

Systems

**OS/VS Message Library:
VS2 System Messages**

VS2 Release 1.6

IBM

Preface

This publication lists the system messages produced by IBM-supplied components of the operating system. The causes of the message are explained, the accompanying actions by the operating system are described, and appropriate responses are suggested. The messages are presented in alphameric order.

Associated Publications

This publication contains some messages that appear in other publications and are duplicated in this publication, and some messages that appear in this publication only. Those publications that contain messages or that serve as references to specific messages are listed at the beginning of their appropriate message sections in this publication.

Those publications that introduce concepts and terminology relevant to all messages are:

OS/VS Data Management Services Guide, GC26-3783

OS/VS Supervisor Services and Macro Instructions, GC27-6979

Operator's Library: OS/VS2 Reference, GC38-0210

OS/VS2 Debugging Guide, GC28-0632

OS/VS JCL Reference, GC28-0618

OS/VS Service Aids, GC28-0633

OS/VS Utilities, GC35-0005

A list of the books belonging to the OS/VS Message Library is contained in figure 2 of this publication.

References to VSAM are for planning purposes only.

Second Edition (June, 1973)

This is a reprint of GC38-1002-0 incorporating changes released in the following Technical Newsletter:

GN28-2557 (dated April 1, 1973)

This edition applies to release 1.6 of OS/VS2 and to all subsequent releases until otherwise indicated in new editions or Technical Newsletters. Changes are continually made to the information herein; before using this publication in connection with the operation of IBM systems, consult the latest *IBM System/360 and System/370 Bibliography*, GA22-6822, and the *IBM System/370 Advanced Function Bibliography*, GC20-1763, for the editions that are applicable and current.

Requests for copies of IBM publications should be made to your IBM representative or to the IBM branch office serving your locality.

A form for reader's comments is provided at the back of this publication. If the form has been removed, comments may be addressed to IBM Corporation, Publications Development, Department D58, Building 706-2, PO Box 390, Poughkeepsie, N.Y. 12602. Comments become the property of IBM.

I/O Supervisor 1, Supervisor, ABEND, NIP, I/O Supervisor 2	→	IEA
End-of-volume, Open, Close, Catalog Management, Checkpoint/Restart, DASDM, Tape Label Creation, BTAM/QTAM	→	IEC
TCAM	→	IED
Master Scheduler	→	IEE
Job Scheduler	→	IEF
System Generation	→	IEI
SMF Dump Program	→	IFA
Environment Recording	→	IFB
MCH and DDR	→	IGF
Supervisor and Data Management Assembler Macro Expansion	→	IHB
Checkpoint/Restart	→	IHJ

Contents

Introduction	7
IEA (Supervisor Messages)	11
Input/Output Supervisor Messages (1)	11
Supervisor Messages	13
ABEND Messages	13
NUCLEUS Initialization Program Messages	15
Input/Output Supervisor Messages (2)	27
IEC (Data Management Messages)	31
End-of-volume Messages	31
Open Messages	38
Close Messages	48
Catalog Management Messages	54
Checkpoint/Restart Messages	54
Direct Access Device Space Management (DADSM) Messages	55
Tape Label Creation Messages	55
BTAM Messages	55
IED (Telecommunications Access Method (TCAM) Messages)	59
IEE (Master Scheduler Messages)	75
IEF (Job Scheduler Messages)	103
IEI (System Generation Messages)	143
IFA (SMF Dump Program Messages)	145
IFB (Environment Recording Messages)	147
IGF (Machine-Check Handler and Dynamic Device Reconfiguration Messages)	151
IHB (Supervisor and Data Management Assembler Macro Expansion Messages)	155
IHJ (Checkpoint/Restart Messages)	171
Problem Determination Foldout Tables I and II	177

Figures

Figure 1. Customizing Your Message Library	8
Figure 2. OS/VS Message Library	9
Figure 3. Problem Determination (Foldout Table I and II)	177

**Summary of Amendments
for GC38-1002-0
as Updated by TNL GN28-2557
OS/VS2 Release 1.6**

Miscellaneous

Message Id	Reason	Message Id	Reason
IEA000I	Message field change and additional information.	IEF265I	Additional information.
IEA048I	New error field-0601.	IEF287I	Corrections.
IEA101A	Correction.	IEF374I	Corrections.
IEA356I	New Message.	IEF461I	Additional information.
IEA357I	New Message.	IFB002I	Additional information.
IEC012I	Additional information.	IFBF05W	Deleted.
IEC015I	New Message.	IFBF06W	Deleted.
IEC027I	New return code-24.	IFBF07S	Deleted.
IEC030I	Additional information.	IFBF08S	Deleted.
IEC112I	Additional information.	IFBF09S	Deleted.
IEC140I	New Message.	IFBF0AS	Deleted.
IEC153I	Additional information.	IFBF0BI	Deleted.
IEC209I	Corrections.	IFBF0CI	Deleted.
IEC225I	Corrections.	IFBF0DS	Deleted.
IEE929I	Typographical error — REF.	IFBF0EI	Deleted.
IEE930I	Corrections.	IFBF0FW	Deleted.
IEF092I	Additional information.	IFBF0FI	Deleted.
IEF208I	Additional information.	IGF500I/D	Additional information.
		IGF509I/D	Additional information.

The OS/VS Message Library is designed so that you can have the messages and codes documentation that fits your specific needs. You no longer have to maintain an enormous manual.

If you are a system programmer or installation manager, you may want to have all the books in the Message Library in a consolidated document.

If you are an operator, you may want to include *System Messages* and *System Codes* in your Operator's Library.

If you are an assembler language programmer, you may want to have *System Messages*, *System Codes*, *Linkage Editor and Loader Messages*, and the message section from the *Assembler Language Programmer's Guide* in a consolidated document.

If you are a COBOL programmer, you may want to add *Utilities Messages* to your COBOL programmer's guide.

In any case, you can select the appropriate books to build a Message Library to meet your needs.

Basic Books

Each installation will require at least one copy of *VS1 System Messages* or *VS2 System Messages*. You will receive at the console or in your output listings, some subset of the messages in these books no matter which options have been included in your operating system. All programming personnel, especially operations personnel, will require access to these

books; although it may not be necessary for applications oriented personnel to have their own copies.

Each installation will require at least one copy of *VS1 System Codes* or *VS2 System Codes* which contain the system completion codes and wait state codes produced by all the components of OS/VS1 or OS/VS2. All programming personnel, especially operations personnel, will require access to one of these books, although applications oriented personnel may not need to have their own copies.

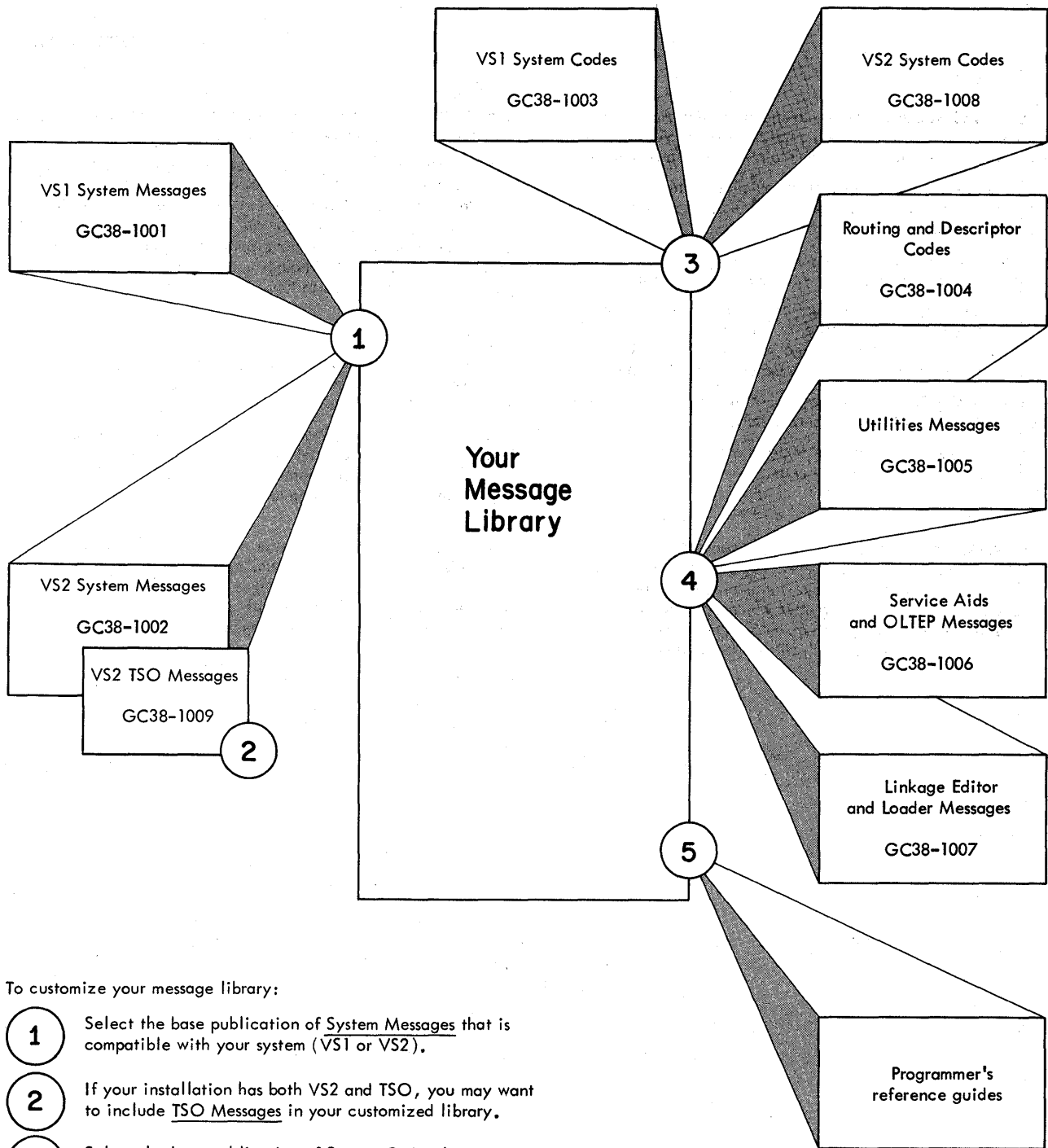
Optional Books

If your installation uses TSO (an option available only in OS/VS2), you may want to add *TSO Messages* to your copies of *VS2 System Messages*.

