeated until all SECDED errors that were logged are reported. The continuation flag in word 3 is set to zero for the last message in the sequence.

	59	47	41	35	29	23	11	5	0
Word 2	0224B	0102B	PP	17B			MS		
Word 3	0	FLG				MID	MD		
Word 4				MRSA			0	CT	
Word 5				MRSA			0	CT	
Word 6				MRSA			0	CT	
Word 7				MRSA			0	CT	

<u>Field</u>	<u>Location</u>	<u>Description</u>
PP	35-30	PP that detected the error.
MS	23-0	Memory size. This field contains bits 0-15 of the options installed register.
FLG	41-36	Flag field.
MID	23-12	Machine identifier.
MD	11-0	Memory model number from element identifier register.

<u>Field</u>	<u>Location</u>	<u>Description</u>
MRSA	59-12	Maintenance register SECDED address.
	(59-39)	CM address from memory corrected error log register (MCEL) bits 13-33.
	(39-32)	Syndrome code from memory corrected error log register (MCEL) bits 42-49.
CT	5-0	Number of times the error was encountered.



! MAINFRAME ! (MODELS 845 AND 855) !	! MSGID 0224B ! !
! MEMORY UNCORRECTED ERROR !	! SYMPTOM 0104B, 0110B, 0200B ! !

This message is not issued after NOS 2.4.2. Refer to MSGID 0250B for mainframe-related BML messages issued after NOS 2.4.2.

The first message has the following form.

	59	47	41	35	29	23	11	0
Word 2	0224B	SYMPTOM	PP	17B			0	
Word 3	0	04				0		
Word 4	EID-Element Identifier (Bits 0-59)							
Word 5	SS-Status Summary (Bits 0-59)							
Word 6	OI-Options Installed (Bits 0-59)							
Word 7	EC-Environment Control (Bits 0-59)							

The continuation message has the following form.

	59	47	41	35	29	23	11	0
Word 2	0224B	SYMPTOM		PP	17B		0	
Word 3	0		04	0				
Word 4	C1	20B	C2	00	C3	22B	C4	40B
	!(10)!		!(00)!		!(12)!		!(20)!	0
Word 5	UEL1-Uncorrectable Error Log 1 (Bits 0-59)							
Word 6	UEL2-Uncorrectable Error Log 2 (Bits 0-59)							
Word 7	BR-Bounds Register (Bits 0-59)							

The continuation message has the following form.

	59	47	41	35	29	23	11	0
Word 2	0224B	SYMPTOM	PP	17B			0	
Word 3	0	0				0		
Word 4	zero							
Word 5	C5	244B	C6	250B	C7	41B		0
	(A4)		(A8)			(21)		
Word 6	0							
Word 7	0							

<u>Field</u>	<u>Location</u>	<u>Description</u>
SYMPTOM	47-36	Symptom code. 0104B Uncorrected error. 0110B Virtual state CM error. 0200B Critical error log.
PP	35-30	PP that detected the error.
C1	59-56	Element identifier (bits 60-63).
C2	47-44	Status summary (bits 60-63).
C3	35-32	Options installed (bits 60-63).
C4	23-20	Environment control (bits 60-63).
C5	59-56	Uncorrectable error log 1 (bits 60-63).
C6	47-44	Uncorrectable error log 2 (bits 60-63).
C7	35-32	Bounds register (bits 60-63).

MAINFRAME (MODELS 840, 845, 850, 855, AND 860)	MSGID 0224B
EXPRESS DEADSTART DUMP	SYMPTOM 0105B

This message is not issued after NOS 2.4.2. Refer to MSGID 0250B for mainframe-related BML messages issued after NOS 2.4.2.

The following message is generated by DSDI from data dumped during an express deadstart dump. This message is written to a local file but not to the BML.

The first message has the following form.

	59	47	41	35	29	23	11	0
Word 2	0224B	0105B	0	17B			0	
Word 3	0	04				0		
Word 4	EID-Element Identifier (Bits 0-59)							
Word 5	SS-Status Summary (Bits 0-59)							
Word 6	OI-Options Installed (Bits 0-59)							
Word 7	EC-Environment Control (Bits 0-59)							

The continuation message has the following form.

	59	47	41	35	29	23	11	0
Word 2	0224B	0105B	0	17B	0			
Word 3	0	04			0			
Word 4	C1	20B	C2	00	C3	22B	C4	40B
	(10)	(00)		(12)		(20)		
Word 5	UEL1-Uncorrectable Error Log 1 (Bits 0-59)							
Word 6	UEL2-Uncorrectable Error Log 2 (Bits 0-59)							
Word 7	BR-Bounds Register (Bits 0-59)							

The continuation message has the following form.

	59	47	41	35	29	23	11	0
Word 2	0224B	0105B	PP	17B			0	
Word 3	0	0				0		
Word 4	CEL - Corrected Error Log (Bits 0-59)							
Word 5	C5 !244B! !(A4)!	C6 ! 250B! !(A8)!	C7 ! 41B ! !(21) !	C8 !240B ! !(A0) !				0
Word 6			0					
Word 7			0					

<u>Field</u>	<u>Location</u>	<u>Description</u>
PP	35-30	PP that detected the error.
C1	59-56	Element identifier (bits 60-63).
C2	47-44	Status summary (bits 60-63).
C3	35-32	Options installed (bits 60-63).
C4	23-20	Environment control (bits 60-63).
C5	59-56	Uncorrectable error log 1 (bits 60-63).
C6	47-44	Uncorrectable error log 2 (bits 60-63).
C7	35-32	Bounds register (bits 60-63).
C8	23-20	Corrected error log (bits 60-63).

! MAINFRAME ! (MODELS 810, 815, 825, ! AND 830) !	! MSGID 0232B ! !
! PROCESSOR CORRECTED ERROR !	! SYMPTOM 0100B ! !

This message is not issued after NOS 2.4.2. Refer to MSGID 0250B for mainframe-related BML messages issued after NOS 2.4.2.

The first message has the following form.

	59	47	41	35	29	17	5	0
Word 2	0232B		0100B	PP	17B		0	CPU
Word 3		0		04			0	
Word 4	EID-Element Identifier (Bits 0-55)							
Word 5	SS-Status Summary (Bits 0-55)							
Word 6	OI-Options Installed (Bits 0-55)							
Word 7	DEC-Dependent Environment Control (Bits 0-55)							

The continuation message has the following form.

	59	47	41	35	29	23	11	5	0
Word 2	0232B	0100B	PP	17B	0	CPU			
Word 3	0	04			0				
Word 4	C1 !(10)	20B !	C2 !(00)	00 !	C3 !(12)	22B !	C4 !(30)	60B !	0 !
Word 5	CSEL-Control Store Error Log (Bits 0-59)								
Word 6	MCEL-Map Corrected Error Log (Bits 0-59)								
Word 7	RCEL-Retry Corrected Error Log (Bits 0-59)								



The continuation message has the following form.

	59	47	41	35	29	23	5	0
Word 2	0232B		0100B	PP	17B		0	CPU
Word 3	0	RTY	0				0	
Word 4				0				
Word 5	C5 !(91)	221B	C6 !(93)	223B	C7 !(90)	220B	0	
Word 6				0				
Word 7				0				

<u>Field</u>	<u>Location</u>	<u>Description</u>
PP	35-30	PP that detected the error.
CPU	5-0	Logical CPU number. 0: Processor 0. 1: Processor 1.
RTY	47-42	Number of retries attempted.
C1	59-56	Element identifier (bits 60-63).
C2	47-44	Status summary (bits 60-63).
C3	35-32	Options installed (bits 60-63).
C4	23-20	Dependent environment control (bits 60-63).
C5	59-56	Control store error log (bits 60-63).
C6	47-44	Map corrected error log (bits 60-63).
C7	35-32	Retry corrected error log (bits 60-63).

```

! MAINFRAME                               ! MSGID   0232B           !
! (MODELS 810, 815, 825, AND 830) !
!
! PROCESSOR UNCORRECTED ERROR             ! SYMPTOM 0141B, 0142B, 0144B, 0145B!
!                                           !           0161B, 0164B, 0200B     !
!

```

This message is not issued after NOS 2.4.2. Refer to MSGID 0250B for mainframe-related BML messages issued after NOS 2.4.2.

The first message has the following form.

```

      59      47      41      35      29      23      5      0
Word 2 ! 0232B ! SYMPTOM ! PP ! 17B!           0           ! CPU !
      !
Word 3 !      0 ! RTY ! FLG !                       0           !
      !
Word 4 ! EI-Element Identifier (Bits 0-59)
      !
Word 5 ! SS-Status Summary (Bits 0-59)
      !
Word 6 ! OI-Options Installed (Bits 0-59)
      !
Word 7 ! DEC-Dependent Environment Control (Bits 0-59)
      !

```

The continuation message has the following form.

	59	47	41	35	29	23	11	5	0
Word 2	0232B	SYMPTOM	PP	17B	0				CPU
Word 3	0	RTY	FLG			0			
Word 4	C1 !(10)!	20B !	C2 !	00 !(00)!	C3 !	22B !(12)!	C4 !	60B !(30)!	0
Word 5	PFS-Processor Fault Status (Bits 0-59)								
Word 6	CSEL-Control Store Error Log (Bits 0-59)								
Word 7	0								

The continuation message has the following form.

	59	47	41	35	29	23	5	0	
Word 2	0232B	SYMPTOM	PP	17B	0			CPU	
Word 3	0	RTY	FLG			0			
Word 4	0								
Word 5	C5 !(80)!	200B !	C6 !	201B !(81)!	0				
Word 6	0								
Word 7	0								

<u>Field</u>	<u>Location</u>	<u>Description</u>
SYMPTOM	47-36	Symptom code.
		0141B Real state processor detected uncorrected error (DUE) with process damaged.
		0142B Real state processor detected uncorrected error (DUE) with process not damaged and software retry exhausted.
		0144B Virtual state processor detected uncorrected error (DUE) with process damaged.
		0145B Virtual state processor detected uncorrected error (DUE) with process not damaged and software retry exhausted.
		0161B Real state processor detected uncorrected error (DUE) with process not damaged and software retry successful.
		0164B Virtual state processor detected uncorrected error (DUE) with process not damaged and software retry successful.
		0200B Critical error log.
CPU	5-0	Logical CPU number. 0: Processor 0. 1: Processor 1.
RTY	47-42	Number of times software retried failing operation.
FLG	41-36	Flag Field.
		Bit 38: 0 Final/only message. 1 Continuation message.
		Bit 37: Reserved.
		Bit 36: 0 Recovered. 1 Unrecovered.
C1	59-56	Element identifier (bits 60-63).
C2	47-44	Status summary (bits 60-63).
C3	35-32	Options installed (bits 60-63).
C4	23-20	Dependent environment control (bits 60-63).
C5	59-56	Processor fault status (bits 60-63).
C6	47-44	Control store error log (bits 60-63).

MAINFRAME (MODELS 810, 815, 825, AND 830)	MSGID 0232B
EXPRESS DEADSTART DUMP	SYMPTOM 0113B

This message is not issued after NOS 2.4.2. Refer to MSGID 0250B for mainframe-related BML messages issued after NOS 2.4.2.

The following message is generated by DSDI from data dumped during an express deadstart dump. This message is written to a local file; it is not issued to the BML.

The first message has the following form.

	59	47	41	35	29	23	5	0
Word 2	0232B	0113B	0	17B	0	CPU		
Word 3	0	04			0			
Word 4	EID-Element Identifier (Bits 0-59)							
Word 5	SS-Status Summary (Bits 0-59)							
Word 6	OI-Options Installed (Bits 0-59)							
Word 7	DEC-Dependent Environment Control (Bits 0-59)							

The continuation message has the following form.

	59	47	41	35	29	23	11	5	0
Word 2	0232B	0113B	0	17B	0	CPU			
Word 3	0	04			0				
Word 4	C1 ! 20B! !(10)!	C2 ! 00! !(00)!	C3 ! 22B! !(12)!	C4 ! 40B! !(30)!	0				
Word 5	MCEL-Map Corrected Error Log (Bits 0-59)								
Word 6	RCEL-Retry Corrected Error Log (Bits 0-59)								
Word 7	PFS-Processor Fault Status (Bits 0-59)								

The continuation message has the following form.

	59	47	41	35	29	23	11	5	0
Word 2	0232B	0113B	0	17B	0	CPU			
Word 3	0	0			0				
Word 4	0								
Word 5	C5 ! 223B! !(93)!	C6 ! 220B! !(90)!	C7 ! 200B! !(80)!	0					
Word 6	0								
Word 7	0								

<u>Field</u>	<u>Location</u>	<u>Description</u>
CPU	5-0	Logical CPU number. 0: Processor 0. 1: Processor 1.
C1	59-56	Element identifier (bits 60-63).
C2	47-44	Status summary (bits 60-63).
C3	35-32	Options installed (bits 60-63).
C4	23-20	Dependent environment control (bits 60-63).
C5	59-56	Map corrected error log (bits 60-63).
C6	47-44	Retry corrected error log (bits 60-63).
C7	35-32	Processor fault status (bits 60-63).

! MAINFRAME ! (MODEL 835)	! MSGID 0233B
! PROCESSOR CORRECTED ERROR	! SYMPTOM 0100B

This message is not issued after NOS 2.4.2 level 642. Refer to MSGID 250 for mainframe-related BML messages issued after NOS 2.4.2 level 642.

The first message has the following form.

	59	47	41	35	29	23	11	5	0
Word 2	0233B	0100B	PP	17B	0	CPU			
Word 3	0	04			0				
Word 4	EID-Element Identifier (Bits 0-59)								
Word 5	SS-Status Summary (Bits 0-59)								
Word 6	OI-Options Installed (Bits 0-59)								
Word 7	DEC-Dependent Environment Control (Bits 0-59)								

The continuation message has the following form.

	59	47	41	35	29	23	11	5	0
Word 2	0233B	0100B	PP	17B	0	CPU			
Word 3	0	04			0				
Word 4	C1	20B	C2	00	C3	22B	C4	60B	zero
	!(10)!	!(00)!		!(12)!		!(30)!			
Word 5	CCEL-Cache Corrected Error Log (Bits 0-59)								
Word 6	RCEL-Retry Corrected Error Log (Bits 0-59)								
Word 7	0								



The continuation message has the following form.

	59	47	41	35	29	23	11	5	0
Word 2	0233B	0100B	PP	17B	0	CPU			
Word 3	0	0			0				
Word 4				0					
Word 5	C5 (92)	222B	C6 (90)	220B		0			
Word 6				0					
Word 7				0					

<u>Field</u>	<u>Location</u>	<u>Description</u>
PP	35-30	PP that detected the error.
CPU	5-0	Logical CPU number. 0: Processor 0.
C1	59-56	Element identifier (bits 60-63).
C2	47-44	Status summary (bits 0-63).
C3	35-32	Options installed (bits 60-63).
C4	23-20	Dependent environment control (bits 60-63).
C5	59-56	Cache corrected error log (bits 60-63).
C6	47-44	Retry corrected error log (bits 60-63).

! MAINFRAME ! (MODEL 835) !	! MSGID 0233B ! !
! PROCESSOR UNCORRECTED ERROR ! !	! SYMPTOM 0141B, 0142B, 0144B, 0145B! ! 0161B, 0164B, 0200B !

This message is not issued after NOS 2.4.2. Refer to MSGID 0250B for mainframe-related BML messages issued after NOS 2.4.2.

The first message has the following form.