Routing and Descriptor Codes contains routing and descriptor codes for all messages that have these codes. Your installation's system programmer will need this book, especially if your operating systems have multiple console support (MCS).

Depending on your requirements, you may want to have copies of *Utilities Messages*, *Service Aids and OLTEP Messages*, or *Linkage Editor and Loader Messages*. Select the books that you need, and keep them either in the appropriate System Library Manual or in your customized Message Library.

Customizing Your OS/VS Message Library



To customize your message library:

- 1** Select the base publication of System Messages that is compatible with your system (VS1 or VS2).
- 2** If your installation has both VS2 and TSO, you may want to include TSO Messages in your customized library.
- 3** Select the base publication of System Codes that is compatible with your system (VS1 or VS2).
- 4** Select any of the four supplementary messages and codes publications that fit the needs of your installation.
- 5** If your installation uses a particular compiler or application program, you may want to append the program's messages to your message library. These messages are in the associated programmer's guide.

Figure 2 lists the messages and their associated manuals.

Figure 1. Customizing Your OS/VS Message Library

OS/VS Message Library

Publication	Order Number	Contents
<u>VS1 System Messages</u>	GC38-1001	IEA, IEC, IED, IEE, IEF, IEI, IFA, IFB, IGF, IHB, IHJ, IHK messages
<u>VS2 System Messages</u>	GC38-1002	IEA, IEC, IED, IEE, IEF, IEI, IFA, IFB, IGF, IHB messages
<u>VS1 System Codes</u>	GC38-1003	all completion and wait state codes
<u>VS2 System Codes</u>	GC38-1008	all completion and wait state codes
<u>Routing and Descriptor Codes</u>	GC38-1004	all routing and descriptor codes
<u>Utilities Messages</u>	GC38-1005	IBC, IEB, IEH messages
<u>Service Aids and OLTEP Messages</u>	GC38-1006	HHL, HMA, HMB, HMD, IFC, IFD, IMC messages
<u>Linkage Editor and Loader Messages</u>	GC38-1007	IEW messages
<u>VS2 TSO Messages</u>	GC38-1009	IKJ, IKM, IPD messages
In other System Library Manuals:		
<u>Assembler Programmer's Guide</u>	GC33-4021	I FO messages
<u>Emulator publications</u>	See: <u>IBM System/360 and System/370 Bibliography</u>	emulator messages
<u>Problem Determination Aids and Messages for Graphic Programming Services (GPS) and Graphic Subroutine Package (GSP)</u>	GC27-6974	I FF messages

Figure 2. OS/VS Message Library



Component Name	IEA
Program Producing Message	ABEND, IEAPRINT program, input/output supervisor, nucleus initialization program (NIP), and supervisor.
Audience and Where Produced	For operator: console. For programmer: SYSPRINT data set.
Message Format	xx IEAnnns text xx Message reply identification (absent, if operator reply not required or if issued by IEANIP at IPL time). nnn Message serial number. s Type code: A Action; operator must perform a specific action. E Eventual action; operator must perform action when he has time. I Information; no operator action is required. W Wait; processing stopped until action is determined and performed. text Message text.
Comments	None.
Problem Determination	Refer to fold-out Tables I and II at the back of this publication for problem determination instructions.

Input/Output Supervisor Messages 1

IEA000A adr,INT REQ,cm,stat,sensbbbbbb,,ser,jjj
IEA000A adr,INT REQ,CC = 3/NO PATHS AVAILABLE,,,jjj

Explanation: For the first format of the message, the input/output supervisor detected a device that requires intervention; for the second format of the message, the input/output supervisor received a 'not operational' indication on the last available path to a device.

In the message text in hexadecimal, the fields are:

- adr
Unit address of the device.
- cm
Operation code of the channel command word (CCW) during whose execution the error occurred. If the channel command word cannot be found, this field appears as **.
- stat
Status portion of the channel status word (CSW).
- sens
First 2 sense bytes for the error condition.
- bbbbbb
Next 3 sense bytes for the error condition. This field appears only for devices that give more than 2 bytes of sense information.
- ser
Serial number of the volume on which intervention is required. This field appears only for magnetic tape or direct access devices.
- jjj
Job name, in characters, during which intervention is required. (If the job name cannot be determined, this field will be left blank.)

Operator Response: For the first format of the message, take an appropriate action, such as:

- Make the unit ready. If the unit cannot be made ready, cancel the job.

- Feed more cards to the reader or punch.
 - Clear a card jam.
 - Empty a stacker.
 - Empty the chip box.
 - Put paper into the printer or console typewriter.
- For the second format of the message, either physically turn on a path to the device (for example, a control unit switch or a channel switch) or VARY a path online that has been previously varied offline. Then, if necessary, make the device ready.

Problem Determination: Table I, items 11, 29, 30.

IEA000I adr,errmsg,cm,stat,sens,dbcctfd,ser
IEA000I lna,err,cm,stat,ibss,opxterm,jjj,hh.mm.ss
IEA000I adr,err,cm,stat,sensbbbbbb,
{ binxcylntrck } ,ser,jjj,hh.mm.ss
{ binxsbstcytr }
{ dbcctfd }

Explanation: The input/output supervisor, the basic telecommunication access method (BTAM), or the queued telecommunication access method (QTAM) routine found an uncorrectable input/output error. The first format of the message is used only for magnetic tapes; the second format only for telecommunication devices; and the third format for all devices other than telecommunication devices. For devices having more than five sense bytes, such as the 2305 and 3330, this message appears on two consecutive lines. In systems with graphics access method (GAM), unit checks and conditions that require operator intervention indicate devices that do not exist or that were included in SYSGEN but not attached to the system.

In the message texts, the fields are:

- errmsg
Message describing the error:
 - ERROR ON ERG to indicate that a data check occurred during an erase gap operation. The operation was initiated by the write recovery procedures. This message

is an indication that some residual data remained on the tape; a later reread through the erased area may indicate a noise record. Depending on the length of the noise, a permanent error (read data check) may occur.

- NOISE-USER to indicate that a noise record (a record whose length is less than 12 bytes) was recognized as a cause of a data check. The noise record is ignored, and no repositioning for a reread is attempted.
- NOISE-ERP to indicate that error recovery procedures were in progress when a short record-data check condition was encountered. This situation should not occur, and is a good indication of either faulty hardware media, a crimp in the tape, or noise on the bus line. Repositioning of the tape cannot be guaranteed under these conditions.
- UNEX LOAD PT to indicate that an unexpected load point was encountered during error recovery for magnetic tape (probably the result of a recording density incompatibility). The message may appear twice if the tape is not a standard label tape.
- CTRL BLK ERR to indicate that the tape ERP is using an input/output block IOB in which the CSW command address is zero instead of an expected address.
- DSE FAILED to indicate that a data security erase failure occurred. An IOB intercept condition has been detected and the error is flagged as permanent.
- UNEX INTRPT to indicate that an interrupt condition has been detected by the error recovery procedures and that only "device end" is on in the status byte.
- CHAN PGM CHECK - channel program check.
- PROT CHECK - channel protection check.
- WR INHIBITED - write command attempted to file-protected device.
- OVR - overrun (for direct access and magnetic tape only).
- SKC - seek check (for direct access only).
- TOT - time out (for telecommunications only).
- LDA - lost data (for telecommunications only).

err

Description of the error based on status and sense information:

- CCC - channel control check.
- ICC - interface control check.
- CHC - chaining check.
- CDC - channel data check.
- EQC - equipment check.
- BOC - bus out check.
- CMD - command reject.
- DCK - data check
- SEN - a unit check occurred during a sense operation. (When this condition is present, the fields cm, stat, sensbbbbbb, and binxylntrck do not appear in the message text.)
- OVR - overrun (for direct access and magnetic tape only).
- SKC - seekcheck (for direct access only).
- NRF - no record found (for direct access only).
- MAM - missing address marker (for direct access only).
- DCC - data converter check (for magnetic tape only).
- UNC - unusual command (for 2540 card reader and punch only).
- TOT - time out (for telecommunications only).
- LDA - lost data (for telecommunications only).
- IOE - input/output error (for errors other than those described above).
- WRI - indicates write inhibit switch should be checked.
- UEX - unit exception.
- CPC - channel program check.
- PRT - protection check.

adr

Unit address, in hexadecimal, of the device.

lna

Line address, in hexadecimal.

cm

Command code, in hexadecimal, of the channel command word (CCW) being executed when the error occurred. If the channel command word cannot be found, this field appears as **.

stat

Status portion, in hexadecimal, of the channel status word (CSW).

sens

First two sense bytes, in hexadecimal, for the error condition. This field appears only if a unit check condition is indicated in the stat field (which precedes this field in the message text).

bbbbbb

Next three sense bytes, in hexadecimal, for the error condition. This field appears only for devices that give more than two bytes of sense information. For devices having more than five sense bytes, this field appears on the second line of this message. For the 3330 and 2305, this field contains the next six sense bytes for program errors and the next 22 bytes for equipment and data checks.

ib

The sense byte describing a unit check type error condition for telecommunication devices.

ss

Sense information resulting from the execution of a diagnostic Write/Read command which ended with a unit check status (2701 Data Adapter Unit only). This information may result from a Write/Break or Read/Skip command for QTAM.

dcbctfd

Record count, in hexadecimal, not including label records. This field appears only for magnetic tape. (For the first format of this message, this field indicates the count of the record preceding the error record.) For devices having more than five sense bytes, this field appears on the second line of this message.

op

TP operation code, in hexadecimal, describing the type of channel command word (CCW) being executed when the error occurred.

xx

Not used.

term

Terminal identification characters, in hexadecimal. It may be either two bytes or one byte, depending upon the terminal type. If it is one byte, it is left justified. If a dial line is being used with QTAM, the last four digits of the dial number are provided.

binxylntrck

Address, in hexadecimal, of the bin (binx), the cylinder (cyl), and the track (trck) where the error occurred. When an error occurs while trying to obtain this data, the last seek address is substituted. This field appears only for disk and drum direct access devices. On a data or equipment check for a 2305 or 3330, this field does not appear. For other errors on these devices, and for other devices having more than five sense bytes, this field appears on the second line of this message.

binxsbstcytr

Address, in hexadecimal, of the bin (binx), the subcell (sb), the strip (st), the cylinder (cy), and the track (tr) where the error occurred. When an error occurs while trying to obtain this data, the last seek address is substituted. This field appears only for data cell direct access storage devices.

ser

Serial number of the volume on which the error occurred. This field appears only for magnetic tape or direct access devices.

jjj

Jobname

hh.mm.ss

hh = hour

mm = minute

ss = second

Note: Two consecutive commas or a blank field in the message text indicates that a field could not be determined or is contained on the next or previous line of the message.

Operator Response: Probable hardware error. For the first format of the message, proceed with caution in accepting, unconditionally, the results of the operation. Consider canceling the job if there is a requirement to expect perfect results. Each message should be considered as a potential warning of a marginal condition.

Problem Determination: Table I, items 2, 30.

For the second and third formats of the message, note that some abnormal error condition occurred. Depending on the severity of the error (check the status and sense information) and depending on the installation requirements, take appropriate action.

For the 2305 and the 3330, the following responses are valid:

- **CMD REJECT** - command reject
This is a programmer error - correct and retry.
- **OVERRUN**
BUS OUT CK - bus out check
EQUIP CHECK - equipment check
INTF CTL CK - interface control check
These are permanent hardware faults. Customer Engineer action is required.
- **DATA CHECK**
Operator should request an alternate sparing utility program such as IEHATLAS to perform recovery - replace functions and to assign an alternate track spare if necessary.
If the above utility cannot complete, then the GET ALT function in the IBCDASDI or IHFDASDR utility should be invoked. This will assign the spare but will not perform recovery/replace.
If no alternate spares are available, Customer Engineer action is required.
- **WR INHIBITED**
If the write inhibit switch is set on to inhibit execution of write commands and the volume should be written on, set the switch off and rerun the job. If the write inhibit switch is set on to intentionally inhibit execution of write commands, follow the procedures established by your installation.

For the 1419/1275, the following response is valid:

- **CMD REJECT** - command reject. If the command is a X'FF', this is a probable hardware failure. The disengage command failed and a Customer Engineer's attention is required.

IEA001I UNIT adr, PATH pth INOPERATIVE

Explanation: One path to a multipath device has become inoperative. The system will continue all operations on a limited basis, using the remaining paths.

In the message text, the fields are:

adr

Unit address, in hexadecimal, of the device.

pth

Channel and unit control path, in hexadecimal, by which the device could not be accessed. If the path cannot be determined, this field appears as **.

Operator Response: Probable hardware error. The system will automatically begin reusing the path when it becomes operational.

Problem Determination: Table I, items 2, 30.

Supervisor Messages

IEA007I NO CORE AVAIL FOR NEW REGN

Explanation: Sufficient storage (52K contiguous bytes within dynamic storage) to bring in a terminator is not available.

System Action: A second attempt is made to obtain the 52K of storage, and if successful, processing continues. If storage can not be obtained, the task is abnormally terminated and the system proceeds to the next task.

Operator Response: None.

Programmer Response: Ensure that 52K of storage is available and resubmit the job.

Abend Messages

IEA024I ERROR IN GTF. xxx TRACE OPTION WAS DISABLED

Explanation: ABDUMP in its formatting of the GTF trace table found an error record for trace option xxx; where xxx is EXT, IO, SIO, PI, or SSM (SSM is applicable only in a multiprocessing system). This error record was produced when GTF encountered a program check while attempting to create a trace record for xxx. This message is followed by a hexadecimal dump of the error record. Refer to messages AHL118I and AHL1201.

System Action: The program check for the error record caused GTF to bypass recording further events for the trace option xxx. However, GTF continued to record all events for the other trace options requested.

Programmer Response: Probable user error. Ensure that problem programs are not altering the GTF region. If xxx is SVC, SVC tracing will continue.

Problem Determination: Table I, items 1, 2, 16, 29. Ensure that sufficient storage is available within the GTF region for a SNAP dump (an additional 4K is needed for ABDUMP/SNAP execution). Ensure that the GTFSNP catalogued procedure is used to obtain an ABDUMP/SNAP dump.

IEA025I INVALID GTF RECORD FOLLOWS

Explanation: ABDUMP in its formatting of the GTF trace table found a GTF record with an invalid EID or FID field. ABDUMP prints this message and follows it with a hexadecimal dump of the error record.

System Action: Processing continues.

Programmer Response: Probable user error. Ensure that problem programs are not altering the trace table.

Problem Determination: Table I, items 1, 2, 11, 29.

IEA027I jjj sss ENQUEUED RESOURCES**IEA027I xxxx, yyyy**

Explanation: Step sss of job jjj has been running in 'must complete' status. However, the job has been scheduled for abnormal termination.

In the message text, xxxx is a major name and yyyy is a minor name of an enqueued resource for the job named in the previous message (IEA8011).

System Action: The system continues processing.

Operator Response: None. Message IEA028A follows.

IEA028A REPLY 'C' OR 'N'

Explanation: This message permits the operator to respond to preceding message IEA0271.

System Action: The system waits for a reply.

Operator Response: If the resources are critical and 'must complete' status must be maintained, enter REPLY xx,'C'. If the resources are not critical, enter REPLY xx,'N' to release the resources and allow processing to continue.

Note: A REPLY xx,'C' will require that the system be reinitialized to release the resources.

IEA029I jjj sss TASK REINSTATEMENT FAILED

Explanation: An attempt was made to reinstate a failing task for step sss of job jjj. The task is quiesced and marked permanently nondispatchable. System tasks are reinstated.

System Action: The system continues processing.

Operator Response: None. If the problem recurs, before calling IBM for programming support, execute the AMDPRDMP service aid program to print the dump data set, and have the output available.

Problem Determination: Table II, Format 1: trace option - TRACE = SYS

IEA030I OPEN FAILED FOR DUMP DATA SET FOR {JS} [DUE TO {Shhh} {Uhhh}] {ST}

Explanation: An attempt to open a dump data set during ABEND processing failed.

JS signifies a job step task, and ST a subtask. If the phrase DUE TO Shhh or Uhhh appears, the task was abnormally terminated with a system (S) hhh or a user (U) code of hhhh. *System Action:* The dump is bypassed and abnormal termination continues.

Programmer Response: If the phrase DUE TO appears, respond as indicated for that completion code. If not, make sure that the dump DD statement is currently specified and rerun the job.

Problem Determination: Table I, items 1, 15, 29.

IEA031I ABDUMP FAILED FOR {JS}{DUE TO hhh} {ST}

Explanation: The abnormal termination dump routine (ABDUMP) was executed unsuccessfully. In the message text, JS signifies a job step task and ST signifies a subtask. If the phrase 'DUE TO hhh' appears, abnormal termination with a system completion code of hhh has occurred during the execution of the ABDUMP routine.

System Action: The system continues processing.

Programmer Response: If the phrase 'DUE TO hhh' appears with a completion code of B37, allocate more direct access space by coding the SPACE parameter on the SYSABEND or SYSUDUMP data definition card. For other completion codes, follow the response given for that completion code. If the phrase does not appear, resubmit the job.

Problem Determination: Table I, items 1, 15, 29. If not a B37 completion code, see Table II, Format 1: trace option - TRACE = SYSTEM.

IEA032I CLOSE FAILED FOR {JS} [DDNAME = ddname] [CC = {Unnnn} {Snnn}] DATA SET - DEB = xxxxxx

Explanation: The abnormal termination routine attempted unsuccessfully to close a data set for the job step task (JS) or a subtask (ST). DEB = xxxxxx is the address of the data extent block for the data set. If the data definition name associated with the data set can be located, it will be included as ddname. The completion code (CC), if given, is a system (Snnn) or a user (Unnnn) completion code associated with the close failure.

System Action: Abnormal termination continues.

Programmer Response: If the completion code is present, respond as indicated for that completion code. If the data definition name is valid, correct the error and rerun the job.

Problem Determination: Table I, items 2, 5a, 15, 16, 29.

IEA047A <PGSUP.ERROR> nnnn

Explanation: The system was placed in a disabled wait state because of an error that occurred in the paging supervisor. The nnnn field indicates the type of error which occurred as follows:

nnnn Meaning

0001 A translation specification exception occurred while the system was executing with a storage protection key of zero. Control program addressability is lost as a result of damage to the control program's address translation tables.

System Action: The system is placed in a disabled wait state with wait state code X'28'.

Operator Response: Probable control program error. Notify the system programmer and restart the system.

Problem Determination: Table I, items 2, 11, 13, 16, 29.

0201 Allocation of real storage for an SQA or LSQA page failed due to a control program error. Probable damage has been detected in the control program's address translation table.

System Action: The system is placed in a disabled wait state. *Operator Response:* Probable control program error. Notify the system programmer and restart the system.

Problem Determination: Table I, items 2, 11, 13, 16, 29.

0202 The page table entry for an SQA or LSQA page could not be located during real storage allocation for that page due to probable damage to the control program's address translation table.

System Action: The system is placed in a disabled wait state. *Operator Response:* Probable control program error. Notify the system programmer and restart the system.

Problem Determination: Table I, items 2, 11, 13, 16, 29.

0700 A translation exception has occurred for a page that is flagged as valid in the control program's address translation tables. Probable damage has been detected in either the control program's translation tables, or in the problem program's translation tables.

System Action: The system is placed in a disabled wait state. *Operator Response:* Probable control program error. Notify the system programmer and restart the system.

Problem Determination: Table I, items 2, 11, 13, 16, 29.

0701 The page table entry for a page that was the subject of a translation exception could not be located due to probable damage to the control program's address translation table.

System Action: The system is placed in a disabled wait state. *Operator Response:* Probable control program error. Notify the system programmer and restart the system.

Problem Determination: Table I, items 2, 11, 13, 16, 29.

1500 No external page storage is available for allocation from the page data sets. Probable causes are:

- A hardware malfunction occurred on some direct access devices used to support paging data sets.
- A control program error resulted in the overcommitment of external page storage.

System Action: The system is placed in a disabled wait state.
Operator Response: If a message preceded this one, indicating that one or more paging I/O failures occurred, reconfigure the system without the failing paging data sets and restart the system. If no paging I/O failures were indicated contact the system programmer and restart the system.

Problem Determination: Table I, items 2, 11, 13, 16, 29, or 30.

2100 A program check interrupt occurred while the paging supervisor was executing.

System Action: The system is placed in a disabled wait state.
Operator Response: Notify the system programmer and restart the system.

Problem Determination: Table I, items 2, 11, 13, 16, 29.