	59	47	41	35	29	23	11	5	0
Word 2	0233B	SYMPTOM	PP	17B	0	CPU			
Word 3	0	RTY	FLG						
Word 4	EID-Element Identifier (Bits 0-59)								
Word 5	SS-Status Summary (Bits 0-59)								
Word 6	OI-Options Installed (Bits 0-59)								
Word 7	DEC-Dependent Environment Control (Bits 0-59)								

The continuation message has the following form.

	59	47	41	35	29	23	11	5	0
Word 2	0233B	SYMPTOM	PP	17B	0	CPU			
Word 3	0	RTY	FLG		0				
Word 4	C1 ! 20B! !(10)!	C2 ! 00! !(00)!	C3 ! 22B! !(12)!	C4 ! 60B! !(30)!	0				
Word 5	PFS-Processor Fault Status (Bits 0-59)								
Word 6	0								
Word 7	0								

The continuation message has the following form.

	59	47	41	35	29	23	11	5	0
Word 2	0233B	SYMPTOM	PP	17B	0	CPU			
Word 3	0	RTY	FLG		0				
Word 4	0								
Word 5	C5 ! 200B! !(80)!		0						
Word 6	0								
Word 7	0								

<u>Field</u>	<u>Location</u>	<u>Description</u>
SYMPTOM	47-36	Symptom code. 0141B Real state processor detected uncorrected error (DUE) with process damaged. 0142B Real state processor detected uncorrected error (DUE) with process not damaged and software retry exhausted. 0144B Virtual state processor detected uncorrected error (DUE) with process damaged. 0145B Virtual state processor detected uncorrected error (DUE) with process not damaged and software retry exhausted. 0161B Real state processor detected uncorrected error (DUE) with process not damaged and software retry successful. 0164B Virtual state processor detected uncorrected error (DUE) with process not damaged and software retry successful. 0200B Critical error log.
PP	35-30	PP that detected the error.
CPU	5-0	Logical CPU number. 0: Processor 0.
RTY	47-42	Number of times software retried the failing operation.
FLG	41-36	Flag field. Bit 38: 0 Final/only message. 1 Continuation message. Bit 37: Reserved. Bit 36: 0 Recovered. 1 Unrecovered.
C1	59-56	Element identifier (bits 60-63).
C2	47-44	Status summary (bits 0-63).
C3	35-32	Options installed (bits 60-63).
C4	23-20	Dependent environment control (bits 60-63).
C5	59-56	Processor fault (bits 0-63).

MAINFRAME (MODEL 835)	MSGID 0233B
EXPRESS DEADSTART DUMP	SYMPTOM 0113B

This message is not issued after NOS 2.4.2. Refer to MSGID 0250B for mainframe-related BML messages issued after NOS 2.4.2.

The following message is generated by DSDI from data dumped during an express deadstart dump. This message is written to a local file but not to the BML.

The first message has the following form.

	59	47	41	35	29	23	11	5	0
Word 2	0233B	0113B	0	17B	0	CPU			
Word 3	0	04			0				
Word 4	EID-Element Identifier (Bits 0-59)								
Word 5	SS-Status Summary (Bits 0-59)								
Word 6	OI-Options Installed (Bits 0-59)								
Word 7	DEC-Dependent Environment Control (Bits 0-59)								

The continuation message has the following form.

	59	47	41	35	29	23	11	5	0
Word 2	0233B	0113B	0	17B	0	CPU			
Word 3	0	04			0				
Word 4	C1 ! 20B! !(10)!	C2 ! 00! !(00)!	C3 ! 22B! !(12)!	C4 ! 60B! !(30)!	0				
Word 5	CCEL-Cache Corrected Error Log (Bits 0-59)								
Word 6	RCEL-Retry Corrected Error Log (Bits 0-59)								
Word 7	PFS-Processor Fault Status (Bits 0-59)								

The continuation message has the following form.

	59	47	41	35	29	23	5	0	
Word 2	0233B	0113B	0	17B	0	CPU			
Word 3	0	0			0				
Word 4	0								
Word 5	C5 ! 222B! !(92)!	C6 ! 220B! !(90)!	C7 ! 200B! !(80)!	0					
Word 6	0								
Word 7	0								

<u>Field</u>	<u>Location</u>	<u>Description</u>
CPU	5-0	Logical CPU number. 0: Processor 0.
C1	59-56	Element identifier (bits 60-63).
C2	47-44	Status summary (bits 0-63).
C3	35-32	Options installed (bits 60-63).
C4	23-20	Dependent environment control (bits 60-63).
C5	59-56	Cache corrected error log (bits 60-63).
C6	47-44	Retry corrected error log (bits 60-63).
C7	35-32	Processor fault status (bits 60-63).

! MAINFRAME ! (MODEL 835)	! MSGID 0234B
! PROCESSOR ERROR	! SYMPTOM 0100B, 0113B, 0141B, 0142B! ! 0144B, 0145B, 0161B, 0164B! ! 0200B

This message is not issued after NOS 2.4.2. Refer to MSGID 0250B for mainframe-related BML messages issued after NOS 2.4.2.

The first message has the following form.

	59	47	41	35	29	23	11	5	0
Word 2	0233B	SYMPTOM	PP	17B	0	CPU			
Word 3	0	RTY	FLG		0				
Word 4	EID-Element Identifier (Bits 0-59)								
Word 5	SS-Status Summary (Bits 0-59)								
Word 6	OI-Options Installed (Bits 0-59)								
Word 7	DEC-Dependent Environment Control (Bits 0-59)								



The continuation message has the following form.

	59	47	41	35	29	23	11	5	0
Word 2	0233B	SYMPTOM	PP	17B	0	CPU			
Word 3	0	RTY	FLG		0				
Word 4	C1	20B	C2	00	C3	22B	C4	60B	zero
	!(10)!	!	(00)!	!	(12)!	!	(30)!	!	!
Word 5	PFS0-Processor Fault Status 0 (Bits 0-59)								
Word 6	PFS1-Processor Fault Status 1 (Bits 0-59)								
Word 7	PFS2-Processor Fault Status 2 (Bits 0-59)								

The continuation message has the following form.

	59	47	41	35	29	23	11	5	0
Word 2	0233B	SYMPTOM	PP	17B	0	CPU			
Word 3	0	RTY	FLG		0				
Word 4	PFS3-Processor Fault Status 3 (Bits 0-59)								
Word 5	C5	200B	C6	201B	C7	202B	C8	203B	0
	!(80)!	!	(81)!	!	(82)!	!	(83)!	!	!
Word 6	PFS4-Processor Fault Status 4 (Bits 0-59)								
Word 7	PFS5-Processor Fault Status 5 (Bits 0-59)								

The continuation message has the following form.

	59	47	41	35	29	23	11	5	0
Word 2	0233B	SYMPTOM	PP	17B	0	CPU			
Word 3	0	RTY	FLG		0				
Word 4	PFS6-Processor Fault Status 6 (Bits 0-59)								
Word 5	PFS7-Processor Fault Status 7 (Bits 0-59)								
Word 6	C9	204B	C10	205B	C11	206B	C12	207B	0
	(84)		(85)		(86)		(87)		
Word 7	PFS8-Processor Fault Status 8 (Bits 0-59)								

The continuation message has the following form.

	59	47	41	35	29	23	11	5	0
Word 2	0233B	SYMPTOM	PP	17B	0	CPU			
Word 3	0	RTY	FLG		0				
Word 4	Processor Fault Status 9 (Bits 0-59)								
Word 5	0								
Word 6	0								
Word 7	C13	210B	C14	211B		0			
	(88)		(89)						

<u>Field</u>	<u>Location</u>	<u>Description</u>
SYMPTOM	47-36	Symptom code. 0100B Corrected error. 0113B Express deadstart dump. 0141B Real state processor detected uncorrected error (DUE) with process damaged. 0142B Real state processor detected uncorrected error (DUE) with process not damaged and software retry exhausted. 0144B Virtual state processor detected uncorrected error (DUE) with process damaged. 0145B Virtual state processor detected uncorrected error (DUE) with process not damaged and software retry exhausted. 0161B Real state processor detected uncorrected error (DUE) with process not damaged and software retry successful. 0164B Virtual state processor detected uncorrected error (DUE) with process not damaged and software retry successful. 0200B Critical error log.
PP	35-30	PP that detected the error.
CPU	5-0	Logical CPU number. 0: Processor 0. 1: Processor 1.
RETRY	47-42	Number of times software retried the failing operation.

<u>Field</u>	<u>Location</u>	<u>Description</u>
FLG	41-36	Flag field. Bit 39: 0 First/only block of message 1 Not the first block of message. Bit 38: 0 Final/only block of message. 1 A continuation block follows. Bit 37: Reserved. Bit 36: 0 Recovered. 1 Unrecovered.
C1	55-56	Element identifier (bits 60-63).
C2	47-44	Status summary (bits 60-63).
C3	35-32	Options installed (bits 60-63).
C4	23-20	Dependent environment control (bits 60-63).
C5	55-56	Processor fault status 0 (bits 60-63).
C6	47-44	Processor fault status 1 (bits 60-63).
C7	35-32	Processor fault status 2 (bits 60-63).
C8	23-20	Processor fault status 3 (bits 60-63).
C9	59-56	Processor fault status 4 (bits 60-63).
C10	47-44	Processor fault status 5 (bits 60-63).
C11	35-32	Processor fault status 6 (bits 60-63).
C12	23-20	Processor fault status 7 (bits 60-63).
C13	55-56	Processor fault status 8 (bits 60-63).
C14	47-44	Processor fault status 9 (bits 60-63).

DUAL STATE	MSGID 0240B
CM ASSIGNED, CM RETURNED	SYMPTOM 0110B, 0111B

This message is issued wherever central memory (CM) is assigned to NOS/VE or returned to NOS.

	59	47	35	23	0
Word 2	0240B	SYMPTOM		0	
Word 3			0		
Word 4	0	FWA/1000B		(LWA-1)1000B	

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
SYMPTOM	2	47-36	Symptom code. 0110B CM assigned to NOS/VE. 0111B CM returned to NOS.
FWA	4	47-24	First word address of NOS/VE. CM after operation is complete.
LWA	4	23-0	Last word address of NOS/VE. CM after operation is complete.

DUAL STATE	MSGID 0240B
CONCURRENT PP STATUS	SYMPTOM 0114B, 0115B, 0122B

These messages are issued whenever a concurrent PP (CPP) is assigned to NOS/VE or returned to NOS.

	59	47	35	23	11	0
WORD 2	0240B	SYMPTOM			0	
WORD 3				0		
WORD 4			0			CPP

<u>FIELD</u>	<u>WORD</u>	<u>LOCATION</u>	<u>DESCRIPTION</u>
SYMPTOM	2	47-36	Symptom code. 0114B CPP assigned to NOS/VE. 0115B CPP returned to NOS. 0122B Idle CPP error. This BML message can be issued when a NOS CPP is being idled. It is not issued when a NOS/VE CPP is idled since that is done by NOS/VE.
CPP	4	11-0	Logical CPP number to which message applies (0-11B).

! DUAL STATE	! MSGID 0240B
! PP STATUS	! SYMPTOM 0112B, 0113B, 0120B, 0121B

These messages are issued whenever a PP is assigned to NOS/VE or returned to NOS.

	59	47	35	11	0
Word 2	0240B	SYMPTOM		0	
Word 3			0		
Word 4		0		PP	

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
SYMPTOM	2	47-36	Symptom code. 0112B PP assigned to NOS/VE. 0113B PP returned to NOS. 0120B Deadstart PP error. 0121B Idle PP error.
PP	4	11-0	Logical PP number to which the message applies.

MAINFRAME (180 CLASS MODELS)	MSGID 0250B
IOU ERRORS	SYMPTOM 0001B,0002B

The first message has the following form.

	59	47	41	35	29	23	11	0
Word 2	0250B	SYMPTOM	PP	17B			0	
Word 3	0	04B		0		MID	0	
Word 4	EID - Element Identifier (bits 0 - 59)							
Word 5	SS - Status Summary (bits 0 - 59)							
Word 6	OI - Options Installed (bits 0 - 59)							
Word 7	DEC - Dependent Environment Control (bits 0 - 59)							

Continuation message 1.

	59	47	41	35	29	23	11	0
Word 2	0250B	SYMPTOM	PP	17B			0	
Word 3	0	14B		0		MID	0	
Word 4	C1 ! 20B ! ! (10)!	C2 ! 00B ! ! (00)!	C3 ! 22B ! ! (12)!	C4 ! 60B ! ! (30)!			0	
Word 5	SR - Status Register (bits 0 - 59)							
Word 6	FS1 - Fault Status Register 1 (bits 0 - 59)							
Word 7	FS2 - Fault Status Register 2 (bits 0 - 59)							



Continuation message 2.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!
Word 3	!	0	! 14B	!	0	!	MID	! 0
Word 4	!	TM - Test Mode (bits 0 - 59)						!
Word 5	! C5	! 100B!	C6	! 200B!	C7	! 201B!	C8	! 240B!
	!	! (40)!	!	! (80)!	!	! (81)!	!	! (A0)!
Word 6	!	FSM - Fault Status Mask (bits 0 - 59)						!
Word 7	!	OSB - OS Bounds (bits 0 - 59)						!

Continuation message 3. This is the last message if the CIO subsystem is not installed.

	59	47	35	29	23	11	0	
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	
Word 3	!	0	! 10B	!	0	!	MID	
Word 4	!	0						!
Word 5	!	0						!
Word 6	! C9	! 30B!	C10	! 41B!	!	!	0	
	!	! (18)!	!	! (21)!	!	!	!	
Word 7	!	0						!

Continuation message 3, if the CIO subsystem is installed.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!
Word 3	!	0	! 14B	!	0	!	MID	! 0
Word 4	!	OI - CIO Options Installed (bits 0 - 59)						!
Word 5	!	EC - CIO Environment Control (bits 0 - 59)						!
Word 6	! C9	! 30B!	C10	! 41B!	C11	! 26B!	C12	! 64B!
	!	! (18)!	!	! (21)!	!	! (16)!	!	! (34)!
Word 7	!	SR - CIO Status Register (bits 0 - 59)						!

Continuation message 4, if the CIO subsystem is installed.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!
Word 3	!	0	! 14B	!	0	! MID	!	0
Word 4	! FS1 - CIO Fault Status 1 (bits 0 - 59) !							
Word 5	! FS2 - CIO Fault Status 2 (bits 0 - 59) !							
Word 6	! TM - CIO Test Mode (bits 0 - 59) !							
Word 7	! C13 !104B !	C14 ! 204B !	C15 ! 205B !	C16 ! 244B !	0	!	!	!
	! (44) !	! (84) !	! (85) !	! (A4) !	!	!	!	!

Continuation message 5, if the CIO subsystem is installed.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!
Word 3	!	0	! 14B	!	0	! MID	!	0
Word 4	! FSM - CIO Fault Status Mask (bits 0 - 59) !							
Word 5	! OSB - CIO OS Bounds (bits 0 - 59) !							
Word 6	! CS0 - Channel 0 Status (bits 0 - 59) !							
Word 7	! CS1 - Channel 1 Status (bits 0 - 59) !							

Continuation message 6, if the CIO subsystem is installed.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!
Word 3	!	0	! 14B	!	0	! MID	!	0
Word 4	! C17 ! 34B !	C18 ! 45B !	C19 ! 260B !	C20 ! 261B !	0	!	!	!
	! (1C) !	! (25) !	! (B0) !	! (B1) !	!	!	!	!
Word 5	! CS2 - Channel Status 2 (bits 0 - 59) !							
Word 6	! CS3 - Channel Status 3 (bits 0 - 59) !							
Word 7	! CS4 - Channel Status 4 (bits 0 - 59) !							

Continuation message 7. This is the last message if a 5-PP CIO subsystem is installed.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!
Word 3	!	0	! 10B	!	0	! MID	!	0
Word 4	!		0					!
Word 5	! C21	! 262B!	C22 ! 263B !	C23 ! 264B !			0	!
	!	! (B2)!	! (B3) !	! (B4) !				!
Word 6	!				0			!
Word 7	!				0			!

Continuation message 7, if a 10-PP CIO subsystem is installed.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!
Word 3	!	0	! 14B	!	0	! MID	!	0
Word 4	!	CS5 - CIO Channel 5 Status (bits 0 - 59)						!
Word 5	! C21	! 262B!	C22 ! 263B !	C23 ! 264B !	C24 ! 265B !		0	!
	!	! (B2)!	! (B3) !	! (B4) !	! (B5) !			!
Word 6	!	CS6 - CIO Channel 6 Status (bits 0 - 59)						!
Word 7	!	CS7 - CIO Channel 7 Status (bits 0 - 59)						!

Continuation message 8. This is the last message if a 10-PP CIO subsystem is installed.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!
Word 3	!	0	! 10B	!	0	! MID	!	0
Word 4	!	CS8 - CIO Channel 10B Status (bits 0 - 59)						!
Word 5	!	CS9 - CIO Channel 11B Status (bits 0 - 59)						!
Word 6	! C25	! 266B !	C26 ! 267B !	C27 ! 270B !	C28 ! 271B !		0	!
	!	! (B6) !	! (B7) !	! (B8) !	! (B9) !			!
Word 7	!				0			!

<u>Field</u>	<u>Location</u>	<u>Description</u>
SYMPTOM	47-36	Symptom code. 0001B Deadstart error log IOU error. 0002B Express deadstart dump IOU error.
PP	35-30	PP that detected the error.
MID	23-12	Machine identifier.
C1	59-56	Element identifier (bits 60 - 63).
C2	47-44	Status summary (bits 60 - 63).
C3	35-32	Options installed (bits 60 -63).
C4	23-20	Dependent environment control (bits 60 - 63).
C5	59-56	Status register (bits 60 - 63).
C6	47-44	Fault status 1 (bits 60 - 63).
C7	35-32	Fault status 2 (bits 60 - 63).
C8	23-20	Test mode (bits 60 - 63).
C9	59-56	Fault status mask (bits 60 - 63).
C10	47-44	OS bounds (bits 60 - 63).
C11	35-32	CIO options installed (bits 60 -63).
C12	23-20	CIO environment control (bits 60 - 63).
C13	59-56	CIO status register (bits 60 - 63).
C14	47-44	CIO fault status 1 (bits 60 - 63).
C15	35-32	CIO fault status 2 (bits 60 - 63).
C16	23-20	CIO test mode (bits 60 - 63).
C17	59-56	CIO fault status mask (bits 60 - 63).
C18	47-44	CIO OS bounds (bits 60 - 63).
C19	35-32	CIO channel 0 status (bits 60 - 63).
C20	23-20	CIO channel 1 status (bits 60 - 63).
C21	59-56	CIO channel 2 status (bits 60 - 63).
C22	47-44	CIO channel 3 status (bits 60 - 63).
C23	35-32	CIO channel 4 status (bits 60 - 63).
C24	23-20	CIO channel 5 status (bits 60 - 63).
C25	59-56	CIO channel 6 status (bits 60 - 63).
C26	47-44	CIO channel 7 status (bits 60 - 63).
C27	35-32	CIO channel 10B status (bits 60 - 63).
C28	23-20	CIO channel 11B status (bits 60 - 63).

!	MAINFRAME	!	MSGID	0250B	!
!	(180 CLASS MODELS)	!			!
!	IOU ERRORS	!	SYMPTOM	0003B, 0004B, 0005B,	!
!		!		0006B, 0007B, 0010B,	!
!		!		0011B, 0012B, 0013B	!

The first message has the following form.

	59	47	41	35	29	23	11	0				
Word 2	!	0250B	!	SYMPTOM	!	PP	!	17B	!	0	!	
Word 3	!	0	!	04B	!	0	!	MID	!	0	!	
Word 4	!										EID - Element Identifier (bits 0 - 59)	!
Word 5	!										SS - Status Summary (bits 0 - 59)	!
Word 6	!										OI - Options Installed (bits 0 - 59)	!
Word 7	!										DEC - Dependent Environment Control (bits 0 - 59)	!

Continuation message 1.

	59	47	41	35	29	23	11	0											
Word 2	!	0250B	!	SYMPTOM	!	PP	!	17B	!	0	!								
Word 3	!	0	!	14B	!	0	!	MID	!	0	!								
Word 4	!	C1	!	20B	!	C2	!	00B	!	C3	!	22B	!	C4	!	60B	!	0	!
	!	(10)	!	(00)	!	(12)	!	(30)	!		!		!		!		!		
Word 5	!										SR - Status Register (bits 0 - 59)	!							
Word 6	!										FS1 - Fault Status Register 1 (bits 0 - 59)	!							
Word 7	!										FS2 - Fault Status Register 2 (bits 0 - 59)	!							

Continuation message 2.

	59	47	41	35	29	23	11	0	
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!	
Word 3	!	0	! 14B	!	0	!	MID	! 0	
Word 4	! TM - Test Mode (bits 0 - 59) !								
Word 5	! C5	! 100B!	C6	! 200B!	C7	! 201B!	C8	! 240B!	0
	!	! (40)!	!	! (80)!	!	! (81)!	!	! (A0)!	!
Word 6	! FSM - Fault Status Mask (bits 0 - 59) !								
Word 7	! OSB - OS Bounds (bits 0 - 59) !								

Continuation message 3. This is the last message if the CIO subsystem is not installed.

	59	47	41	35	29	23	11	0	
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!	
Word 3	!	0	! 10B	!	0	!	MID	! 0	
Word 4	!								
Word 5	!								
Word 6	! C9	! 30B!	C10	! 41B!					!
	!	! (18)!	!	! (21)!					!
Word 7	!								

Continuation message 3, if the CIO subsystem is installed.

	59	47	41	35	29	23	11	0	
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!	
Word 3	!	0	! 14B	!	0	!	MID	! 0	
Word 4	! OI - CIO Options Installed (bits 0 - 59) !								
Word 5	! EC - CIO Environment Control (bits 0 - 59) !								
Word 6	! C9	! 30B!	C10	! 41B!	C11	! 26B!	C12	! 64B!	0
	!	! (18)!	!	! (21)!	!	! (16)!	!	! (34)!	!
Word 7	! SR - CIO Status Register (bits 0 - 59) !								

Continuation message 4, if the CIO subsystem is installed.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!
Word 3	!	0	! 14B	!	0	!	MID	! 0
Word 4	! FS1 - CIO Fault Status 1 (bits 0 - 59)							!
Word 5	! FS2 - CIO Fault Status 2 (bits 0 - 59)							!
Word 6	! TM - CIO Test Mode (bits 0 - 59)							!
Word 7	! C13 !104B !	! C14 ! 204B !	! C15 ! 205B !	! C16 ! 244B !	!	!	0	!
	! (44) !	! (84) !	! (85) !	! (A4) !	!	!	!	!

Continuation message 5, if the CIO subsystem is installed.

	59	47	41	35	29	23	11	0	
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!	
Word 3	!	0	! 14B	!	0	!	MID	! 0	
Word 4	! FSM - CIO Fault Status Mask (bits 0 - 59)							!	
Word 5	! OSB - CIO OS Bounds (bits 0 - 59)							!	
Word 6	!							0	!
Word 7	!							0	!

Continuation message 6, if the CIO subsystem is installed.

	59	47	41	35	29	23	11	0	
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!	
Word 3	!	0	! 10B	!	0	!	MID	! 0	
Word 4	! C17 ! 34B !	! C18 ! 45B !	!	!	!	!	0	!	
	! (1C) !	! (25) !	!	!	!	!	!	!	
Word 5	!							0	!
Word 6	!							0	!
Word 7	!							0	!

<u>Field</u>	<u>Location</u>	<u>Description</u>
SYMPTOM	47-36	Symptom code. 0003B Corrected IOU error (I4 only). 0004B Uncorrected IOU error (PP halt). 0005B 12/16 IOU conversion error. 0006B Fatal IOU error. 0007B Channel error. 0010B Fatal IOU error (CIO PP). 0011B Uncorrected IOU error (CIO PP halt). 0012B 12/16 IOU conversion error (CIO PP). 0013B Uncorrected channel error (CIO PP).
PP	35-30	PP that detected the error.
MID	23-12	Machine identifier.
C1	59-56	Element identifier (bits 60 - 63).
C2	47-44	Status summary (bits 60 - 63).
C3	35-32	Options installed (bits 60 - 63).
C4	23-20	Dependent environment control (bits 60 - 63).
C5	59-56	Status register (bits 60 - 63).
C6	47-44	Fault status 1 (bits 60 - 63).
C7	35-32	Fault status 2 (bits 60 - 63).
C8	23-20	Test mode (bits 60 - 63).
C9	59-56	Fault status mask (bits 60 - 63).
C10	47-44	OS bounds (bits 60 - 63).
C11	35-32	CIO options installed (bits 60 -63).
C12	23-20	CIO environment control (bits 60 - 63).
C13	59-56	CIO status register (bits 60 - 63).
C14	47-44	CIO fault status 1 (bits 60 - 63).
C15	35-32	CIO fault status 2 (bits 60 - 63).
C16	23-20	CIO test mode (bits 60 - 63).
C17	59-56	CIO fault status mask (bits 60 - 63).
C18	47-44	CIO OS bounds (bits 60 - 63).



! MAINFRAME	! MSGID 0250B
! (180 CLASS EXCEPT 990)	!
! MEMORY ERROR	! SYMPTOM 0401B, 0402B

The first message has the following form.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!
Word 3	!	0	! 04B	!	0	!	MID	! 0
Word 4	! EID - Element Identifier (bits 0 - 59) !							
Word 5	! SS - Status Summary (bits 0 - 59) !							
Word 6	! OI - Options Installed (bits 0 - 59) !							
Word 7	! EC - Environment Control (bits 0 - 59) !							

Continuation message 1.

	59	47	41	35	29	23	11	0	
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!	
Word 3	!	0	! 14B	!	0	!	MID	! 0	
Word 4	! C1	! 20B	! C2	! 00B	! C3	! 22B	! C4	! 40B	! 0
	!	! (10)!	!	! (00)!	!	! (12)!	!	! (20)!	!
Word 5	! CEL - Corrected Error Log (bits 0 - 59) !								
Word 6	! UEL1 - Uncorrectable Error Log 1 (bits 0 - 59) !								
Word 7	! UEL2 - Uncorrectable Error Log 2 (bits 0 - 59) !								

Continuation message 2.

	59	47	41	35	29	23	11	0											
Word 2	!	0250B	!	SYMPTOM	!	PP	!	17B	!	0	!								
Word 3	!	0	!	10B	!	0	!	MID	!	0	!								
Word 4	! BR - Bounds Register (bits 0 - 59) !																		
Word 5	!	C5	!	240B	!	C6	!	244B	!	C7	!	250B	!	C8	!	41B	!	0	!
	!	(A0)!	!	(A4)	!	(A8)	!	(21)!	!		!		!		!		!		!
Word 6	!										0	!							
Word 7	!										0	!							

<u>Field</u>	<u>Location</u>	<u>Description</u>
SYMPTOM	47-36	Symptom code. 0401B Deadstart error log memory error. 0402B Express deadstart dump memory error.
PP	35-30	PP that detected the error.
MID	23-12	Machine identifier.
C1	59-56	Element identifier (bits 60 - 63).
C2	47-44	Status summary (bits 60 - 63).
C3	35-32	Options installed (bits 60 -63).
C4	23-20	Environment control (bits 60 - 63).
C5	59-56	Corrected error log (bits 60 - 63).
C6	47-44	Uncorrectable error log 1 (bits 60 - 63).
C7	35-32	Uncorrectable error log 2 (bits 60 - 63).
C8	23-20	Bounds register (bits 60 - 63).

! MAINFRAME	! MSGID 0250B
! (MODEL 990)	!
! MEMORY ERROR	! SYMPTOM 0401B, 0402B
!	!

The first message has the following form.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!
Word 3	!	0	! 04B	!	0	!	MID	! 0
Word 4	! EID - Element Identifier (bits 0 - 59)							
Word 5	! SS - Status Summary (bits 0 - 59)							
Word 6	! OI - Options Installed (bits 0 - 59)							
Word 7	! EC - Environment Control (bits 0 - 59)							

Continuation message 1.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!
Word 3	!	0	! 14B	!	0	!	MID	! 0
Word 4	! C1	! 20B	! C2	! 00B	! C3	! 22B	! C4	! 40B
	! (10)	!	! (00)	!	! (12)	!	! (20)	!
Word 5	! CEL0 - Corrected Error Log 0 (bits 0 - 59)							
Word 6	! CEL1 - Corrected Error Log 1 (bits 0 - 59)							
Word 7	! CEL2 - Corrected Error Log 2 (bits 0 - 59)							

Continuation message 2.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!
Word 3	!	0	! 14B	!	0	!	MID	! 0
Word 4	! CEL3 - Corrected Error Log 3 (bits 0 - 59)							!
Word 5	! C5	! 240B!	C6	! 241B!	C7	! 242B!	C8	! 243B!
	!	! (A0)!	!	! (A1)!	!	! (A2)!	!	! (A3)!
Word 6	! UELO - Uncorrectable Error Log 0 (bits 0 - 59)							!
Word 7	! UEL1 - Uncorrectable Error Log 1 (bits 0 - 59)							!

Continuation message 3.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!
Word 3	!	0	! 14B	!	0	!	MID	! 0
Word 4	! UEL2 - Uncorrectable Error Log 2 (bits 0 - 59)							!
Word 5	! UEL3 - Uncorrectable Error Log 3 (bits 0 - 59)							!
Word 6	! C9	! 244B!	C10	! 245B!	C11	! 246B!	C12	! 247B!
	!	! (A4)!	!	! (A5)!	!	! (A6)!	!	! (A7)!
Word 7	! BR - Bounds Register (bits 0 - 59)							!

Continuation message 4.

	59	47	41	35	29	23	11	0	
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!	
Word 3	!	0	! 10B	!	0	!	MID	! 0	
Word 4	!							0	
Word 5	!							0	
Word 6	!							0	
Word 7	! C13	! 41B!	!					0	!
	!	! (21)!	!					!	

<u>Field</u>	<u>Location</u>	<u>Description</u>
SYMPTOM	47-36	Symptom code. 0401B Deadstart error log memory error. 0402B Express deadstart dump memory error.
PP	35-30	PP that detected the error.
MID	23-12	Machine identifier.
C1	59-56	Element identifier (bits 60 - 63).
C2	47-44	Status summary (bits 60 - 63).
C3	35-32	Options installed (bits 60 -63).
C4	23-20	Environment control (bits 60 - 63).
C5	59-56	Corrected error log 0 (bits 60 - 63).
C6	47-44	Corrected error log 1 (bits 60 - 63).
C7	35-32	Corrected error log 2 (bits 60 - 63).
C8	23-20	Corrected error log 3 (bits 60 - 63).
C9	59-56	Uncorrectable error log 0 (bits 60 - 63).
C10	47-44	Uncorrectable error log 1 (bits 60 - 63).
C11	35-32	Uncorrectable error log 2 (bits 60 - 63).
C12	23-20	Uncorrectable error log 3 (bits 60 - 63).
C13	59-56	Bounds register (bits 60 - 63).