2101 The paging supervisor task was scheduled for abnormal termination.

System Action: The system is placed in a disabled wait state.
Operator Response: Notify the system programmer and restart the system.

Problem Determination: Table I, items 2, 11, 13, 16, 29.

IEA048I <PG.SUP.ERROR> nnnn RECOVERY ATTEMPTED

Explanation: An error has occurred in paging supervision. The nnnn field indicates the type of error that occurred as follows:
 nnnn Meaning

- 0100 Real storage allocation attempted to reclaim a page frame that had been allocated to a V = R region; a new page frame has been used instead.
- 0101 Real storage allocation has found a page frame that is not accounted for on any page frame queue or by any system process. The page frame is ignored.
- 0102 A page control block could not be found for a page frame, although the external page table entry indicated the existence of a PCB. The page frame is ignored.
- 0301 A page frame has been made available for allocation to a previously requested V = R region. However, the original V = R request cannot be found. The page frame is made available for general allocation.
- 0302 The page table entry for a V = R region being allocated could not be found. Probable damage has been done to the control program's address translation tables. The request for the V = R region is rejected.
- 0600 Real storage replacement has been attempted when an insufficient number of page frames are replaceable. Either the amount of fixed real storage is too large for the configuration, or the replacement function was invoked needlessly.
- 0601 The page table entry could not be referenced for a page chosen to be replaced by the system. The page was treated as an unchanged page.
- 1800 In the process of releasing a virtual page, a page control block whose existence was indicated in the page's external page table entry, could not be found.

System Action: Normal system processing continues.

Operator Response: If the error type was 0600, contact the system programmer. System replacement values may need to be modified at the next IPL.

**IEA049I <PG.SUP.ERROR> 0001
 JOBSTEP = jobname.stepname TERMINATING**

Explanation: A translation specification exception occurred

while the system was executing with a non-zero storage protection key. The jobname and stepname are indicated in the message text.

System Action: The task that caused the translation specification exception is scheduled for abnormal termination (system completion code X'28').

Operator Response: None.

Problem Determination: Table I, items 1, 2, 5a, 13, 16, 29.

Nucleus Initialization Program (NIP) Messages

**IEA101A SPECIFY SYSTEM PARAMETERS FOR RELEASE
 xx.yy.sss**

Explanation: This message is issued during nucleus initialization to allow the operator to change certain system parameters that were specified during system generation. In the message text, xx is the release number, yy is the release level, and sss is the system type (PCP,MFT,MVT/MP, VS2).

System Action: The system waits for the operator's response and changes the system parameters as specified by the operator.

The parameters are:

- APG = (nn,llim,ulim,delta,stat,ratio) to specify an automatic priority group (APG) for the VS2 task dispatcher. If only a subset of the default APG parameter is to be changed, the values which are to remain unchanged need not be included in the APG parameter. However, care must be taken to include the correct number of commas for the values which are to remain unchanged and which precede the values being changed. For example, to change only the stat value in the default APG enter APG = (,,,7666).
 nn specifies the priority of the APG. It is expressed as a one or two digit value from 0 through 13.
 llim specifies the lower bound, in milliseconds, of the time slice for the APG. It is expressed as a one to three digit value from 1 through 998.
 ulim specifies the upper bound, in milliseconds, of the time slice for the APG. It is expressed as a one to three digit value from 2 through 999. Ulim must be a value greater than that expressed for llim.
 delta specifies the value, in milliseconds, which is to be added or subtracted from the APG time slice value at the end of each statistics interval. It is expressed as a one or two digit value from 1 through 99.
 stat specifies the length, in milliseconds, of the statistics interval. It is expressed as a one to four digit value from 1 through 9999.
 ratio specifies the ratio, in tenths, of

$$\frac{\text{time slice ends}}{\text{voluntary wait request} + \text{time slice ends}}$$
 which is to be considered optimum for the APG. It is expressed as a one digit value from 1 through 9.
- AUXLIST to specify that the current allocation limits are to be displayed at NIP time. The data displayed includes:
 - Total auxiliary storage available.
 - Auxiliary storage available for background.
 - Auxiliary storage available for TSO.
 - Current value of TSOAUX.
 After the display is complete, the operator may accept the specification as stated (enter EOB) or may enter new values by specifying 'TSOAUX = '.
- $\left. \begin{array}{l} \{ \text{BLDLF} \} \\ \{ \text{BLDL} \} \end{array} \right\} = \text{xx}$ to specify a resident directory for the linkage library (SYS1.LINKLIB) data set. xx specifies the name of a SYS1.PARMLIB member (for example, IEABLDxx);

the member contains a list of modules for which entries are to be built in the resident BLDL table. If specified during system generation and not modified through this reply or the SYS1.PARMLIB list of system parameters, the IEABLD00 list is used. The directory created in response to the specification of the BLDL parameter will reside in the pageable area of the VS2 system. The directory created in response to the specification of the BLDLDF parameter will reside in the non-pageable, or fixed, area of the VS2 system. BLDLDF and BLDL parameters are mutually exclusive; BLDL and BLDLDF should not be specified for the same IPL process. If, in error, both parameters are specified, the BLDLDF parameters are accepted and BLDL is ignored; a warning message will be issued to identify this condition.

- CLPA to specify that the system link pack area (LPA) is to be recreated. If a previously created LPA is found in one of the paging data sets, the previously created LPA is logically deleted from the paging data set and the space which the LPA occupied will be made available for system paging use.
- CPQE = nnnn to specify the number of channel program (CCW) sequences to be defined for the VS2 Paging Supervisor. nnnn is the number to be added to the minimum number of CCW sequences, which is 10 for a single page data set, and 15 if there is more than one page data set. The number of channel program sequences is equivalent to the maximum number of concurrent paging operations (page-in and page-out). The nnnn is expressed as a one to four digit value from 0 through 9999.

- DUMP = $\left\{ \begin{array}{l} \text{NO} \\ \text{[([)DA[,siz]]} \\ \text{(TA,ddd)} \end{array} \right\}$ to specify whether a SYS1.DUMP data set is to be defined. NO specifies no SYS1.DUMP data set will be defined. (The dump, which is normally directed to the SYS1.DUMP data set, is bypassed if a critical error occurs.) DA specifies that the SYS1.DUMP data set is defined on DASD for system use. The data set must be cataloged and on a direct access device. siz specifies the minimum number of 1K (1024 bytes) records which are to be allocated in the SYS1.DUMP data set. If siz is not specified, a default of 512K is assumed. TA specifies that the tape unit at device address ddd will be allocated to the system. The system ensures that a non-standard labeled tape volume is mounted at ddd for use as the SYS1.DUMP data set.

- FIX = (aa,bb,cc,dd,...) to specify reenterable routines from SYS1.LPALIB, SYS1.LINKLIB, and/or SYS1.SVCLIB to be made resident as a nonpageable extension to the VS2 link pack area (LPA). Routines specified by the FIX option will be used in preference to the same routines specified by the MLPA option and/or included in the Quick-Startable LPA. Fix routines are active only for the duration of the system that has been loaded and may not be reactivated via the VS2 quick start facility. The aa,bb,cc,dd, etc., are appended to IGAFX to form the names of SYS1.PARMLIB members; the members contain lists of modules to be loaded. If specified during system generation and not modified through this reply or through the SYS1.PARMLIB list of system parameters, the IEAFIX00 list is used.

- HARDCPY = $\left(\left\{ \begin{array}{l} \text{SYSLOG} \\ \text{[unit address]} \end{array} \right\} \left\{ \begin{array}{l} \text{ALL} \\ \text{[routing codes]} \end{array} \right\} \left\{ \begin{array}{l} \text{CMDS} \\ \text{INCMDS} \\ \text{STCMDS} \\ \text{NOCMDS} \end{array} \right\} \right)$

to specify that the hard copy log is desired.

$\left\{ \begin{array}{l} \text{SYSLOG} \\ \text{[unit address]} \end{array} \right\}$ specifies the hard copy log. SYSLOG specifies that the system log is to be used as the hard copy log; unit address specifies that a console is to be used as

the hard copy log. If the system log was designated as the hard copy log during system generation, a unit address must be specified; if desired, a VARY command can be issued to reestablish the system log as the hard copy log after message IEE0411 is received.

$\left\{ \begin{array}{l} \text{ALL} \\ \text{[routing codes]} \end{array} \right\}$ specifies what messages are to be recorded on the hard copy log. If ALL is specified, all messages will be recorded. If only messages with specific routing codes are to be recorded on the hard copy log, a list of routing codes should be given (separated by commas and enclosed in parentheses). (If the console configuration contains an active display console or more than one active console, a hard copy log is required. In this case, no response is required if any of routing codes 1,2,3,4,7,8 and 10 are desired, since all of these codes are automatically assigned by the system.)

$\left\{ \begin{array}{l} \text{CMDS} \\ \text{INCMDS} \\ \text{STCMDS} \\ \text{NOCMDS} \end{array} \right\}$ specifies what commands and responses are to be recorded on the hard copy log. CMDS indicates all operator commands and system commands and responses are to be recorded; INCMDS indicates all operator commands, system commands, and in-line responses; STCMDS indicates all operator commands, system commands, in-line responses, and status displays; NOCMDS indicates the responses are not to be recorded. If this parameter is not specified, CMDS is the system default. (If the console configuration contains an active display console or more than one active console, a hard copy log is required. In this case, all responses must be recorded; if NOCMDS is specified, CMDS is automatically assigned by the system.)

- MLPA = (aa,bb,cc,dd,...) specifies reenterable routines from SYS1.PARMLIB, SYS1.LINKLIB and/or SYS1.SVCLIB to be made resident as an extension to the VS2 link pack area (LPA). Routines specified by the MLPA option are used in preference to the same routines included in the 'quick-startable' LPA. MLPA routines are active only for the duration of the system that has been loaded and may not be reactivated via the VS2 quick start facility. The aa,bb,cc,dd, etc. are appended to IEALPA to form the names of SYS1.PARMLIB members; the members contain lists of modules to be loaded. Any number of members can be specified in this manner.

- MPA = nnn to specify the virtual storage space for the master region. The nnn is the number of 64K (65,536 - byte) blocks of storage to be added to the minimum VS2 master region size, which is 128K, and is expressed as a one to three digit value. If the specified amount of virtual storage is not available, a warning message will be issued. The MPA parameter may be respecified at that time.