! MAINFRAME ! (180 CLASS EXCEPT 990)	! MSGID 0250B
! CORRECTED MEMORY ERROR	! SYMPTOM 0403B, 0405B

The first message has the following form.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!
Word 3	!	0	! 04B	!	0	! MID	!	0
Word 4	! EID - Element Identifier (bits 0 - 59)							
Word 5	! SS - Status Summary (bits 0 - 59)							
Word 6	! OI - Options Installed (bits 0 - 59)							
Word 7	! EC - Environment Control (bits 0 - 59)							

Continuation message 1.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!
Word 3	!	0	! 14B	!	0	! MID	!	0
Word 4	! C1	! 20B	! C2	! 00B	! C3	! 22B	! C4	! 40B
	!	! (10)!	!	! (00)!	!	! (12)!	!	! (20)!
Word 5	! CEL - Corrected Error Log (bits 0 - 59)							
Word 6	!							
Word 7	!							

Continuation message 2.

	59	47	41	35	29	23	11	0			
Word 2	!	0250B	!	SYMPTOM	!	PP	!	17B	!	0	!
Word 3	!	0	!	10B	!	0	!	MID	!	0	!
Word 4	!					0					!
Word 5	!	C5	!	240B!		0					!
	!		!	(A0)!							!
Word 6	!					0					!
Word 7	!					0					!

<u>Field</u>	<u>Location</u>	<u>Description</u>
SYMPTOM	47-36	Symptom code. 0403B Corrected memory error. 0405B Multiple odd bit error.
PP	35-30	PP that detected the error.
MID	23-12	Machine identifier.
C1	59-56	Element identifier (bits 60 - 63).
C2	47-44	Status summary (bits 60 - 63).
C3	35-32	Options installed (bits 60 -63).
C4	23-20	Environment control (bits 60 - 63).
C5	59-56	Corrected error log (bits 60 - 63).

! MAINFRAME ! (MODEL 990)	! MSGID 0250B
! CORRECTED MEMORY ERROR	! SYMPTOM 0403B, 0405B

The first message has the following form.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!
Word 3	!	0	! 04B	!	0	!	MID	! 0
Word 4	! EID - Element Identifier (bits 0 - 59) !							
Word 5	! SS - Status Summary (bits 0 - 59) !							
Word 6	! OI - Options Installed (bits 0 - 59) !							
Word 7	! EC - Environment Control (bits 0 - 59) !							

Continuation message 1.

	59	47	41	35	29	23	11	0	
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!	
Word 3	!	0	! 14B	!	0	!	MID	! 0	
Word 4	! C1	! 20B	! C2	! 00B	! C3	! 22B	! C4	! 40B	! 0
	!	! (10)!	!	! (00)!	!	! (12)!	!	! (20)!	!
Word 5	! CEL0 - Corrected Error Log 0 (bits 0 - 59) !								
Word 6	! CEL1 - Corrected Error Log 1 (bits 0 - 59) !								
Word 7	! CEL2 - Corrected Error Log 2 (bits 0 - 59) !								



Continuation message 2.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!
Word 3	!	0	! 10B	!	0	!	MID	! 0
Word 4	! CEL3 - Corrected Error Log 3 (bits 0 - 59)							!
Word 5	! C5	! 240B!	C6	! 241B	! C7	! 242B	! C8	! 243B
	!	! (A0)!	!	! (A1)	!	! (A2)	!	! (A3)
Word 6	!	!	!	!	0	!	!	!
Word 7	!	!	!	!	0	!	!	!

<u>Field</u>	<u>Location</u>	<u>Description</u>
SYMPTOM	47-36	Symptom code. 0403B Corrected memory error. 0405B Multiple odd bit error.
PP	35-30	PP that detected the error.
MID	23-12	Machine identifier.
C1	59-56	Element identifier (bits 60 - 63).
C2	47-44	Status summary (bits 60 - 63).
C3	35-32	Options installed (bits 60 -63).
C4	23-20	Environment control (bits 60 - 63).
C5	59-56	Corrected error log 0 (bits 60 - 63).
C6	47-44	Corrected error log 1 (bits 60 - 63).
C7	35-32	Corrected error log 2 (bits 60 - 63).
C8	23-20	Corrected error log 3 (bits 60 - 63).

! MAINFRAME	! MSGID	0250B
! (180 CLASS EXCEPT 990)		
! UNCORRECTED MEMORY ERROR	! SYMPTOM	0404B

The first message has the following form.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! 0404B	! PP	! 17B	!		0	!
Word 3	!	0	! 04B	!	0	!	MID	! 0
Word 4	! EID - Element Identifier (bits 0 - 59) !							
Word 5	! SS - Status Summary (bits 0 - 59) !							
Word 6	! OI - Options Installed (bits 0 - 59) !							
Word 7	! EC - Environment Control (bits 0 - 59) !							

Continuation message 1.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! 0404B	! PP	! 17B	!		0	!
Word 3	!	0	! 14B	!	0	!	MID	! 0
Word 4	! C1	! 20B	! C2	! 00B	! C3	! 22B	! C4	! 40B
	! (10)!	!	! (00)!	!	! (12)!	!	! (20)!	!
Word 5	! UEL1 - Uncorrectable Error Log 1 (bits 0 - 59) !							
Word 6	! UEL2 - Uncorrectable Error Log 2 (bits 0 - 59) !							
Word 7	! BR - Bounds Register (bits 0 - 59) !							

Continuation message 2.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! 0404B	! PP	! 17B	!	!	0	!
Word 3	!	0	! 10B	!	0	!	MID	! 0
Word 4	!				0			!
Word 5	! C5	! 244B!	C6	! 250B	! C7	! 41B	!	0
	!	! (A4)!	!	! (A8)	!	! (21)	!	!
Word 6	!				0			!
Word 7	!				0			!

<u>Field</u>	<u>Location</u>	<u>Description</u>
PP	35-30	PP that detected the error.
MID	23-12	Machine identifier.
C1	59-56	Element identifier (bits 60 - 63).
C2	47-44	Status summary (bits 60 - 63).
C3	35-32	Options installed (bits 60 -63).
C4	23-20	Environment control (bits 60 - 63).
C5	59-56	Uncorrectable error log 1 (bits 60 - 63).
C6	47-44	Uncorrectable error log 2 (bits 60 - 63).
C7	35-32	Bounds register (bits 60 - 63).

! MAINFRAME	! MSGID	0250B	!
! (MODEL 990)	!		!
! UNCORRECTED MEMORY ERROR	! SYMPTOM	0404B	!

The first message has the following form.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! 0404B	! PP	! 17B	!		0	!
Word 3	!	0	! 04B	!	0	!	MID	! 0
Word 4	! EID - Element Identifier (bits 0 - 59) !							
Word 5	! SS - Status Summary (bits 0 - 59) !							
Word 6	! OI - Options Installed (bits 0 - 59) !							
Word 7	! EC - Environment Control (bits 0 - 59) !							

Continuation message 1.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! 0404B	! PP	! 17B	!		0	!
Word 3	!	0	! 14B	!	0	!	MID	! 0
Word 4	! C1	! 20B	! C2	! 00B	! C3	! 22B	! C4	! 40B
	!	! (10)!	!	! (00)!	!	! (12)!	!	! (20)!
Word 5	! UELO - Uncorrected Error Log 0 (bits 0 - 59) !							
Word 6	! UEL1 - Uncorrected Error Log 1 (bits 0 - 59) !							
Word 7	! UEL2 - Uncorrected Error Log 2 (bits 0 - 59) !							

Continuation message 2.

	59	47	41	35	29	23	11	0	
Word 2	! 0250B	! 0404B	! PP	! 17B	!	!	0	!	
Word 3	!	0	! 14B	!	0	!	MID	! 0	
Word 4	! UEL3 - Uncorrected Error Log 3 (bits 0 - 59)							!	
Word 5	! C5	! 244B	! C6	! 245B	! C7	! 246B	! C8	! 247B	
	!	! (A4)	!	! (A5)	!	! (A6)	!	! (A7)	
Word 6	! BR - Bounds Register (bits 0 - 59)							!	
Word 7	!							0	!

Continuation message 3.

	59	47	41	35	29	23	11	0	
Word 2	! 0250B	! 0404B	! PP	! 17B	!	!	0	!	
Word 3	!	0	! 10B	!	0	!	MID	! 0	
Word 4	!							0	!
Word 5	!							0	!
Word 6	! C9	! 41B	!	!	0	!	!	!	
	!	! (21)	!	!	!	!	!	!	
Word 7	!							0	!

<u>Field</u>	<u>Location</u>	<u>Description</u>
PP	35-30	PP that detected the error.
MID	23-12	Machine identifier.
C1	59-56	Element identifier (bits 60 - 63).
C2	47-44	Status summary (bits 60 - 63).
C3	35-32	Options installed (bits 60 - 63).
C4	23-20	Environment control (bits 60 - 63).
C5	59-56	Uncorrected error log 0 (bits 60 - 63).
C6	47-44	Uncorrected error log 1 (bits 60 - 63).
C7	35-32	Uncorrected error log 2 (bits 60 - 63).
C8	23-20	Uncorrected error log 3 (bits 60 - 63).
C9	59-56	Bounds register (bits 60 - 63).

! MAINFRAME	! MSGID	0250B	!
! (MODELS 815, 825)	!		!
! UNCORRECTED PROCESSOR	! SYMPTOM	1001B, 1004B, 1010B	!
! ERROR	!		!

The first message has the following form.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!
Word 3	!	0	! 04B	!	0	!	MID	! 0
Word 4	! EID - Element Identifier (bits 0 - 59) !							
Word 5	! SS - Status Summary (bits 0 - 59) !							
Word 6	! OI - Options Installed (bits 0 - 59) !							
Word 7	! DEC - Dependent Environment Control (bits 0 - 59) !							

Continuation message 1.

	59	47	41	35	29	23	11	0	
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!	
Word 3	!	0	! 14B	!	0	!	MID	! 0	
Word 4	! C1	! 20B	! C2	! 00B	! C3	! 22B	! C4	! 60B	! 0
	!	! (10)!	!	! (00)!	!	! (12)!	!	! (30)!	!
Word 5	! PFS - Processor Fault Status (bits 0 - 59) !								
Word 6	! 0 !								
Word 7	! 0 !								

Continuation message 2.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!
Word 3	!	0	! 10B	!	0	!	MID	! 0
Word 4	!	!	!	!	0	!	!	!
Word 5	! C5	! 200B!	!	!	0	!	!	!
	!	! (80)!	!	!	!	!	!	!
Word 6	!	!	!	!	0	!	!	!
Word 7	!	!	!	!	0	!	!	!

<u>Field</u>	<u>Location</u>	<u>Description</u>
SYMPTOM	47-39	Symptom code. 1001B Deadstart error log processor error. 1004B Uncorrected processor error. 1010B Fatal CPU halt.
PP	35-30	PP that detected the error.
MID	23-12	Machine identifier.
C1	59-56	Element identifier (bits 60 - 63).
C2	47-44	Status summary (bits 60 - 63).
C3	35-32	Options installed (bits 60 -63).
C4	23-20	Dependent environment control (bits 60 - 63).
C5	59-56	Processor fault status 0 (bits 60 - 63).

! MAINFRAME	! MSGID 0250B
! (MODELS 810, 830, 835)	!
! UNCORRECTED PROCESSOR	! SYMPTOM 1001B, 1004B, 1010B
! ERROR	!

The first message has the following form.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!
Word 3	!	0	! 04B	!	0	!	MID	! 0
Word 4	! EID - Element identifier (bits 0 - 59)							!
Word 5	! SS - Status Summary (bits 0 - 59)							!
Word 6	! OI - Options Installed (bits 0 - 59)							!
Word 7	! DEC - Dependent Environment Control (bits 0 - 59)							!

Continuation message 1.

	59	47	41	35	29	23	11	0	
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!	
Word 3	!	0	! 14B	!	0	!	MID	! 0	
Word 4	! C1	! 20B	! C2	! 00B	! C3	! 22B	! C4	! 60B	
	! (10)!	!	! (00)!	!	! (12)!	!	! (30)!	!	
Word 5	! PFS0 - Processor Fault Status 0 (bits 0 - 59)							!	
Word 6	! PFS1 - Processor Fault Status 1 (bits 0 - 59)							!	
Word 7	!							0	!



Continuation message 2.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!
Word 3	!	0	! 10B	!	0	!	MID	! 0
Word 4	!		0					!
Word 5	! C5	! 200B!	C6	! 201B	!			!
	!	! (80)!	!	(81)	!			!
Word 6	!				0			!
Word 7	!				0			!

<u>Field</u>	<u>Location</u>	<u>Description</u>
SYMPTOM	47-36	Symptom code. 1001B Deadstart error log processor error. 1004B Uncorrected processor error. 1010B Fatal CPU halt.
PP	35-30	PP that detected the error.
MID	23-12	Machine identifier.
C1	59-56	Element identifier (bits 60 - 63).
C2	47-44	Status summary (bits 60 - 63).
C3	35-32	Options installed (bits 60 -63).
C4	23-20	Dependent environment control (bits 60 - 63).
C5	59-57	Processor fault status 0 (bits 60 - 63).
C6	47-44	Processor fault status 1 (bits 60 - 63).

! MAINFRAME	! MSGID	0250B	!
! (MODELS 840,845,850,855,860)!			!
! PROCESSOR ERRORS	! SYMPTOM	1001B, 1002B, 1003B,	!
		1004B, 1010B	!

The first message has the following form.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	0	!	!
Word 3	! 0	! 04B	!	0	!	MID	!	0
Word 4	! EID - Element Identifier (bits 0 - 59)							!
Word 5	! SS - Status Summary (bits 0 - 59)							!
Word 6	! OI - Options Installed (bits 0 - 59)							!
Word 7	! DEC - Dependent Environment Control (bits 0 - 59)							!

Continuation message 1.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	0	!	!
Word 3	! 0	! 14B	!	0	!	MID	!	0
Word 4	! C1	! 20B	! C2	! 00B	! C3	! 22B	! C4	! 60B
	! (10)!	!	! (00)!	!	! (12)!	!	! (30)!	!
Word 5	! PFS0 - Processor Fault Status 0 (bits 0 - 59)							!
Word 6	! PFS1 - Processor Fault Status 1 (bits 0 - 59)							!
Word 7	! PFS2 - Processor Fault Status 2 (bits 0 - 59)							!

Continuation message 2.

	59	47	41	35	29	23	11	0	
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!	
Word 3	!	0	! 14B	!	0	!	MID	! 0	
Word 4	! PFS3 - Processor Fault Status 3 (bits 0 - 59)							!	
Word 5	! C5	! 200B!	C6	! 201B!	C7	! 202B!	C8	! 203B!	0
	!	! (80)!	!	! (81)!	!	! (82)!	!	! (83)!	!
Word 6	! PFS4 - Processor Fault Status 4 (bits 0 - 59)							!	
Word 7	! PFS5 - Processor Fault Status 5 (bits 0 - 59)							!	

Continuation message 3.

	59	47	41	35	29	23	11	0	
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!	
Word 3	!	0	! 14B	!	0	!	MID	! 0	
Word 4	! PFS6 - Processor Fault Status 6 (bits 0 - 59)							!	
Word 5	! PFS7 - Processor Fault Status 7 (bits 0 - 59)							!	
Word 6	! C9	! 204B!	C10	! 205B!	C11	! 206B!	C12	! 207B!	0
	!	! (84)!	!	! (85)!	!	! (86)!	!	! (87)!	!
Word 7	! PFS8 - Processor Fault Status 8 (bits 0 - 59)							!	

Continuation message 4.

	59	47	41	35	29	23	11	0	
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!	
Word 3	!	0	! 10B	!	0	!	MID	! 0	
Word 4	! PFS9 - Processor Fault Status 9 (bits 0 - 59)							!	
Word 5	!							0	!
Word 6	!							0	!
Word 7	! C13	! 210B!	C14	! 211B!					!
	!	! (88)!	!	! (89)!					!

<u>Field</u>	<u>Location</u>	<u>Description</u>
SYMPTOM	47-36	Symptom code. 1001B Deadstart error log processor error. 1002B Express deadstart dump processor error. 1003B Corrected processor error. 1004B Uncorrected processor error. 1010B Fatal CPU halt.
PP	35-30	PP that detected the error.
MID	23-12	Machine identifier.
C1	59-56	Element identifier (bits 60 - 63).
C2	47-44	Status summary (bits 60 - 63).
C3	35-32	Options installed (bits 60 -63).
C4	23-20	Dependent environment control (bits 60 - 63).
C5	59-56	Processor fault status 0 (bits 60 - 63).
C6	47-44	Processor fault status 1 (bits 60 - 63).
C7	35-32	Processor fault status 2 (bits 60 - 63).
C8	23-20	Processor fault status 3 (bits 60 - 63).
C9	59-56	Processor fault status 4 (bits 60 - 63).
C10	47-44	Processor fault status 5 (bits 60 - 63).
C11	35-32	Processor fault status 6 (bits 60 - 63).
C12	23-20	Processor fault status 7 (bits 60 - 63).
C13	59-56	Processor fault status 8 (bits 60 - 63).
C14	47-44	Processor fault status 9 (bits 60 - 63).

MAINFRAME (MODEL 990)	MSGID 0250B
PROCESSOR ERRORS	SYMPTOM 1001B, 1002B, 1003B, 1004B, 1005B, 1010B, 1013B, 1014B, 1015B

The first message has the following form.

	59	47	41	35	29	23	11	0
Word 2	0250B	SYMPTOM	PP	17B			0	
Word 3	0	04B		0		MID		0
Word 4	EID - Element Identifier (bits 0 - 59)							
Word 5	SS - Status Summary (bits 0 - 59)							
Word 6	OI - Options Installed (bits 0 - 59)							
Word 7	DEC - Dependent Environment Control (bits 0 - 59)							

Continuation message 1.

	59	47	41	35	29	23	11	0	
Word 2	0250B	SYMPTOM	PP	17B			0		
Word 3	0	14B		0		MID		0	
Word 4	C1	20B	C2	00B	C3	22B	C4	60B	0
	(10)		(00)		(12)		(30)		
Word 5	PFS0 - Processor Fault Status 0 (bits 0 - 59)								
Word 6	PFS1 - Processor Fault Status 1 (bits 0 - 59)								
Word 7	PFS2 - Processor Fault Status 2 (bits 0 - 59)								

Continuation message 2.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!
Word 3	!	0	! 14B	!	0	!	MID	! 0
Word 4	! PFS3 - Processor Fault Status 3 (bits 0 - 59)							!
Word 5	! C5	! 200B!	C6	! 201B!	C7	! 202B!	C8	! 203B!
	!	! (80)!	!	! (81)!	!	! (82)!	!	! (83)!
Word 6	! PFS4 - Processor Fault Status 4 (bits 0 - 59)							!
Word 7	! PFS5 - Processor Fault Status 5 (bits 0 - 59)							!

Continuation message 3.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!
Word 3	!	0	! 14B	!	0	!	MID	! 0
Word 4	! PFS6 - Processor Fault Status 6 (bits 0 - 59)							!
Word 5	! PFS7 - Processor Fault Status 7 (bits 0 - 59)							!
Word 6	! C9	! 204B!	C10	! 205B!	C11	! 206B!	C12	! 207B!
	!	! (84)!	!	! (85)!	!	! (86)!	!	! (87)!
Word 7	! PFS8 - Processor Fault Status 8 (bits 0 - 59)							!

Continuation message 4.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!
Word 3	!	0	! 14B	!	0	!	MID	! 0
Word 4	! PFS9 - Processor Fault Status 9 (bits 0 - 59)							!
Word 5	! PFS10 - Processor Fault Status 10 (bits 0 - 59)							!
Word 6	! PFS11 - Processor Fault Status 11 (bits 0 - 59)							!
Word 7	! C13	! 210B!	C14	! 211B!	C15	! 212B!	C16	! 213B!
	!	! (88)!	!	! (89)!	!	! (8A)!	!	! (8B)!

Continuation message 5.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!
Word 3	!	0	! 14B	!	0	!	MID	! 0
Word 4	!	PFS12 - Processor Fault Status 12 (bits 0 - 59)						!
Word 5	!	PFS13 - Processor Fault Status 13 (bits 0 - 59)						!
Word 6	!	PFS14 - Processor Fault Status 14 (bits 0 - 59)						!
Word 7	!	PFS15 - Processor Fault Status 15 (bits 0 - 59)						!

Continuation message 6.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!
Word 3	!	0	! 10B	!	0	!	MID	! 0
Word 4	! C17 !214B !	! C18 ! 215B !	! C19 ! 216B !	! C20 ! 217B !	!	!	0	!
	! ! (8C) !	! ! (8D) !	! ! (8E) !	! ! (8F) !	!	!		!
Word 5	!	0						!
Word 6	!	0						!
Word 7	!	0						!

<u>Field</u>	<u>Location</u>	<u>Description</u>
SYMPTOM	47-36	Symptom code. 1001B Deadstart error log processor error. 1002B Express deadstart dump processor error. 1003B Corrected processor error. 1004B Uncorrected processor error. 1005B Retry in progress processor error. 1010B Fatal CPU halt. 1013B Fatal CPU recovery error. 1014B Corrected processor error with cache reload. 1015B Fatal CPU uncorrected error.
PP	35-30	PP that detected the error.
MID	23-12	Machine identifier.
C1	59-56	Element identifier (bits 60 - 63).
C2	47-44	Status summary (bits 60 - 63).
C3	35-32	Options installed (bits 60 -63).
C4	23-20	Dependent environment control (bits 60 - 63).
C5	59-56	Processor fault status 0 (bits 60 - 63).
C6	47-44	Processor fault status 1 (bits 60 - 63).
C7	35-32	Processor fault status 2 (bits 60 - 63).
C8	23-20	Processor fault status 3 (bits 60 - 63).
C9	59-56	Processor fault status 4 (bits 60 - 63).
C10	47-44	Processor fault status 5 (bits 60 - 63).
C11	35-32	Processor fault status 6 (bits 60 - 63).
C12	23-20	Processor fault status 7 (bits 60 - 63).
C13	59-56	Processor fault status 8 (bits 60 - 63).
C14	47-44	Processor fault status 9 (bits 60 - 63).
C15	35-32	Processor fault status 10 (bits 60 - 63).
C16	23-20	Processor fault status 11 (bits 60 - 63).
C17	59-56	Processor fault status 12 (bits 60 - 63).
C18	47-44	Processor fault status 13 (bits 60 - 63).
C19	35-32	Processor fault status 14 (bits 60 - 63).
C20	23-20	Processor fault status 15 (bits 60 - 63).



! MAINFRAME	! MSGID	0250B	!
! (MODELS 810, 815, 825, 830)!			!
! EXPRESS DEADSTART DUMP	! SYMPTOM	1002B	!
! PROCESSOR ERROR	!		!

The first message has the following form.

	59	47	41	35	29	23	11	0			
Word 2	! 0250B	!	1002B	!	PP	!	17B	!	0	!	
Word 3	!	0	!	04B	!	0	!	MID	!	0	!
Word 4	! EID - Element Identifier (bits 0 - 59)								!		
Word 5	! SS - Status Summary (bits 0 - 59)								!		
Word 6	! OI - Options Installed (bits 0 - 59)								!		
Word 7	! DEC - Dependent Environment Control (bits 0 - 59)								!		

Continuation message 1.

	59	47	41	35	29	23	11	0										
Word 2	! 0250B	!	1002B	!	PP	!	17B	!	0	!								
Word 3	!	0	!	14B	!	0	!	MID	!	0	!							
Word 4	! C1	!	20B	!	C2	!	00B	!	C3	!	22B	!	C4	!	60B	!	0	!
	!	(10)!	!	(00)!	!	(12)!	!	(30)!	!									!
Word 5	! MCEL - Map Corrected Error Log (bits 0 - 59)								!									
Word 6	! RCEL - Retry Corrected Error Log (bits 0 - 59)								!									
Word 7	! CSEL - Control Store Error Log (bits 0 - 59)								!									

Continuation message 2.

	59	47	35	29	23	11	0
Word 2	! 0250B	! 1002B	! PP	! 17B	!	0	!
Word 3	!	0	! 14B	!	0	! MID	! 0
Word 4	! PFS0 - Processor Fault Status 0 (bits 0 - 59)						!
Word 5	! C5	! 223B!	C6	! 220B	! C7	! 221B	! C8
	!	! (93)!	!	! (90)	!	! (91)	! C8
	!	!	!	!	!	! (80)	!
Word 6	! PFS1 - Processor Falult Status 1 (bits 0 - 59)						!
Word 7	!						0

Continuation message 3.

	59	47	35	29	23	11	0	
Word 2	! 0250B	! 1002B	! PP	! 17B	!	0	!	
Word 3	!	0	! 10B	!	0	! MID	! 0	
Word 4	!						0	
Word 5	!						0	
Word 6	! C9	! 201B!					0	!
	!	! (81)!						!
Word 7	!						0	

<u>Field</u>	<u>Location</u>	<u>Description</u>
PP	35-30	PP that detected the error.
MID	23-12	Machine identifier.
C1	59-56	Element identifier (bits 60 - 63).
C2	47-44	Status summary (bits 60 - 63).
C3	35-32	Options installed (bits 60 -63).
C4	23-20	Dependent environment control (bits 60 - 63).
C5	59-57	Map corrected error log (bits 60 - 63).
C6	47-44	Retry corrected error log (bits 60 - 63).
C7	35-32	Control store error log (bits 60 - 63).
C8	23-20	Processor fault status 0 (bits 60 - 63).
C9	59-57	Processor fault status 1 (bits 60 - 63).

! MAINFRAME	! MSGID	0250B
! (MODEL 835)	!	!
! EXPRESS DEADSTART DUMP	! SYMPTOM	1002B
! PROCESSOR ERROR	!	!

The first message has the following form.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! 1002B	! PP	! 17B	!	!	0	!
Word 3	!	0	! 04B	!	0	!	MID	! 0
Word 4	! EID - Element Identifier (bits 0 - 59) !							
Word 5	! SS - Status Summary (bits 0 - 59) !							
Word 6	! OI - Options Installed (bits 0 - 59) !							
Word 7	! DEC - Dependent Environment Control (bits 0 - 59) !							

Continuation message 1.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! 1002B	! PP	! 17B	!	!	0	!
Word 3	!	0	! 14B	!	0	!	MID	! 0
Word 4	! C1	! 20B	! C2	! 00B	! C3	! 22B	! C4	! 60B
	!	! (10)!	!	! (00)!	!	! (12)!	!	! (30)!
Word 5	! RCEL - Retry Corrected Error Log (bits 0 - 59) !							
Word 6	! CCEL - Cache Corrected Error Log (bits 0 - 59) !							
Word 7	! PFSO - Processor Fault Status 0 (bits 0 - 59) !							

Continuation message 2.

	59	47	41	35	29	23	11	0
Word 2	0250B	1002B	PP	17B			0	
Word 3	0	10B		0		MID	0	
Word 4	PFS1 - Processor Fault Status 1 (bits 0 - 59)							
Word 5	C5	220B	C6	222B	C7	200B	C8	201B
	(90)		(92)		(80)		(81)	
Word 6	0							
Word 7	0							

<u>Field</u>	<u>Location</u>	<u>Description</u>
PP	35-30	PP that detected the error.
MID	23-12	Machine identifier.
C1	59-56	Element identifier (bits 60 - 63).
C2	47-44	Status summary (bits 60 - 63).
C3	35-32	Options installed (bits 60 -63).
C4	23-20	Dependent environment control (bits 60 - 63).
C5	59-56	Retry corrected error Log (bits 60 - 63).
C6	47-44	Cache corrected error Log (bits 60 - 63).
C7	35-32	Processor fault status 0 (bits 60 - 63).
C8	23-20	Processor fault status 1 (bits 60 - 63).

! MAINFRAME	! MSGID	0250B
! (MODELS 815, 825)	!	!
! CORRECTED PROCESSOR ERROR	! SYMPTOM	1003B
!	!	!

The first message has the following form.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! 1003B	! PP	! 17B	!	!	0	!
Word 3	!	0	! 04B	!	0	!	MID	! 0
Word 4	! EID - Element Identifier (bits 0 - 59) !							
Word 5	! SS - Status Summary (bits 0 - 59) !							
Word 6	! OI - Options Installed (bits 0 - 59) !							
Word 7	! DEC - Dependent Environment Control (bits 0 - 59) !							

Continuation message 1.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! 1003B	! PP	! 17B	!	!	0	!
Word 3	!	0	! 14B	!	0	!	MID	! 0
Word 4	! C1	! 20B	! C2	! 00B	! C3	! 22B	! C4	! 60B
	! (10)	!	! (00)	!	! (12)	!	! (30)	!
Word 5	! RCEL - Retry Corrected Error Log (bits 0 - 59) !							
Word 6	! MCEL - Map Corrected Error Log (bits 0 - 59) !							
Word 7	! 0 !							

Continuation message 2.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! 1003B	! PP	! 17B	!	!	0	!
Word 3	!	0	! 10B	!	0	!	MID	! 0
Word 4	!	!	!	!	0	!	!	!
Word 5	! C5	! 220B!	C6	! 223B	!	!	0	!
	!	! (90)!	!	! (93)	!	!	!	!
Word 6	!	!	!	!	0	!	!	!
Word 7	!	!	!	!	0	!	!	!

<u>Field</u>	<u>Location</u>	<u>Description</u>
PP	35-30	PP that detected the error.
MID	23-12	Machine identifier.
C1	59-56	Element identifier (bits 60 - 63).
C2	47-44	Status summary (bits 60 - 63).
C3	35-32	Options installed (bits 60 -63).
C4	23-20	Dependent environment control (bits 60 - 63).
C5	59-56	Retry corrected error log (bits 60 - 63).
C6	47-44	Map corrected error log (bits 60 - 63).

! MAINFRAME	! MSGID	0250B	!
! (MODELS 810, 830)	!		!
! CORRECTED PROCESSOR ERROR	! SYMPTOM	1003B	!

The first message has the following form.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! 1003B	! PP	! 17B	!		0	!
Word 3	!	0	! 04B	!	0	!	MID	! 0
Word 4	! EID - Element identifier (bits 0 - 59) !							
Word 5	! SS - Status Summary (bits 0 - 59) !							
Word 6	! OI - Options Installed (bits 0 - 59) !							
Word 7	! DEC - Dependent Environment Control (bits 0 - 59) !							

Continuation message 1.

	59	47	41	35	29	23	11	0	
Word 2	! 0250B	! 1003B	! PP	! 17B	!		0	!	
Word 3	!	0	! 14B	!	0	!	MID	! 0	
Word 4	! C1	! 20B	! C2	! 00B	! C3	! 22B	! C4	! 60B	! 0
	!	! (10)!	!	! (00)!	!	! (12)!	!	! (30)!	!
Word 5	! MCEL - Map Corrected Error Log (bits 0 - 59) !								
Word 6	! RCEL - Retry Corrected Error Log (bits 0 - 59) !								
Word 7	! CSEL - Control Store Error Log (bits 0 - 59) !								