- PAGE = $\left[\left(\left\{ \begin{array}{l} \text{D} \\ \text{U = adr} \\ \text{V = ser} \end{array} \right\} \left\{ \begin{array}{l} \text{BLK = nnnn} \\ \text{TRK = nnnn} \\ \text{CYL = nnnn} \\ \text{MAX} \end{array} \right\} \left\{ \begin{array}{l} \text{[P]} \\ \text{[S]} \end{array} \right\} \left\{ \begin{array}{l} \text{[F]} \\ \text{[LPA]} \end{array} \right\} \right) \right] \left[\dots \right]$

to specify the page data set. Up to sixteen data sets may be defined. If more than one data set is defined, all definitions must be enclosed within a single set of parentheses. For example, PAGE = ((U = 190,TRK = 400),(V = 222222),D). D requests that the page definition be displayed on the console. Following this display, the operator is given the option of accepting the definition as displayed, or altering it via another PAGE parameter. adr specifies the unit address of the device on which a page data set is to reside.

ser specifies the volume serial number of the device on which a page data set is to reside.

BLK = nnnn specifies the number of 2K storage blocks which are to be pageable to the data set. nnnn may not exceed 5 characters. The BLK parameter will be rounded to a multiple of 4K.

TRK = nnnn specifies the number of tracks that are to be assigned to the page data set. nnnn may not exceed 5 characters.

CYL = nnnn specifies the number of cylinders that are to be assigned to the page data set. nnnn may not exceed 5 characters.

If the device capacity is exceeded by the allocation specification (BLK, TRK, CYL), the data set allocation will fail. When the numeric allocation value is specified as 0, the data set specification is ignored.

MAX allocates the largest contiguous space available on the volume for the page data set. If a previous page data set already exists on the volume, that data set is scratched before the current allocation is performed.

Note: If a page data set already exists on the volume specified, and if BLK, TRK, CYL, and MAX are not specified, the size of the page data set defaults to the size specified previously.

{P} specifies the category in which the page data set is to be placed. P indicates primary; it should be specified for devices which have a fast data access and/or transfer rate. At least one data set must be specified as P to contain the VS2 link pack area (LPA) and its directory. S indicates secondary (or alternate); it should be specified for comparatively slower devices.

F specifies that a page data set is to be formatted (or reformatted) regardless of whether or not it has been previously formatted. If F is not specified, a previously formatted data set of adequate size may be reused.

LPA specifies that this page data set is to contain the VS2 link pack area (LPA). The data set defined must contain sufficient space for the LPA, the LPA directory, and one-half the real storage size of the CPU being loaded. P should also be specified to indicate the primary category. LPA should not be specified for more than one data set.

Note: The PAGE parameter is unique in that it does not totally replace the page definition in the SYS1.PARMLIB list of system parameters. The units or volumes specified via PAGE are merged with the paging units or volumes specified in the PARMLIB system parameter list with these results:

- If U or V specifies a unit or volume which is not defined in the PARMLIB system parameter list, the unit or volume is added to the current page definition.
- If U or V specifies a unit or volume which is defined in the PARMLIB system parameter list, the PARMLIB definition for the unit or volume will be overridden by the PAGE specifications for the applicable data set. In this instance, the PAGE specification for the data set may be used to delete a unit or volume from use within the paging subsystem by including the BLK, TRK, or CYL keyword with a numerical value (nnnn) of 0.

• PAL = (

D
,LTH = nn
,REPCT = nn
,NFX = nnnn
,LRC = nnnn
,HRC = nnnn
,LRD = nnnn
,HRD = nnnn
,MTIM = n

)

to specify page FIX count limits, the page replacement threshold, and the interval and limits for the task disable algorithm.

D requests a display of the current value of the parameters. After the display is complete, the operator may accept the display, (enter EOB) or respecify the PAL parameter.

Defaults exist for all subparameter values. The default may be invoked by omitting PAL or any of its subparameters. A specification of 'subparameter = ,' also causes the default value to be used for that specification.

LTH specifies the low threshold for real storage page replacement. When the number of real storage pages available drops below this level, page replacement is triggered to provide more available pages. nn may be a value from 1 to 99.

REPCT specifies the number of additional pages to be made available when the LTH threshold is crossed. nn may be a value from 1 to 99.

NFX specifies the number of pages in pageable real storage which can not be made available for page FIX requests.

A minimum percentage of the pageable real storage pages must be available for FIX requests. nnnn may be a value from 8 to 9999; this value is automatically revised downward if the system requires more space for fixed than is being allowed.

The following subparameters are related only to the task disable algorithm. This algorithm, by monitoring certain system events at timed intervals, maintains the system page rate within acceptable rates.

LRC

HRC specifies the low and high thresholds for the reclaim count. This count is increased each time a needed page is found to be still in real storage, but is scheduled for a page out operation. If the reclaim count becomes excessive, then this is an indication that the incidence of page replacement is so high that even frequently needed pages are being scheduled for page out. Conversely, a low page reclaim count may indicate that very little page replacement is occurring, and the system may be operating below its normal capacity. nnnn may be a value from 0 to 9999.

LRD

HRD specifies the number of pages read into real storage.

This is a direct measure of paging activity. nnnn may be a value from 0 to 9999.

Note: Special interactions among LRC, LRD, HRC, and HRD must be noted:

- If either LRC or LRD (or both) equal 0 and if either HRC or HRD (or both) equal 9999, the task disable algorithm is effectively deactivated.
- If LRC is 9999, it is effectively deactivated.
- If LRD is 9999, it is effectively deactivated.
- If HRC is 0, the algorithm is deactivated.
- If HRD is 1, the algorithm is deactivated.
- If too low a value is specified for either LRC or LRD, the activity of pageable tasks may be severely restricted. It is possible, through misuse of the subparameter values, to set all pageable tasks non-dispatchable.

MTIM specifies the real time interval (in units of approximately 1 second) at which Task Dispatchable counts will be inspected. All counters are then reset to zero. n may be a value from 1 to 9.

The default values for the key word operands are:

LTH - 5	HRC - 20
REPCT - 3	LRD - 9999
NFX - .25 (PVTTBASE)	HRD - 0
LRC - 5	MTIM - 1

- **SQACEL =**
LSQACEL = ((qcellsize,number),(qcellsize,number)) to specify the number of quickcells of different sizes to be defined in the LSQA and/or SQA Quickcell Areas. SQACEL defines the quickcell area for SQA; LSQACEL defines the quickcell area for each LSQA. The qcellsize is the size of the cell and is expressed as a one to three digit value from 1 through 256 to indicate the number of bytes of storage in the cell; the value of qcellsize will be rounded upward by the system to an even multiple of eight bytes. The number is the number of cells to be assigned to the qcellsize and is expressed as a one-digit value from 1 through 8. The total size of the LSQA or SQA Quickcell Area is limited to a 4K (4096-byte) block of storage. If multiple SQA or LSQA cells are defined, the definitions must be enclosed with a single set of parentheses. The inner parentheses for the individual Quickcells, which are defined, are still required. For example:
LSQACEL = ((8,8),(16,4),(32,2),(144,3))
SQACEL = (144,8)
- **REAL = nnnn** to specify the maximum amount of real storage which is to be made available for the scheduling of jobs which require virtual = real status. nnnn specifies the number of 4K (4096-bytes) blocks of storage to be added to the minimum size of the virtual = real area, which is 64K, and is expressed as a one to four digit value. If the specified amount of real storage is not available, a warning message is issued; the REAL parameter may be respecified at that time.
- **SQA-*nnn*** to specify the virtual storage space for the system queue area. *nnn* specifies the number of 64K (65,536-byte) blocks of storage to be added to the minimum size of the system queue area, which is 64K, and is expressed as a one to three digit value. If the specified amount of virtual storage is not available, a warning message (IEA331A) is issued; the SQA parameter may be respecified at that time. The size of the SQA cannot be increased during a quick start of the LPA. If SQA is specified on an LPA quick start, and the size is less than that specified on the previous cold start, a warning message IEA342I is issued and the size is increased to the previous cold start size. If the size is greater, a message (IEA343I) is issued with the option to cancel the SQA parameter or specify that a cold start should be initiated.
- **SYSP = (aa,bb,cc,dd,...)** to specify the SYS1.PARMLIB lists of the system parameters which are to be merged with the default list of system parameters, IEASYS00. The aa,bb,cc,dd, etc., are appended to IEASYS to form the names of SYS1.PARMLIB members; the members contain lists of system parameters to be used for the IPL in process. Any number of members can be specified in this manner. If not modified through this reply, only the IEASYS00 list is used; this parameter may not be cancelled. The members are specified in a priority order from low to high, so that a system parameter defined in a member specified nearer the end of the list (e.g., IEASYSdd) completely replaces the same system parameter defined in a member specified nearer the start of the list (e.g., IEASYSbb). In the process of merging system parameters, the default PARMLIB member, IEASYS00, assumes the lowest priority. The IEASYS00 member contains the values selected during system generation for various system parameters unless the contents of the IEASYS00 list have been modified by the system programmer at the installation.
- **TMSL = [(*J*)(*nn,xxxx*),(*nn,xxxx*)...]** to specify time-slice groups. *nn* specifies the priority of the time-slice group and is expressed as a one or two digit value from 0 through 13.

xxxx specifies the length, in milliseconds, of the time slice and is expressed as a one to four digit decimal value; the minimum acceptable time slice is 20 milliseconds and any specification for *xxxx* which is less than this value will be increased to 20 milliseconds.

If more than one time slice group is defined via the TMSL parameter, all the time slice groups must be enclosed within a single set of parentheses. The inner parentheses for each time slice group, which is specified, are still required. For example: TMSL = ((1,20),(2,40),(3,50)).

If the same priority is defined for the APG (cf., APG parameter) and for one of the time slice groups, the TMSL specification of that priority is ignored, and the priority is established as the system APG.

- **TRACE = nnnn** to specify the number of entries in the system trace table. nnnn specifies the number of 32-byte blocks of non-pageable storage to be used for trace table entries and is expressed as a one to four digit value from 0 through 9999. This value overrides the value specified during system generation. A value of zero may be used to cancel the system trace option for the IPL in process. If the required amount of real storage is not available, a warning message (IEA360I) is issued; the size of the Trace Table is decreased to the size of available real storage.
- **TSOAUX = *nn*** to specify the auxiliary storage space which is to be reserved for use by jobs running under the Time Sharing Option (TSO). *nn* specified for paging TSO-related tasks; *nn* is expressed as a one to two digit value from 0 through 99. This portion of pageable space in the Page data sets is not available for allocation to non TSO-related tasks for the duration of the IPL; the TSOAUX value may, however, be respecified when TSO is started. If the number of pages remaining for non-TSO use is less than 500, the number of TSO-reserved pages is decreased to provide the system with 500 pages. If the total number of pages is less than or equal to 500, then TSOAUX is ignored. A warning message will be issued to identify either of these conditions, (IEA381I and IEA380I, respectively).