Continuation message 2.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! 1003B	! PP	! 17B	!	0	!	!
Word 3	!	0	! 10B	!	0	!	MID	! 0
Word 4	!				0			!
Word 5	! C5	! 223B!	C6	! 220B!	C7	! 221B!	0	!
	!	! (93)!	!	! (90)!	!	! (91)!	!	!
Word 6	!				0			!
Word 7	!				0			!

<u>Field</u>	<u>Location</u>	<u>Description</u>
PP	35-30	PP that detected the error.
MID	23-12	Machine identifier.
C1	59-56	Element identifier (bits 60 - 63).
C2	47-44	Status summary (bits 60 - 63).
C3	35-32	Options installed (bits 60 -63).
C4	23-20	Dependent environment control (bits 60 - 63).
C5	59-56	Map corrected error log (bits 60 - 63).
C6	47-44	Retry corrected error log (bits 60 - 63).
C7	35-32	Control store error log (bits 60 - 63).



! MAINFRAME	! MSGID	0250B	!
! (MODEL 835)	!	!	!
! CORRECTED PROCESSOR ERROR	! SYMPTOM	1003B	!
!	!	!	!

The first message has the following form.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! 1003B	! PP	! 17B	!	!	0	!
Word 3	!	0	! 04B	!	0	!	MID	! 0
Word 4	! EID - Element Identifier (bits 0 - 59)							!
Word 5	! SS - Status Summary (bits 0 - 59)							!
Word 6	! OI - Options Installed (bits 0 - 59)							!
Word 7	! DEC - Dependent Environment Control (bits 0 - 59)							!

Continuation message 1.

	59	47	41	35	29	23	11	0	
Word 2	! 0250B	! 1003B	! PP	! 17B	!	!	0	!	
Word 3	!	0	! 14B	!	0	!	MID	! 0	
Word 4	! C1	! 20B	! C2	! 00B	! C3	! 22B	! C4	! 60B	! 0
	!	! (10)	!	! (00)	!	! (12)	!	! (30)	!
Word 5	! RCEL - Retry Corrected Error Log (bits 0 - 59)							!	
Word 6	! CCEL - Cache Corrected Error Log (bits 0 - 59)							!	
Word 7	!							0	!

Continuation message 2.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! 1003B	! PP	! 17B	!	!	0	!
Word 3	!	0	! 10B	!	0	!	MID	! 0
Word 4	!				0			!
Word 5	! C5	! 220B!	C6	! 222B	!		0	!
	!	! (90)!	!	! (92)	!			!
Word 6	!				0			!
Word 7	!				0			!

<u>Field</u>	<u>Location</u>	<u>Description</u>
PP	35-30	PP that detected the error.
MID	23-12	Machine identifier.
C1	59-56	Element identifier (bits 60 - 63).
C2	47-44	Status summary (bits 60 - 63).
C3	35-32	Options installed (bits 60 -63).
C4	23-20	Dependent environment control (bits 60 - 63).
C5	59-56	Retry corrected error log (bits 60 - 63).
C6	47-44	Cache corrected error log (bits 60 - 63).

MAINFRAME (MODEL 990)	MSGID 0250B
UNREPAIRED ERROR	SYMPTOM 1006B, 1007B

This message is issued when control memory parity error has been encountered.

The first message has the following form.

	59	47	41	35	29	23	11	0
Word 2	0250B	SYMPTOM	PP	17B			0	
Word 3	0	04B		0		MID	0	
Word 4	EID - Element identifier (bits 0 - 59)							
Word 5	SS - Status Summary (bits 0 - 59)							
Word 6	OI - Options Installed (bits 0 - 59)							
Word 7	DEC - Dependent Environment Control (bits 0 - 59)							

Continuation message 1.

	59	47	41	35	29	23	11	0
Word 2	0250B	SYMPTOM	PP	17B			0	
Word 3	0	14B		0		MID	0	
Word 4	C1 !(10)!	20B !	C2 !(00)!	00B !	C3 !(12)!	22B !	C4 !(30)!	60B !
Word 5	PFS0 - Processor Fault Status 0 (bits 0 - 59)							
Word 6	PFS1 - Processor Fault Status 1 (bits 0 - 59)							
Word 7	PFS2 - Processor Fault Status 2 (bits 0 - 59)							

Continuation message 2.

	59	47	41	35	29	23	11	0	
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!	
Word 3	!	0	! 14B	!	0	!	MID	! 0	
Word 4	! PFS3 - Processor Fault Status 3 (bits 0 - 59)							!	
Word 5	! C5	! 200B!	C6	! 201B!	C7	! 202B!	C8	! 203B!	0
	!	! (80)!	!	! (81)!	!	! (82)!	!	! (83)!	!
Word 6	! PFS4 - Processor Fault Status 4 (bits 0 - 59)							!	
Word 7	! PFS5 - Processor Fault Status 5 (bits 0 - 59)							!	

Continuation message 3.

	59	47	41	35	29	23	11	0	
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!	
Word 3	!	0	! 14B	!	0	!	MID	! 0	
Word 4	! PFS6 - Processor Fault Status 6 (bits 0 - 59)							!	
Word 5	! PFS7 - Processor Fault Status 7 (bits 0 - 59)							!	
Word 6	! C9	! 204B!	C10	! 205B!	C11	! 206B!	C12	! 207B!	0
	!	! (84)!	!	! (85)!	!	! (86)!	!	! (87)!	!
Word 7	! PFS8 - Processor Fault Status 8 (bits 0 - 59)							!	

Continuation message 4.

	59	47	41	35	29	23	11	0	
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!	
Word 3	!	0	! 14B	!	0	!	MID	! 0	
Word 4	! PFS9 - Processor Fault Status 9 (bits 0 - 59)							!	
Word 5	! PFS10 - Processor Fault Status 10 (bits 0 - 59)							!	
Word 6	! PFS11 - Processor Fault Status 11 (bits 0 - 59)							!	
Word 7	! C13	! 210B!	C14	! 211B!	C15	! 212B!	C16	! 213B!	0
	!	! (88)!	!	! (89)!	!	! (8A)!	!	! (8B)!	!

Continuation message 5.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!
Word 3	!	0	! 14B	!	0	!	MID	! 0
Word 4	! PFS12 - Processor Fault Status 12 (bits 0 - 59)							!
Word 5	! PFS13 - Processor Fault Status 13 (bits 0 - 59)							!
Word 6	! PFS14 - Processor Fault Status 14 (bits 0 - 59)							!
Word 7	! PFS15 - Processor Fault Status 15 (bits 0 - 59)							!

Continuation message 6.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!
Word 3	!	0	! 14B	!	0	!	MID	! 0
Word 4	! C17 !214B !	! C18 ! 215B !	! C19 ! 216B !	! C20 ! 217B !	!	!	0	!
	! ! (8C) !	! ! (8D) !	! ! (8E) !	! ! (8F) !	!	!		!
Word 5	! M1	! M2	!	TC	!	ADDR	!	
Word 6	! Contents of Failing Address (bits 0 - 59)							!
Word 7	! Contents of Failing Address (bits 0 - 59)							!
	! (after reload)							!

Continuation message 7.

	59	47	41	35	29	23	11	0	
Word 2	! 0250B	! SYMPTOM	! PP	! 17B	!	!	0	!	
Word 3	!	0	! 10B	!	0	!	MID	! 0	
Word 4	!							0	!
Word 5	!							0	!
Word 6	! F1 ! 00 !	F2	!	0	!	!		!	
Word 7	!							0	!

<u>Field</u>	<u>Location</u>	<u>Description</u>
SYMPTOM	47-36	Symptom code. 1006B Repaired error (Control memory has been successfully reloaded). 1007B Unrepaired error (Control memory has not been successfully reloaded).
PP	35-30	PP that detected the error.
MID	23-12	Machine identifier.
C1	59-56	Element identifier (bits 60 - 63).
C2	47-44	Status summary (bits 60 - 63).
C3	35-32	Options installed (bits 60 -63).
C4	23-20	Dependent environment control (bits 60 - 63).
C5	59-56	Processor fault status 0 (bits 60 - 63).
C6	47-44	Processor fault status 1 (bits 60 - 63).
C7	35-32	Processor fault status 2 (bits 60 - 63).
C8	23-20	Processor fault status 3 (bits 60 - 63).
C9	59-56	Processor fault status 4 (bits 60 - 63).
C10	47-44	Processor fault status 5 (bits 60 - 63).
C11	35-32	Processor fault status 6 (bits 60 - 63).
C12	23-20	Processor fault status 7 (bits 60 - 63).
C13	59-56	Processor fault status 8 (bits 60 - 63).
C14	47-44	Processor fault status 9 (bits 60 - 63).
C15	35-32	Processor fault status 10 (bits 60 - 63).
C16	23-20	Processor fault status 11 (bits 60 - 63).
C17	59-56	Processor fault status 12 (bits 60 - 63).
C18	47-44	Processor fault status 13 (bits 60 - 63).
C19	35-32	Processor fault status 14 (bits 60 - 63).
C20	23-20	Processor fault status 15 (bits 60 - 63).
M1	59-48	Bit mask to identify control memory.
M2	47-32	Bit mask reply from 2AP (reload was successful if bit set in M1 is clear).
TC	31-16	Type code of control memory with error.
ADDR	15-0	Failing address (if known). If unknown, ADDR = N + 1, where N = LWA of the control memory in question. In this case, the contents will be 0.

<u>Field</u>	<u>Location</u>	<u>Description</u>
F1*	59-56	Contents of failing address (bits 60 - 63).
F2*	47-44	Contents of failing address after reload (bits 60 - 63).

\* - Depending on which control memory is failing, the contents of the failing address may be 64 bits, 128 bits, 192 bits, or 256 bits. The unused bits will be reported as zero.

```

!-----!
!   MAINFRAME           !   MSGID   0250B   !
!   (180 CLASS MODELS) !-----!
!   PROCESSOR DETECTED !   SYMPTOM 1011B  !
!   MALFUNCTION        !-----!
!-----!

```

This message is issued by IAJ whenever a mode 20 error is detected for a job.

The first message has the following form.

```

          59          47   41   35   29   23          11   0
+-----+-----+-----+-----+-----+-----+-----+
Word 2 !  0250B  !  1011B  !  PP  ! 17B  !           0           !
+-----+-----+-----+-----+-----+-----+-----+
Word 3 !           0           !  0  !  0  !  MID  !  0  !
+-----+-----+-----+-----+-----+-----+-----+
Word 4 !           Contents of RA + 0           !
+-----+-----+-----+-----+-----+-----+-----+
Word 5 !           Contents of location (P)           !
+-----+-----+-----+-----+-----+-----+-----+

```

<u>Field</u>	<u>Location</u>	<u>Description</u>
PP	35-30	PP that detected the error.
MID	23-12	Machine identifier.



MAINFRAME (180 CLASS MODELS)	MSGID 0250B
PROCESSOR STATE ERROR	SYMPTOM 1012B

This message is issued by IAJ whenever a mode 67 error is detected for a job.

The first message has the following form.

	59		47		41		35		29		23		11		0
Word 2	!	0250B	!	1012B	!	PP	!	17B	!			!	0		!
Word 3	!		!	0	!	0	!	0	!	MID	!		!	0	!
Word 4	!	Contents of RA + 0													!
Word 5	!	Contents of location (P)													!

<u>Field</u>	<u>Location</u>	<u>Description</u>
PP	35-30	PP that detected the error.
MID	23-12	Machine identifier.

MAINFRAME (180 CLASS MODELS)	MSGID 0250B
ENVIRONMENT WARNING	SYMPTOM 3401B

The EID registers for those elements with long warning status set are present in this message. The field is zero for elements without a long warning status. Bits 0 - 3 of the EID registers are not logged. The entries in this message are in one-to-one correspondence with the entries in the Hardware Descriptor Table (HDT).

The first message has the following form.

	59	47	41	35	29	23	11	0
Word 2	0250B	3401B	PP	17B			0	
Word 3	0	04B		0		MID	0	
Word 4	Element 0 EID (bits 4 - 63)							
Word 5	Element 1 EID (bits 4 - 63)							
Word 6	Element 2 EID (bits 4 - 63)							
Word 7	Element 3 EID (bits 4 - 63)							

Continuation message 1.

	59	47	41	35	29	23	11	0
Word 2	0250B	3401B	PP	17B			0	
Word 3	0	14B		0		MID	0	
Word 4	Element 4 EID (bits 4 - 63)							
Word 5	Element 5 EID (bits 4 - 63)							
Word 6	Element 6 EID (bits 4 - 63)							
Word 7	Element 7 EID (bits 4 - 63)							

Continuation message 2.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! 3401B	! PP	! 17B	!	!	0	!
Word 3	!	0	! 10B	!	0	!	MID	! 0 !
Word 4	! Element 8 EID (bits 4 - 63) !							
Word 5	! Element 9 EID (bits 4 - 63) !							
Word 6	! 0 !							
Word 7	! 0 !							

<u>Field</u>	<u>Location</u>	<u>Description</u>
PP	35-30	PP that detected the error.
MID	23-12	Machine identifier.

MAINFRAME (MODELS 810/830)	MSGID 0250B
LONG POWER WARNING	SYMPTOM 3402B

This message is issued for models 810/830 with the battery backup option. The EID registers for those elements with long warning status set are present in this message. The field is zero for elements without a long warning status. Bits 0 - 3 of the EID registers are not logged. The entries in this message are in one-to-one correspondence with the entries in the Hardware Descriptor Table (HDT).

The first message has the following form.

	59	47	41	35	29	23	11	0
Word 2	0250B	3402B	PP	17B			0	
Word 3	0	04B	0		MID		0	
Word 4	Element 0 EID (bits 4 - 63)							
Word 5	Element 1 EID (bits 4 - 63)							
Word 6	Element 2 EID (bits 4 - 63)							
Word 7	Element 3 EID (bits 4 - 63)							

Continuation message 1.

	59	47	41	35	29	23	11	0
Word 2	0250B	3402B	PP	17B			0	
Word 3	0	14B	0		MID		0	
Word 4	Element 4 EID (bits 4 - 63)							
Word 5	Element 5 EID (bits 4 - 63)							
Word 6	Element 6 EID (bits 4 - 63)							
Word 7	Element 7 EID (bits 4 - 63)							

Continuation message 2.

	59	47	41	35	29	23	11	0			
Word 2	!	0250B	!	3402B	!	PP	!	17B	!	0	!
Word 3	!	0	!	10B	!	0	!	MID	!	0	!
Word 4	!	Element 8 EID (bits 4 - 63)									!
Word 5	!	Element 9 EID (bits 4 - 63)									!
Word 6	!	0									!
Word 7	!	0									!

<u>Field</u>	<u>Location</u>	<u>Description</u>
PP	35-30	PP that detected the error.
MID	23-12	Machine identifier.

!	!	!	!	!	!	!	!
!	MAINFRAME	!	MSGID	0250B	!	!	!
!	(180 CLASS MODELS)	!			!	!	!
!	!	!	!	!	!	!	!
!	SHORT POWER WARNING	!	SYMPTOM	3403B	!	!	!
!	!	!	!	!	!	!	!

The EID registers for those elements with short warning status set are present in this message. The field is zero for elements without a short warning status. Bits 0 - 3 of the EID registers are not logged. The entries in this message are in one-to-one correspondence with the entries in the Hardware Descriptor Table (HDT).

The first message has the following form.

	59		47	41	35	29	23		11	0
Word 2	!	0250B	!	3403B	!	PP	!	17B	!	0
Word 3	!	0	!	04B	!	0	!	MID	!	0
Word 4	!	Element 0 EID (bits 4 - 63)								!
Word 5	!	Element 1 EID (bits 4 - 63)								!
Word 6	!	Element 2 EID (bits 4 - 63)								!
Word 7	!	Element 3 EID (bits 4 - 63)								!

Continuation message 1

	59		47	41	35	29	23		11	0
Word 2	!	0250B	!	3403B	!	PP	!	17B	!	0
Word 3	!	0	!	14B	!	0	!	MID	!	0
Word 4	!	Element 4 EID (bits 4 - 63)								!
Word 5	!	Element 5 EID (bits 4 - 63)								!
Word 6	!	Element 6 EID (bits 4 - 63)								!
Word 7	!	Element 7 EID (bits 4 - 63)								!

Continuation message 2.

	59	47	41	35	29	23	11	0			
Word 2	!	0250B	!	3403B	!	PP	!	17B	!	0	!
Word 3	!	0	!	10B	!	0	!	MID	!	0	!
Word 4	!	Element 8 EID (bits 4 - 63)									!
Word 5	!	Element 9 EID (bits 4 - 63)									!
Word 6	!	0									!
Word 7	!	0									!

<u>Field</u>	<u>Location</u>	<u>Description</u>
PP	35-30	PP that detected the error.
MID	23-12	Machine identifier.

MAINFRAME (180 CLASS MODELS)	MSGID 0250B
ENVIRONMENT WARNING CLEAR	SYMPTOM 3404B

This message is issued when all warnings have cleared (and the original warning was an environmental warning). The EID registers of all elements that received long warning status during the interval are present. The field is zero for those elements that did not receive long warning status. The entries in this message are in one-to-one correspondence with the entries in the Hardware Descriptor Table (HDT).

The first message has the following form.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! 3404B	! PP	! 17B	!	!	0	!
Word 3	!	0	! 04B	!	0	!	MID	! 0
Word 4	! Element 0 EID (bits 4 - 63)							!
Word 5	! Element 1 EID (bits 4 - 63)							!
Word 6	! Element 2 EID (bits 4 - 63)							!
Word 7	! Element 3 EID (bits 4 - 63)							!

Continuation message 1.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! 3404B	! PP	! 17B	!	!	0	!
Word 3	!	0	! 14B	!	0	!	MID	! 0
Word 4	! Element 4 EID (bits 4 - 63)							!
Word 5	! Element 5 EID (bits 4 - 63)							!
Word 6	! Element 6 EID (bits 4 - 63)							!
Word 7	! Element 7 EID (bits 4 - 63)							!



Continuation message 2.

	59	47	41	35	29	23	11	0			
Word 2	!	0250B	!	3404B	!	PP	!	17B	!	0	!
Word 3	!	0	!	10B	!	0	!	MID	!	0	!
Word 4	!	Element 8 EID (bits 4 - 63)									!
Word 5	!	Element 9 EID (bits 4 - 63)									!
Word 6	!	0									!
Word 7	!	0									!

<u>Field</u>	<u>Location</u>	<u>Description</u>
PP	35-30	PP that detected the error.
MID	23-12	Machine identifier.

MAINFRAME (MODELS 810/830)	MSGID 0250B
LONG POWER WARNING CLEAR	SYMPTOM 3405B

This message is issued for models 810/830 with the battery backup option. This message is issued when all warnings have cleared (and the original warning was a long power warning). The EID registers of all elements that received long warning status during the interval are present. The field is zero for those elements that did not receive long warning status. The entries in this message are in one-to-one correspondence with the entries in the Hardware Descriptor Table (HDT).

The first message has the following form.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! 3405B	! PP	! 17B	!	!	0	!
Word 3	!	0	! 04B	!	0	!	MID	! 0
Word 4	!	Element 0 EID (bits 4 - 63)						!
Word 5	!	Element 1 EID (bits 4 - 63)						!
Word 6	!	Element 2 EID (bits 4 - 63)						!
Word 7	!	Element 3 EID (bits 4 - 63)						!

Continuation message 1.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! 3405B	! PP	! 17B	!	!	0	!
Word 3	!	0	! 14B	!	0	!	MID	! 0
Word 4	!	Element 4 EID (bits 4 - 63)						!
Word 5	!	Element 5 EID (bits 4 - 63)						!
Word 6	!	Element 6 EID (bits 4 - 63)						!
Word 7	!	Element 7 EID (bits 4 - 63)						!

Continuation message 2.

	59	47	41	35	29	23	11	0
Word 2	! 0250B	! 3405B	! PP	! 17B	!	!	0	!
Word 3	!	0	! 10B	!	0	!	MID	! 0
Word 4	!	Element 8 EID (bits 4 - 63)						!
Word 5	!	Element 9 EID (bits 4 - 63)						!
Word 6	!	0						!
Word 7	!	0						!

<u>Field</u>	<u>Location</u>	<u>Description</u>
PP	35-30	PP that detected the error.
MID	23-12	Machine identifier.

MAINFRAME (180 CLASS MODELS)	MSGID 0250B
SHORT POWER WARNING CLEAR	SYMPTOM 3406B

This message is issued when all warnings have cleared (and the original warning was a short power warning). The EID registers of all elements that received short warning status during the interval are present. The field is zero for those elements that did not receive short warning status. The entries in this message are in one-to-one correspondence with the entries in the Hardware Descriptor Table (HDT).

The first message has the following form.

	59	47	41	35	29	23	11	0
Word 2	0250B	3406B	PP	17B			0	
Word 3	0	04B	0		MID		0	
Word 4	Element 0 EID (bits 4 - 63)							
Word 5	Element 1 EID (bits 4 - 63)							
Word 6	Element 2 EID (bits 4 - 63)							
Word 7	Element 3 EID (bits 4 - 63)							

Continuation message 1.

	59	47	41	35	29	23	11	0
Word 2	0250B	3406B	PP	17B			0	
Word 3	0	14B	0		MID		0	
Word 4	Element 4 EID (bits 4 - 63)							
Word 5	Element 5 EID (bits 4 - 63)							
Word 6	Element 6 EID (bits 4 - 63)							
Word 7	Element 7 EID (bits 4 - 63)							

Continuation message 2.

	59	47	41	35	29	23	11	0			
Word 2	!	0250B	!	3406B	!	PP	!	17B	!	0	!
Word 3	!	0	!	10B	!	0	!	MID	!	0	!
Word 4	! Element 8 EID (bits 4 - 63) !										
Word 5	! Element 9 EID (bits 4 - 63) !										
Word 6	! 0 !										
Word 7	! 0 !										

<u>Field</u>	<u>Location</u>	<u>Description</u>
PP	35-30	PP that detected the error.
MID	23-12	Machine identifier.

MAINFRAME (180 CLASS MODELS)	MSGID 0250B
MAINFRAME ELEMENT COUNTER BUFFER	SYMPTOM 3407B

This message is issued at each top-of-hour. The entries in this message are in one-to-one correspondence with the entries in the Hardware Descriptor Table (HDT).

The first message has the following form.

	59	47	41	35	29	23	15	11	0
Word 2	0250B	3407B	PP	17B			0		
Word 3	0	04B		0		MID		0	
Word 4	CODE	UNLOG			CORR			UNCOR	
Word 5	CODE	UNLOG			CORR			UNCOR	
Word 6	CODE	UNLOG			CORR			UNCOR	
Word 7	CODE	UNLOG			CORR			UNCOR	

Continuation message 1.

	59	47	41	35	29	23	15	11	0
Word 2	0250B	3407B	PP	17B			0		
Word 3	0	14B		0		MID		0	
Word 4	CODE	UNLOG			CORR			UNCOR	
Word 5	CODE	UNLOG			CORR			UNCOR	
Word 6	CODE	UNLOG			CORR			UNCOR	
Word 7	CODE	UNLOG			CORR			UNCOR	

Continuation message 2.

	59	47	41	35	29	23	15	11	0
Word 2	! 0250B	! 3407B	! PP	! 17B	!	!	0	!	!
Word 3	!	0	! 10B	!	0	!	MID	!	0
Word 4	! CODE	! UNLOG	!	CORR	!	!	UNCOR	!	!
Word 5	! CODE	! UNLOG	!	CORR	!	!	UNCOR	!	!
Word 6	!			0					!
Word 7	!			0					!

<u>Field</u>	<u>Location</u>	<u>Description</u>
PP	35-30	PP that detected the error.
MID	23-12	Machine identifier.
CODE	59-48	Element identification code.  This is the CTI identifier code (IOU= 0, memory =1, processor = 2).
UNLOG	47-32	The unlogged error counter for the element.
CORR	31-16	The corrected error counter for the element.
UNCOR	15-0	The uncorrected error counter for the element.

MAINFRAME (180 CLASS MODELS)	MSGID 0250B
SECDED ID TABLE	SYMPTOM 3410B

This message is issued at each top-of-hour. There is one entry for each entry present in the SECDED ID Table. If no SECDED errors occurred in the hour, this message will not be issued.

The first message has the following form.

	59	47	41	35	29	23	15	11	0
Word 2	0250B	3410B	PP	17B			MS		
Word 3	0	04B*	0			MID		MD	
Word 4	COUNT			ADDRESS				SYNDROME	
Word 5	COUNT			ADDRESS				SYNDROME	
Word 6	COUNT			ADDRESS				SYNDROME	
Word 7	COUNT			ADDRESS				SYNDROME	

\* - This field is 0 if only one message is necessary.

Continuation message, if necessary.

	59	47	41	35	29	23	15	11	0
Word 2	0250B	3410B	PP	17B			MS		
Word 3	0	14B*	0			MID		MD	
Word 4	COUNT			ADDRESS				SYNDROME	
Word 5	COUNT			ADDRESS				SYNDROME	
Word 6	COUNT			ADDRESS				SYNDROME	
Word 7	COUNT			ADDRESS				SYNDROME	

\* - This field is 10B if it is the last message.



Continuation message, if necessary.

	59	47	41	35	29	23	15	11	0		
Word 2	!	0250B	!	3410B	!	PP	!	17B	!	MS	!
Word 3	!	0	!	10B	!	0	!	MID	!	MD	!
Word 4	!	COUNT	!	ADDRESS	!	SYNDROME	!		!		!
Word 5	!	COUNT	!	ADDRESS	!	SYNDROME	!		!		!
Word 6	!					0					!
Word 7	!					0					!

<u>Field</u>	<u>Location</u>	<u>Description</u>
PP	35-30	PP that detected the error.
MID	23-12	Machine identifier.
MS	23-0	Memory size (bits 0 - 23 of the options installed register).
MD	11-0	Memory model number.
COUNT	59-48	Number of errors for this address during the past hour.
ADDRESS	47-16	Central memory address.
SYNDROME	15-0	Syndrome code.

! LOOSELY COUPLED NETWORKS	! MSGID 0300B
! LOCAL NAD ERROR LOG	! SYMPTOM 0100B

	59	47	35	23	11	0
Word 2	! 0300B	! 0100B	!	!	!	!
Word 3	!	!	!	!	!	!
Word 4	!	!	!	!	!	!
.	!	!	!	!	!	!
.	!	!	!	!	!	!
.	!	!	!	!	!	!
Word 60	!	!	!	!	!	!

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
MID	3	23-12	Machine identifier.
HUI	3	11-0	Hardware unique identifier.
NAD ERROR LOG	4-9	59-0	Device status table of local NAD (24 16-bit words).
	10	59-36	
	10	35-0	
	11-59	59-0	21 Local NAD error log entries.
	60	59-12	Each entry consists of 9 16-bit words.

See the 380-170 Network Access Device Hardware Reference Manual for the format of the NAD error log.

! LOOSELY COUPLED NETWORKS	! MSGID	0300B	!
! LOCAL NAD CONNECTION ERROR	! SYMPTOM	2100B	!

	59	47	35	29	23	15	11	0
Word 2	! 0300B	! 2100B	!	! CH	!	!	!	!
Word 3	!	!	!	!	! MID	!	! HUI	!
Word 4	!	!	!	!	! LNAD	! LT	!	!
Word 5	!	!	!	!	!	!	!	!
.	!	!	!	!	!	!	!	!
.	!	!	!	!	!	!	!	!
Word 11	!	!	!	!	!	!	!	!

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
CH	2	29-24	Channel number.
MID	3	23-12	Machine identifier.
HUI	3	11-0	Hardware unique identifier.
LNAD	4	23-16	Local NAD address.
LT	4	15-12	Local trunk enables.
NAD PCT	5-10 11	59-0 59-52	Local NAD path control table (23 16-bit words).

See the 380-170 Network Access Device Hardware Reference Manual for the format of the NAD path control table.

LOOSELY COUPLED NETWORKS	MSGID 0300B
LOCAL NAD ERROR LOG	SYMPTOM 2101B, 2102B, 2110B-2117B, 2120B-2122B, 2140B-2146B, 2150B-2156B

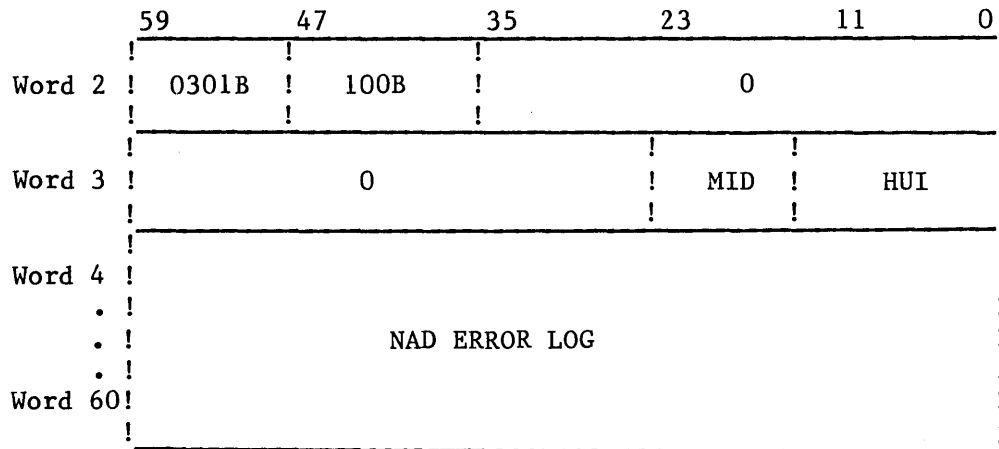
	59	47	43	41	35	29	23	11	0
Word 2	0300B	SYMPTOM			PP	CH	0		
Word 3	EST	RTY	FLG	0		MID	HUI		
Word 4	FUNC	CSTAT		HSTAT		LNAD	0		
Word 5	FFH1	FFH2		FFH3		FFH4	0		
Word 6	DISTAT		TCISTAT1		TCISTAT2		0		
Word 7	CWHALT		0						

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
SYMPTOM	2	47-36	Symptom code. 2101B NAD hardware fault. 2102B NAD microcode disaster halt. 2110B Function time out. 2111B Channel inactive after activate. 2112B Date timeout. 2113B Prime timeout. 2114B Flag timeout. 2115B Transfer error. 2116B Abnormal path status. 2117B Abnormal response code. 2120B Control message length error. 2121B Parameter length error. 2122B Transfer length error.