Operator Response: Reply as requested by the system programmer at the installation. The reply must take one of these forms:

- **REPLY *xx*, 'U'** to indicate that no parameters are to be changed and that the default list of system parameters in SYS1.PARMLIB, IEASYS00, is to be used for this IPL. Note: A simple EOB is equivalent to this reply.
- **REPLY *xx*, '*prm = ,*'** to indicate that the parameter as specified in the SYS1.PARMLIB list of system parameters is to be cancelled for this IPL.
- **REPLY *xx*, '*prm = val*'** or **REPLY *xx*, '*prm = (val, val, ...)*'** to indicate that the parameter is to take the specified values for this IPL.
- To obtain a list of the MLPA, BLDL, and/or the FIX modules, and/or the SYSP list of system parameters, enter one of these:
REPLY *xx*, '*prm = (val, L)*'
REPLY *xx*, '*prm = (val, val, ..., L)*'
REPLY *xx*, '*prm = (, L)*'
REPLY *xx*, '*U, L*'
Enter the first or second reply when specifying the values for the parameter, the third reply when using the SYS1.PARMLIB system parameter list value for the parameter, and the fourth reply when using the default SYS1.PARMLIB list of system parameters, IEASYS00, if all lists are wanted.
- Omission of a parameter from the reply indicates that the value found in the SYS1.PARMLIB list of system parameters is to be used.

Note: At the operator's option, the REPLY xx,'...' format may be entered in one of the following alternate forms:

```
REPLY x'...'
REPLY x,...
R xx,'...'
R x,'...'
R x,...
```

The following replies may be used instead of end of block (EOB) with the same meaning:

```
REPLY xx
REPLY x
R xx
R x
```

More than one parameter can be specified. For example:

```
REPLY xx'prm = (val,val),prm = val prm = ,prm = (,L)'
```

The rules for specifying several parameters are:

- The list of parameters must be enclosed in apostrophes or must all be separated by commas.
- A blank or comma must follow each parameter, except the last.
- U must not be specified.
- If all parameters do not fit on one line, follow the last parameters on the line with a blank or comma and CONT.

For example:

```
REPLY 00,'TSOAX = 50,TMSL = (1,20),FIX = ,
MLPA = (,L),CONT'
```

The system issues message IEA116A to request the remainder of the reply.

A single parameter may be continued to a second line in a similar manner. For example:

```
R 00,'MLPA = (00,01,CONT'
R 00,'03,04,L),BLDL = 01'
```

When specifying more than one value for a parameter, the following rule must be observed:

- If more than one value applies to a parameter, all the values must be enclosed within a single set of parentheses.

For example:

```
REPLY 00,'MLPA = (00,01)'
```

If the individual values are contained within parentheses, these inner parentheses are still required. For example:

```
REPLY 00,'TMSL = ((1,20),(2,40)),MLPA = (00,01,L)'
```

IEA107I prm IGNORED

Explanation: A reply to message IEA101A names a parameter prm, that was not selected by the installation for optional changing when the system is loaded.

System Action: The nucleus initialization program (NIP) continues processing.

Operator Response: Report this message to the programmer.

Programmer Response: Probable user error. Make sure that the parameter was not restricted from operator changes in the IEASYSxx member of SYS1.PARMLIB (OPI = NO option).

Problem Determination: Table I, items 2, 11, 29.

IEA108I PERMANENT I/O ERROR DURING BLDL

Explanation: The nucleus initialization program (NIP) is unable to bring the linkage library (SYS1.LINKLIB) directory into virtual storage because of an uncorrectable input/output error.

System Action: The nucleus initialization program continues processing without a resident directory.

Operator Response: Probable hardware error. Report this message to the programmer.

Problem Determination: If the error recurs, before calling IBM for hardware support, record the address of the device on which the input/output error occurred and have it available.

IEA109I BLDL FAILED FOR FOLLOWING MODULES

Explanation: During nucleus initialization, parts of the resident directories have not been completed. The module names not found in SYS1.SVCLIB or SYS1.LINKLIB and therefore not appearing in the resident directory are printed on the console immediately following this message.

System Action: The nucleus initialization program (NIP) continues processing with an incomplete resident directory.

Operator Response: Probable user error. Report this message and give the master console log to the programmer.

Programmer Response: Probable user error. Ensure that the modules listed are included in the SYS1.LINKLIB data set.

Problem Determination: Table I, items 2, 13, 25c, 29.

IEA116A CONTINUE SYSTEM PARAMETERS

Explanation: During nucleus initialization, the reply to message IEA101A specified CONT as its final entry. The CONT indicated that the reply was incomplete and that additional parameters were to be specified.

System Action: The system waits for a reply to message IEA101A.

Operator Response: Continue the reply to message IEA101A, beginning this continuation with REPLY 00.

IEA118I TIME SLICE VALUE INCREASED TO 20 MILLISECONDS

Explanation: The time-slice value specified by the operator is smaller than the minimum value permitted. The nucleus initialization program (NIP) corrected the error by increasing the size of the time-slice value to 20, the minimum permissible size.

System Action: The system continues processing.

Operator Response: None.

IEA120A DEVICE ddd SHARED. REPLY 'CONTINUE' OR 'WAIT'

Explanation: Device ddd is a shared device and is presently reserved by a central processing unit (CPU) other than the central processing unit from which an IPL is being performed.

System Action: The system action depends on the operator's response.

Operator Response: To wait until the device is released by the central processing unit that is presently using it, enter REPLY xx,'WAIT'. Normal processing will continue after the device is available.

Otherwise, enter REPLY xx,'CONTINUE'. This reply will result in the device being marked unavailable to the central processing unit from which the IPL is being performed. Processing will continue. (If this reply is entered, do not execute any job that might require allocation of device ddd. If such a job is executed, a mount message will be issued and subsequent operator action might make the device unavailable to the central processing unit that originally reserved it.)

Note: If the message appears frequently or if the wait time is excessive, notify the system programmer at the installation.

IEA152I HARDCPY SPECIFICATION INVALID

Explanation: In response to message IEA101A, IEA332A, or IEA335A, the operator specified a device for a hard copy log that was not a valid console.

System Action: The system issues message IEA332A or IEA335A.

Operator Response: Probable user error. Respond as indicated for the following IEA332A or IEA335A message.

Problem Determination: Table I, items 11, 29.

IEA153I HARDCPY CONSOLE UNAVAILABLE

Explanation: In response to message IEA101A, HARDCPY specified a valid console, but the console was unavailable at IPL time.

System Action: The system issues message IEA332A or IEA335A.

Operator Response: Probable user error. Respond as indicated for the following IEA332A or IEA335A message.

IEA154I HARD COPY OF INITIALIZATION MESSAGES DISCONTINUED

Explanation: The logging of nucleus initialization program (NIP) messages must be discontinued because the message buffer is full. The message or operator reply preceding this message was the last message recorded.

System Action: System initialization continues.

Operator Response: None.

IEA205I UNABLE TO SCRATCH dsn ON ser

Explanation: An attempt to scratch and reallocate space for data set dsn on the volume whose serial number is ser failed because of an error during the scratch operation.

System Action: The system continues processing.

Operator Response: Report this message to the programmer.

Programmer Response: Probable hardware error.

Problem Determination: Table I, item 30.

IEA206I UNABLE TO ALLOCATE dsn ON ser

Explanation: An attempt to allocate space for data set dsn on the volume whose serial number is ser failed.

System Action: The system continues processing.

Operator Response: Report this message to the programmer.

Programmer Response: Probable hardware error.

Problem Determination: Table I, item 30.

IEA207I FORMATTING OF dsn DATA SET UNSUCCESSFUL ON ser

Explanation: A permanent input/output error occurred while the nucleus initialization program (NIP) was attempting to set up the format of the data set dsn, on the volume with the serial number ser.

System Action: The system continues processing.

Operator Response: Report this message to the programmer.

Programmer Response: Probable hardware error.

Problem Determination: Table I, item 30.

IEA208I fff FUNCTION INOPERATIVE

Explanation: The nucleus initialization program (NIP) has detected unrecoverable error conditions during initialization of function fff. As a result, the function has been made inoperative.

This message is issued in conjunction with a diagnostic message identifying the specific type of error.

System Action: The nucleus initialization program continues processing.

Operator Response: Report this message to the programmer.

Programmer Response: Probable user error. Respond to the diagnostic message issued in conjunction with this message.

IEA209I dsn SCRATCHED FROM ser

Explanation: The space allocation for data set dsn was found to be too small and has been scratched from the volume whose serial number is ser.

System Action: The system attempts to allocate more space for the data set and will inform the operator of the action taken by issuing either message IEA206I or IEA210I.

Operator Response: None.

IEA210I dsn ALLOCATED ON ser

Explanation: Space for data set dsn was successfully allocated on the volume whose serial number is ser.

System Action: The system continues processing.

Operator Response: None.

IEA211I OBTAIN FAILED FOR dsn DATA SET

Explanation: The nucleus initialization program (NIP) was unable to find the data set control block (DSCB) for data set dsn for one of the following reasons:

- The volume containing the data set was not mounted.
- The data set control block was not in the volume table of contents (VTOC).
- A permanent input/output error occurred.

System Action: The nucleus initialization program continues processing.

Operator Response: If the volume that contains the data set is not mounted, mount it and restart the system. If the volume is mounted, record the device number and notify the programmer.

Programmer Response: Probable user error. List the VTOC of the volume that is supposed to contain the data set. If the data set is not on the volume, create it and have the system restarted.

Problem Determination: Table I, items 2, 13, 25bd, 29.

The data set may be relocated.

IEA212A D, xxx OR yyy

Explanation: During nucleus initialization, direct access devices xxx and yyy were found to have duplicate volume labels.

System Action: Nucleus initialization is suspended until one of the identified volumes is demounted.

Operator Response: Demount the volume that is not needed. If the volume to be demounted is a permanently resident device, such as a drum, start the system again.