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u> (Continued)
			214xB Local read error (convert mode).
			215xB Local write error (convert mode).
			0 Block error.
			1 Host ABN error.
			2 Block too large.
			3 Data length error.
			4 Block fragment with EOR/EOT.
			5 Network ABN error.
			6 Block not 60-bit multiple.
PP	2	35-30	PP number.
CH	2	29-24	Channel number.
EST	3	59-48	EST ordinal.
RTY	3	47-42	Retry count.
FLG	3	41-36 (37)	Flag field.
			0 DISTAT, TCISTAT1, TCISTAT2, CWHALT invalid.
			1 DISTAT, TCISTAT1, TCISTAT2, CWHALT valid.
		(36)	0 Recovered error.
			1 Unrecovered error.
MID	3	23-12	Machine identifier.
HUI	3	11-0	Hardware unique identifier. Set to 7777B if invalid.
FUNC	4	59-48	Initial function.
CSTAT	4	47-36	Initial controlware status.
HSTAT	4	35-24	Initial hardware status.
LNAD	4	23-16	Local NAD address.
FFH1	5	59-48	Flag function history.
FFH2	5	47-36	Flag function history.
FFH3	5	35-24	Flag function history.
FFH4	5	23-12	Flag function history.

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u> (Continued)
DISTAT	6	59-44	Device interface status.
TCISTAT1	6	43-28	Trunk control interface status I.
TCISTAT2	6	27-12	Trunk control interface status II.
CWHALT	7	59-44	Controlware halt code.

LOOSELY COUPLED NETWORKS	MSGID 0301B
REMOTE NAD ERROR LOG	SYMPTOM 0100B



<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
MID	3	23-12	Machine identifier.
HUI	3	11-0	Hardware unique identifier.
NAD ERROR LOG	4-9	59-0	Device status table of remote NAD (24, 16-bit words).
	10	59-36	
	10	35-0	
	11-59	59-0	
	60	59-12	21 remote NAD error log entries. Each entry consists of 9, 16-bit words.

See the 380-170 Network Access Device Hardware Reference Manual for the format of the NAD error log.

LOOSELY COUPLED NETWORKS	MSGID 0301B
REMOTE NAD ERROR	SYMPTOM 2160B-2164B, 2170B-2176B

	59	47	41	35	29	23	15	11	7	0
Word 2	0301B	SYMPTOM	0	CH	0					
Word 3	0	RTY	FLG	0	MID	HUI				
Word 4	FUNC	CSTAT	HSTAT	LNAD	LTAD	0	RN			
Word 5	FFH1	FFH2	FFH3	FFH4	0					

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
SYMPTOM	2	47-36	Symptom code. 2160B Header length error. 2161B Bad data block length. 2162B Bad PRU data block. 2163B Abnormal response. 2164B Connect in progress timeout. 2170B Block error. 2171B Host ABN error. 2172B Block too large. 2173B Data length error. 2174B Block fragment without EOR/EOT. 2175B Network ABN error. 2176B Block not 60-bit multiple.
CH	2	29-24	Channel number.
RTY	3	47-42	Retry count.
FLG	3	41-36 (36)	Flag field. 0 Recovered error. 1 Unrecovered error.
MID	3	23-12	Machine identifier.
HUI	3	11-0	Hardware unique identifier. Set to 7777B if invalid.
FUNC	4	59-48	Initial function code.



<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u> (Continued)
CSTAT	4	47-36	Initial controlware status.
HSTAT	4	35-24	Initial hardware status.
LNAD	4	23-16	Local NAD address.
LTAD	4	15-12	Local trunk enables.
RN	4	7-0	Remote NAD address.
FFH1	5	59-48	Flag function history.
FFH2	5	47-36	Flag function history.
FFH3	5	35-24	Flag function history.
FFH4	5	23-12	Flag function history.

MAP III/MAP IV	MSGID 0320B
MAP ERRORS	SYMPTOM 0101B - 0113B

The following BML message is issued by the MSSSI driver MP3.

	59	47	35	29	23	11	5	0
Word 2	0320B	SYMPTOM	PP	CH	0	0	A/B	
Word 3	EST	0	0		MID		0	
Word 4	ST0	ST1	ST2		ST3		ST4	
Word 5	ST5	ST6	ST7		0		0	

<u>Field</u>	<u>Location</u>	<u>Description</u>
SYMPTOM	47-36	Symptom code. 0101B No response to function. 0102B Fatal MAP or system error. 0103B Checkword or channel parity error. 0104B Channel full after output. 0105B Timeout on channel input. 0106B Timeout on channel output. 0107B Channel full before output. 0110B Channel active before function. 0111B Function busy timeout. 0112B Channel empty before input. 0113B Parity error in one or more MAP memories or ECS/ESM.
PP	35-30	The PP from which the MAP driver, MP3, detected the error.
Ch	29-24	Number of the channel connected to the MAP.
A/B	5-0	The MAP access number. 1 Access A 2 Access B
EST	59-48	Est ordinal of the MAP.

<u>Field</u>	<u>Location</u>	<u>Description</u> (Continued)
MID	23-12	Machine identifier of the mainframe connected to the MAP.
ST0	59-48	MAP hardware status word 0.
ST1	47-36	MAP hardware status word 1.
ST2	35-24	MAP hardware status word 2.
ST3	23-12	MAP hardware status word 3.
ST4	11-0	MAP hardware status word 4.
ST5	59-48	MAP hardware status word 5.
ST6	47-36	MAP hardware status word 6.
ST7	35-24	MAP hardware status word 7.

Refer to the MAP Field Maintenance Manual for detailed information on the MAP status definitions.

SOFTWARE INITIALIZATION	MSGID 0400B
SYSTEM TITLE	SYMPTOM 0100B

The following message is issued whenever a BML is created or recovered.

	59	47	35	0
Word 2	0400B	0100B		0
Word 3	SYSTEM TITLE LINE (Word 0)			
Word 4	SYSTEM TITLE LINE (Word 1)			
Word 5	SYSTEM TITLE LINE (Word 2)			
Word 6	SYSTEM TITLE LINE (Word 3)			

! SOFTWARE INITIALIZATION	! MSGID 0400B
! SYSTEM VERSION	! SYMPTOM 0101B

The following message is issued whenever a BML is created or recovered.

	59	47	35	0
Word 2	0400B	0101B		0
Word 3	SYSTEM VERSION NAME (Word 0)			
Word 4	SYSTEM VERSION NAME (Word 1)			

HARDWARE INITIALIZATION	MSGID 0401B
PACK SERIAL NUMBER	SYMPTOM 0100B

The following message will be issued for each mass storage pack whenever a BML is created or recovered.

	59	47	35	23	11	0
Word 2	0401B	0100B	DT		0	
Word 3			PSN	EST	UN	

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
DT	2	35-24	Device mnemonic. Two display code characters.
PSN	3	59-24	Pack serial number in display code left justified, blank filled.
EST	3	23-12	EST ordinal in binary format.
UN	3	11-0	Unit number in binary format.

```

!-----!
! HARDWARE INITIALIZATION      ! MSGID   0401B      !
!-----!
! CONTROLWARE REVISION        ! SYMPTOM 0101B, 0102B, 0103B !
! 7x5x CONTROLLERS, 834/836/ !-----!
! FSC/CCC ADAPTERS           !-----!
!-----!

```

The following message applies to 7x5x controllers, 834/836 adapters, FSC adapters, and CCC adapters.

```

          59          47          35          23          0
!-----!
Word 2 ! 0401B ! SYMPTOM ! CH ! 0 !
!-----!
Word 3 !                CW                !
!-----!

```

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
SYMPTOM	2	47-36	Symptom code.
			0101B Controlware level. This message is logged after every deadstart and everytime the error log or BML is terminated.
			0102B Operator initiated load. This message is logged whenever LOADBC is initiated by the operator.
			0103B System initiated load. This message is logged whenever LOADBC is initiated by the operating system.
CH	2	35-24	Channel used to access the controller.
CW	3	59-0	Controlware revision level in display code. ***** if LOADBC cannot find the revision level.

HARDWARE INITIALIZATION	MSGID 0401B
COS REVISION LEVEL	SYMPTOM 0104B, 0105B, 0106B

The following message applies to the ISD control module.

	59	47	35	23	11	0
Word 2	0401B	SYMPTOM	CH	EQ		0
Word 3			CW			

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
SYMPTOM	2	47-36	Symptom code. 0104B COS level. This message is logged after every deadstart and everytime the error log or BML is terminated. 0105B Operator initiated load. This message is logged whenever LOADBC is initiated by the operator. 0106B System initiated load. This message is logged whenever LOADBC is initiated by the operating system.
CH	2	35-24	Channel used to access the control module.
EQ	2	23-12	Equipment number of control module.
CW	3	59-0	COS revision level in display code. ***** if LOADBC cannot find the revision level.



HARDWARE INITIALIZATION	MSGID 0401B
MDI	SYMPTOM 0110B

This BML message is issued when an MDI is successfully initialized. The MDI is the CDCNET component known as a mainframe device interface.

	59	51 47	35	23	11	0
Word 2	0401B	0110B	CH	EST	0	
Word 3	0	VER		0		

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
CH	2	35-24	Channel over which the MDI was initialized.
EST	2	23-12	EST ordinal of the equipment.
VER	3	51-36	Version number of the software to be loaded.

```

-----
!           HARDWARE INITIALIZATION           !           MSGID: 0401B           !
!-----!
!           887                               !           SYMPTOM: 0107B           !
!-----!

```

The following BML message is issued whenever NOS recovers a 887 device or whenever NOS terminates the BML file. (The following message is required to be near the beginning of the BML file for HPA analysis.)

```

          59          47          35          23          11          0
-----
WORD 2  !  0401B  !  0107B  !  DT  !  EST  !  UN  !
!-----!
WORD 2  !           IHD SN           !           IHDC           !  DBS  !
!-----!
WORD 3  !  DBS  !           TR  !           IHD RL  !
!-----!
WORD 4  !  IHD  !           0  !
!  RL  !
!-----!

```

<u>FIELD</u>	<u>WORD</u>	<u>LOCATION</u>	<u>DESCRIPTION</u>
DT	2	35-24	Device mnemonic. Two display code characters.
EST	2	23-12	EST ordinal in binary format.
UN	2	11-0	Unit number in binary format.
IHD SN	2	59-28	Disk serial number.
IHDC	3	11-0	Disk characteristics.
DBS	2	11-0	Data buffer size.
DBS	3	59-40	Data buffer size.
TR	3	39-24	Transfer rate.
IHD RL	4	23-0	Disk revision level.
IHD RL	5	59-52	Disk revision level.

Refer to the CDC Intelligent Hydra Drive Hardware Reference Manual for the format of the IHDC, IHD SN, DBS, TR, and IHD RL fields.

HARDWARE INITIALIZATION	MSGID 0401B
NIP/CCC	SYMPTOM 0111B, 0112B, 0113B

	59	47	35	29	23	17	11	0
Word 2	0401B	SYMPTOM	PP	CH	EQ		0	
Word 3	EST	0			MID		0	
Word 4	STAT				0			

<u>Field</u>	<u>Location</u>	<u>Description</u>
SYMPTOM	59-48	Symptom code. 0111B NIP/CCC peripheral microcode loaded. 0112B NIP/CCC peripheral microcode load error. 0113B NIP/CCC status error.
PP	35-30	PP that detected the error.
CH	29-24	Channel on which the error was detected.
EQ	23-18	Equipment number.
EST	59-48	EST ordinal of the equipment.
MID	23-12	Machine identifier.
STAT	59-48	CCC status.

HARDWARE INITIALIZATION	MSGID 0401B
LOADBC FAILURES	SYMPTOM 0114B, 0115B, 0116B, 0117B

LOADBC issues the following message when an error is detected during controlware reload.

	59	47	35	30	24	0
WORD 2	0401B	SYMPTOM	CHANNEL			0
WORD 3		STATUS				0

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
SYMPTOM	2	47-36	0114B Controller did not take all controlware. 0115B General status. 0116B Function timeout. 0117B No general status recieved.
CHANNEL	2	35-24	Channel used to access the controller.
STATUS	3	39-30	Not used for symptoms 0114B and 0117B. General status for symptom 0115B in display code terminated by a period. Function code for symptom 0116B in display code terminated by a period.

BINARY MAINTENANCE	MSGID 0406B
STATUS	SYMPTOM 0101B, 0102B, 0103B, 0105B, 0107B, 0113B, 0114B

	59	47	35	0
Word 2	0406B	SYMPTOM		0
Word 3			0	

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
SYMPTOM	2	47-36	Symptom code. 0101B Maintenance log created. 0102B Maintenance log accessed. 0103B Maintenance log terminated. 0105B Maintenance log read error. 0107B Maintenance log data lost. 0113B Maintenance log accessed by HPA. 0114B Maintenance log messages lost (detected by CPUMTR).

! PROCESSOR INITIALIZATION	! MSGID 0407B
! HARDWARE CONFIGURATION/ ! MICROCODE, EI	! SYMPTOM 0100B

This message is issued during all levels of deadstart to indicate the microcode and environment interface (EI) being used.

	59	47	35	23	17	11	0
Word 2	0407B	0100B			0		
Word 3			MNAME		0	ENAME	
Word 4			MDATE		0		L
Word 5			EDATE		0		

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
MNAME	3	59-18	Microcode name. Seven display code characters, left justified, zero filled.
ENAME	3	11-0	EI revision level. Two display code characters.
MDATE	4	59-24	Date microcode was generated in display code (yymmdd).
L	4	0	If set, microcode was not loaded. If clear, microcode was loaded.
EDATE	5	59-24	Date EI was generated in display code (yymmdd).

! MAINFRAME STATUS	! MSGID 0410B
! SUMMARY OF ERROR COUNTERS	! SYMPTOM 0100B

This message is issued at the top of every hour by IMB. If all counters are zero, no message will be issued. The counters indicate the number of errors encountered during the previous hour.

	59	47	35	23	11	0
Word 2	0410B	0100B		0		
Word 3	UPEC	CPU0	CPU1	CM	LCME	

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
UPEC	3	59-48	Uncorrected processor error counter.
CPU0	3	47-36	Corrected processor error counter for processor 0.
CPU1	3	35-24	Corrected processor error counter for processor 1.
CM	3	23-12	Corrected memory error counter.
LCME	3	11-0	Corrected LCME error counter.

SOFTWARE ERROR	MSGID 0411B
CONDITIONAL HANG	SYMPTOM 0100B

A BML message will be issued for each occurrence of a system software error reported through the CPUMTR conditional hang function. This message will also be issued for the existing HMGM monitor function and any CPUMTR detected PP HUNG conditions.

	59	53	47	35	23	11	0
Word 2	0411B		0100B		0		
Word 3	0	AF	PA	JSN		SC	
Word 4				IR			
Word 5				OR			
Word 6				MB			

<u>Field</u>	<u>Word</u>	<u>Location</u>	<u>Description</u>
AF	3	53-48	Abort flag. 0 No user job impact. 1 Job step aborted. 2 Job aborted. 3 PP hung.
PA	3	47-36	PP program address (zero, if detected by CPUMTR).
JSN	3	35-12	Job sequence name of the job.
SC	3	11-0	Job service class.
IR	4	59-0	Input register of the PP when the hang condition occurred.
OR	5	59-0	Output register of the PP when the hang condition occurred.
MB	6	59-0	Message buffer of the PP (first word when the hang condition occurred).



# COMMENT SHEET

MANUAL TITLE: Binary Maintenance Log (BML) Message Formats

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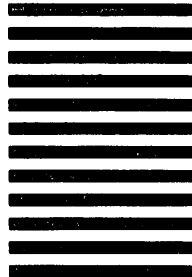
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