IEA216I GETMAIN FAILED DURING INITIALIZATION

Explanation: The nucleus initialization program (NIP) issued a GETMAIN macro instruction; however, more storage was requested than was available.

System Action: The system is placed in a wait state with a code of X'38'.

Operator Response: Probable user error. Report this message to the system programmer.

Programmer Response: See the description of wait state code X'38'.

Problem Determination: Table I, items 11, 29.

IEA300I I/O ERROR DURING BLDL FOR mem IN dsn

Explanation: An uncorrectable input/output error prevents the nucleus initialization program (NIP) from reading the directory entry for member mem from data set dsn into virtual storage.

System Action: If mem is a NIP module, the system is placed in a disabled wait state. If not, processing continues.

Operator Response: Probable hardware error. Record the address of the device on which the input/output error occurred and have it available.

Problem Determination: Table I, items 2, 30.

IEA3011 mem NOT FOUND IN dsn

Explanation: The nucleus initialization program (NIP) is unable to find member mem in data set dsn.

System Action: If mem is a NIP module, the system is placed in a disabled wait state. If not, processing continues.

Operator Response: Probable user error. Report this message to the system programmer.

Programmer Response: Make sure that mem is included in the data set.

Problem Determination: Table I, items 2, 11, 29.

IEA3021 TOD CLOCK INOPERATIVE

Explanation: NIP found that the time of day (TOD) clock is not working. The VS2 system requires the TOD clock for further processing.

System Action: The system enters a disabled wait state.

Operator Response: Probable hardware error. Report this message to the system programmer.

Problem Determination: Table I, item 30.

IEA3031 ABEND cde DURING SUPERVISOR INITIALIZATION

Explanation: Abnormal termination (ABEND) was requested by a system function during nucleus initialization. In the message text, cde is the system completion code.

System Action: The system is placed in a disabled wait state.

Operator Response: Restart the system.

Problem Determination: Table I, item 29.

IEA304W SYSTEM WAIT STATE - CODE cde

Explanation: The nucleus initialization program (NIP) has encountered an error which requires that the system initialization process be discontinued. The reason for terminating the normal IPL sequence is described by the wait state code, cde.

IEA305A INVALID REPLY FORMAT - RESPECIFY

Explanation: During nucleus initialization, the last reply entered through the console was not in correct format.

System Action: The system ignores the reply just entered and waits for the reply to be respecified.

Operator Response: Probable user error. Enter the reply correctly.

IEA3061 adr, I/O ERROR, cm, stat, sens, ser

Explanation: The nucleus initialization program (NIP) issued an I/O request to the device at the unit address adr. In the message text:

- cm is the I/O command which resulted in an unsuccessful I/O completion.
- stat is the CSW status bytes.
- sens is the first two bytes of sense data.
- ser is the volume serial number of a direct access device involved.

The I/O request included a command which resulted in an unsuccessful I/O completion. The CSW status bytes and the first two bytes of sense data are included as a diagnostic aid and may be used to determine the cause of the I/O failure. The sense data appears only for errors involving a unit check status; the volume serial number appears only for direct access devices.

System Action: If the I/O request is critical to the system initialization process, the system will issue message IEA304W and enter a disabled wait state. Otherwise, processing continues.

Operator Response: Probable hardware error. Restart the system. Depending on the severity of the error (check the status and sense information) and the installation requirements, take appropriate action.

Problem Determination: Table I, items 2, 30.

IEA310A INVALID REPLY - RESPECIFY

Explanation: During nucleus initialization, the last reply entered through the console did not contain the information requested by the system.

System Action: The system ignored the reply just entered and waits for the reply to be respecified.

Operator Response: Probable user error. Enter the reply again, correctly.

IEA3111 UNLABELED DASD ON ddd

Explanation: The direct access device mounted on device ddd is not formatted correctly.

System Action: The system marks device ddd offline and issues message IEA312I to inform the operator that it has done so.

Operator Response: Probable user error. If this message is unexpected for the volume on device ddd, report the message to the system programmer.

Programmer Response: Make sure that the volume mounted on device ddd has been properly initialized by either the IBCDASDI program or the IEHDASDR program.

IEA312I ddd OFFLINE

Explanation: The nucleus initialization program (NIP) has placed device ddd offline for the reason indicated in message IEA311I.

System Action: The system continues processing without device ddd.

Operator Response: None.

Programmer Response: Respond as indicated to message IEA311I.

IEA313I DEVICE ddd DEMOUNTED

Explanation: During nucleus initialization, device ddd was demounted in response to message IEA212A.

System Action: The nucleus initialization program (NIP) continues processing.

Operator Response: Make sure that device ddd is the device that you intended to demount. If ddd is not the correct device, do one of the following:

- Restart the system with the correct device in ready status.
- If the device is not required during system initialization, wait for system initialization to complete and then enter a VARY command to establish the desired volume status.

IEA314I CONFLICTING VOLUME ON ddd

Explanation: The nucleus initialization program (NIP) detected an invalid specification while attempting to mount a volume. ddd identifies the device which contains the correct volume label but which is an unacceptable unit type.

System Action: One of the following occurs:

1. If the volume on device ddd is not permanently resident, the system marks ddd not ready and prompts the operator with message IEA315A to mount the proper volume.
2. If the volume on device ddd is permanently resident but the volume to be mounted is for an optional data set, the system prompts the operator with message IEA317A to respecify.
3. If the volume to be mounted is for a required data set and the volume on device ddd is permanently resident, the system enters a wait state with a code of X'39'.

Operator Response: In case 1, respond as indicated to message IEA315A. In case 2, respond as indicated to message IEA317A; use the cancel option of IEA317A if processing must continue. In case 3, respond as indicated to wait state code X'39'.

IEA315A M ddd,[NL], dsn

Explanation: The nucleus initialization program (NIP) requires that either an unlabeled tape (for the SYS1.DUMP data set) or the volume containing data set dsn, be mounted on device ddd.

System Action: The system waits for a volume to be mounted on device ddd.

Operator Response: Mount either the direct access volume containing data set dsn or an unlabeled scratch tape, as directed.

IEA316A D ddd[,ser]

Explanation: The nucleus initialization program (NIP) determined that the volume whose serial number is ser was mounted on device ddd rather than on the device requested. If ddd is a tape unit, the volume may be mounted on the correct device, but the volume is write-protected or contains a standard IBM tape label.

System Action: The system issues message IEA315A to inform the operator which volume was expected.

Operator Response: Probable user error. Demount volume ser. Make sure that the proper volume is mounted on device ddd and that the volume has been initialized with the proper volume serial number.

IEA317A SPECIFY UNIT FOR dsn ON ser [OR CANCEL]

Explanation: The nucleus initialization program (NIP) needs a data set that does not reside on a previously mounted volume. This message requests the operator to select a device on which to mount the volume containing the data set. If the message text contains 'OR CANCEL', the operator may choose not to mount the volume.

System Action: The system waits for the operator to reply.

Operator Response: Select an available device of the type required and respond r xx,'ddd', where ddd is the unit address of that device. If the option 'OR CANCEL' is included in the message text, you may respond by signalling EOB; this indicates that the volume is not available and is not to be used for this IPL.

IEA318I UNIT UNACCEPTABLE

Explanation: The nucleus initialization program (NIP) found that the unit specified in the reply to message IEA317A was an unacceptable device type for the data set volume to be mounted, or contained a volume which could not be demounted.

System Action: The system rejects the earlier specification and reissues message IEA317A.

Operator Response: Probable user error. Respond to message IEA317A with the specification for an alternate unit.

Programmer Response: Make sure that the unit specified is the proper device type for the volume to be mounted, does not contain a required system data set, and is, in fact, demountable.

IEA319I dsn NOT FOUND ON ser

Explanation: The nucleus initialization program (NIP) could not find data set dsn on the volume which has the volume serial number ser. The data set control block is not found in the volume table of contents (VTOC).

System Action: If data set dsn is SYS1.LOGREC, SYS1.SVCLIB, SYS1.PARMLIB, or SYS1.LINKLIB, the system is placed in a disabled wait state; otherwise, processing continues.

Operator Response: Probable user error. Report this message to the system programmer.

Programmer Response: List the table of contents of the volume that is supposed to contain the data set. If the data set is not on the volume, create the data set and have the system restarted.

Problem Determination: Table I, items 2, 11, 25, 29.

IEA320A RESPECIFY PARAMETERS OR CANCEL

Explanation: During nucleus initialization, one of the following contained an invalid parameter:

- The operator's response to message IEA101A.
- The system parameters defined by an active IEASYSxx list in SYS1.PARMLIB.

This message may be preceded by an explanatory message.

System Action: The system accepts all parameters specified before the parameter in error. The system waits for the operator to enter the respecification or cancellation.

Operator Response: Probable user error. Enter the reply again correctly. Enter a reply specifying only the corrected parameter and the parameters that were not accepted (that is, those parameters following the invalid parameter in the last reply), or cancel further input by signalling EOB. In this case, the parameters accepted by the system remain in effect. Any parameter may be respecified in this response.

Problem Determination: Table I, items 2, 29.

IEA321I INVALID PARAMETER SYNTAX - prm - text

Explanation: Parameter prm is invalid. The reason for the invalid specification is described in text:

text	meaning
INVALID OPI KEYWORD	The OPI parameter is specified incorrectly in an IEASYSxx member of SYS1.PARMLIB. OPI must be either OPI = YES or OPI = NO.
IMPROPER DELIMITER	The parameter prm is followed by an invalid delimiter. Parameters must be separated by a comma or a blank.
UNBALANCED PARENS	The parameter prm included an unequal number of right or left parentheses.
INVALID CONTINUATION	The parameter prm included continuation across more than two successive lines of text. A parameter may be continued to only one additional line of text.
UNDEFINED KEYWORD	The parameter prm is invalid for IEA101A under OS/VS2.

System Action: The system issues message IEA320A and waits for the operator to reply.

Operator Response: Probable user error. Respecify the parameter correctly or report the problem to the system programmer.

Programmer Response: Specify the parameter correctly.

Problem Determination: Table I, items 2, 11, 29.

IEA322A INVALID prm PARM - { [PLIB] } - RESPECIFY OR CANCEL

Explanation: One of the system parameters designated by prm in the message text, is invalid. For a list of valid system parameters, refer to the explanation of message IEA101A. If prm is PAGE, PAL, or APG, OPER identifies the operator as the

source of the invalid parameter, and PLIB identifies an IEASYSxx list in SYS1.PARMLIB.

System Action: The system ignores the parameter in error, and waits for the operator to reply.

Operator Response: Probable user error. Respecify the parameter correctly (as described under message IEA101A) or signal EOB to cancel the use of the parameter for this IPL.

Programmer Response: None. If PLIB appears in the message text, list the PARMLIB members specified for this IPL and inspect the parameter specification for errors.

IEA323I OPI INVALID IN mem

Explanation: The nucleus initialization program (NIP) found an invalid OPI parameter in the IEASYSxx member of SYS1.PARMLIB identified by mem. The OPI parameter must be specified as either OPI = YES or OPI = NO.

System Action: The system terminates the input from member mem, and issues message IEA324I. It then prompts the operator for respecification of the SYSP parameter by issuing message IEA320A.

Operator Response: Probable user error. The SYSP parameter must be respecified or cancelled. In either case, parameters interpreted up to the point of the error remain in effect.

Programmer Response: Ensure that the SYSP list of system parameters is specified correctly.

IEA324I SYSP INPUT TERMINATED IN mem

Explanation: The input from IEASYSxx member mem has been terminated because of an error. This message is preceded by another message explaining the error.

System Action: The system issues message IEA320A which offers the opportunity to respecify the parameter input which was truncated in member mem. Parameters specified before the error remain in effect.

Operator Response: Probable user error. Report this message to the system programmer.

Programmer Response: Correct the conditions reported by the preceding message.

Problem Determination: Table I, items 2, 11, 29.

IEA325I IEASYSxx PARAMETER LIST

Explanation: The operator requested a listing of the SYSP list of parameters when responding to message IEA101A. This message is the header for the listing of the IEASYSxx member of SYS1.PARMLIB.

System Action: The system lists the parameters and continues processing.

Operator Response: None.

IEA326I LOCATE FAILED FOR dsn

Explanation: The data set dsn could not be found in the system catalog. Valid values for dsn are SYS1.DUMP, SYS1.LINKLIB, SYS1.LPALIB, and SYS1.DSSVM.

System Action: If dsn is SYS1.LINKLIB, the system enters the wait state (wait code X'0A'); otherwise, the system provides additional diagnostic information and options by issuing message IEA354I, IEA351I, IEA355A, or IEA208I.

Operator Response: Probable user error. Report this message to the system programmer along with any associated messages and wait state codes.

Programmer Response: Use the associated messages to determine the action to be taken.

IEA327I LINK LIBRARY DATA SETS NOT FOUND

dsn
dsn

Explanation: The nucleus initialization program (NIP) could not find the link library data sets identified by dsn because:

1. The operator cancelled a define-unit request.
2. An I/O error occurred when opening the data set.
3. The system could not find the data set on the volume indicated by the system catalog.
4. The system could not find a catalog entry for the data set.

The first three conditions would have been reported by previous messages; IEA317A, IEA211I, IEA319I, respectively. *System Action:* The system lists the data sets not found and continues processing.

Operator Response: Probable user error. Report this message to the system programmer.

Programmer Response: Correct the condition which caused the error:

1. No action needed.
2. If the error is permanent, attempt to recreate the data set.
3. Make sure that the data set exists on the volume to which the system catalog points.
4. Catalog the data set.

Problem Determination: Table I, items 11, 25c to list LNKLST00, 29.

IEA328I LNKLST00 INPUT TRUNCATED AT dsn

Explanation: The maximum number of data set names that can be defined in LNKLST00 has been exceeded. The system has defined the first 40 data set names; the remaining data set names, starting with dsn, have been ignored.

System Action: The system continues processing.

Operator Response: Probable user error. Report this message to the system programmer.

Programmer Response: Make sure that the number of data set names does not exceed the system limit of 40 when defining LNKLST00.

Problem Determination: Table I, items 11, 29. Execute the IEHLIST system utility program to obtain a listing of LNKLST00.

IEA330A CONTINUE prm PARM

Explanation: The operator requested that the parameter specification be continued. This message permits him to continue entering information related to parameter prm.

System Action: The system waits for the operator to reply.

Operator Response: Continue entering parameter prm.

IEA331A SPACE EXCEEDED-RESPECIFY prm OR CANCEL

Explanation: The nucleus initialization program (NIP) could not obtain enough storage for the function currently specified for parameter prm.

System Action: The system waits for the operator to reply.

Operator Response: Probable user error. Report this message to the system programmer. Enter parameter prm as defined in the explanation for message IEA101A or signal EOB to indicate that the parameter is to be ignored.

Programmer Response: Make sure that sufficient storage is available for the function defined by prm.

Problem Determination: Table I, items 2, 11, 29.

IEA332A SPECIFY prm [OR CANCEL]

Explanation: The nucleus initialization program (NIP) has detected the omission of the function defined by parameter prm in the system definition. If the function is not optional, the cancel option is omitted from the message text.

System Action: The system waits for the operator to reply.
Operator Response: Reply in the format specified for message IEA101A as requested by the systems programmer. If CANCEL is a reply option, you may signal EOB to bypass the specification of the function prm.

IEA333A LPA INVALID - SPECIFY PAGE

Explanation: The LPA attribute was given to more than one SYS1.PAGE data set during this IPL. Only one SYS1.PAGE data set can have this attribute.

System Action: The system waits for the operator to reply.
Operator Response: Respecify the PAGE parameter in the proper format (see the explanation for message IEA101A). Only those SYS1.PAGE data sets which are incorrectly defined with the LPA attribute need be redefined. To find which data sets are affected, specify the 'D' option of the PAGE parameter; that is, enter rx,'PAGE = D'.
Programmer Response: Make sure that the LPA attribute is given to only one SYS1.PAGE data set on subsequent IPLs.

IEA334A LPA REQUIRED - SPECIFY PAGE

Explanation: The LPA attribute was not specified for any SYS1.PAGE data set, or it was specified for a SYS1.PAGE data set with zero allocation.

System Action: The system waits for the operator to reply.
Operator Response: Respecify the PAGE parameter in the proper format (see the explanation for message IEA101A). The LPA attribute must be specified for one of the PAGE data sets defined.
Programmer Response: On subsequent IPLs, the LPA attribute should be specified when the PAGE parameter is initially defined.

IEA335A RESPECIFY PAGE $\left\{ \begin{array}{l} [U = ddd] \\ [V = ser] \end{array} \right\}$ OR CANCEL

Explanation: This is a prompting message which follows other nucleus initialization program (NIP) messages. In all cases, processing continues when the PAGE parameter is respecified or the entry cancelled.

System Action: The system waits for the operator to reply.
Operator Response: Reply as requested by the system programmer at the installation. Respecify the PAGE parameter in the format as specified for message IEA101A. Enter EOB to bypass the use of the PAGE data set, which is defined by either the unit address, ddd, or the volume label, ser, for this IPL.

IEA336A LPA ON PAGE $\left\{ \begin{array}{l} [V = ser] \\ [U = ddd] \end{array} \right\}$ TO BE SCRATCHED - REPLY YES OR CANCEL

Explanation: The nucleus initialization program (NIP) encountered a link pack area in a SYS1.PAGE data set for which LPA was not specified, or encountered a link pack area in a data set which must be reformatted. The SYS1.PAGE data set was defined for the unit at address ddd or for the volume with serial ser.

System Action: The system waits for the operator to reply. If the operator responds by signalling EOB, the system issues message IEA335A to prompt the operator to respecify the PAGE parameter for that data set. If the operator replies YES, the system makes the space for the link pack area in the data set available for normal system paging.
Operator Response: Make sure that the LPA should be scratched. Reply YES to scratch the data set. Signal EOB to cancel the current specification and permit reentry of the PAGE parameter.

**IEA337I PAGE I/O SUBSYSTEM:
UNIT VOLUME ALLOC CLASS ATTR FORMAT
unit volume alloc class attr format**

Explanation: This message is a response to the display option of the PAGE parameter. Only those elements of the PAGE parameter which were specified are displayed. The description of the PAGE parameter under message IEA101A contains additional information.

System Action: Following the display, the system issues message IEA338A.
Operator Response: Respond to message IEA338A if you want to respecify the PAGE parameter.
Programmer Response: None.

IEA338A ENTER prm OR EOB

Explanation: The nucleus initialization program (NIP) issues this message after displaying the system configuration affected by the current prm parameter. This message notifies the operator to do one of the following:

- Change the system configuration by entering a new prm parameter.
- Accept the current specification by signalling EOB.

System Action: The system waits for the operator to reply. If prm is redefined, the system configuration will be changed to reflect the new specification. If the response is EOB, the system will continue processing.

Operator Response: Reply as requested by the system programmer. To change the system configuration, enter the parameter in the same format specified for message IEA101A. Signal EOB if prm is not to be redefined.

**IEA340I REAL OR VIRTUAL STORAGE NOT AVAILABLE FOR
prm**

Explanation: The nucleus initialization program (NIP) could not obtain storage for the function indicated by prm in the message text.

System Action: If the prm function is not a necessary system function, the system will continue. If, however, the prm function is a necessary system function, the system enters a disabled wait state (X'38'). Functions and system actions follow:

prm	system action
PFT	Wait state X'38'
PAGE	Wait state X'38'
CPQE	Wait state X'38'
BLDL	Respecification offered by message IEA332A
MLPA	Message IEA353I issued - prm INPUT TERMINATED
FIX	Message IEA353I issued - prm INPUT TERMINATED
SYS1.DUMP	Message IEA208I issued - FUNCTION INOPERATIVE
TRACE	Message IEA208I issued - FUNCTION INOPERATIVE
REAL	Wait state X'38'
MPA	Wait state X'38'
LSQA	Wait state X'38'

Note: PFT, SYS1.DUMP, and LSQA are not system parameters.
Operator Response: Probable user error. Report this message to the system programmer.

Programmer Response: Ensure that sufficient storage is available for NIP processing.

Problem Determination: Table I, items 11, 29.

IEA342I SQA SIZE INCREMENTED BY nnn SEGMENTS

Explanation: The size of the system queue area specified in the SQA parameter is smaller than the size of the SQA defined during the previous LPA cold start. The size of the SQA is (bytes of virtual storage) so that it equals the size defined during cold start.

System Action: Processing continues.

Operator Response: If this message was not anticipated, report it to the system programmer.

Programmer Response: If it is critical that the size of the SQA remain as specified, request an LPA cold start and enter the desired SQA size. To request a cold start, enter the CLPA parameter in response to message IEA101A.

If additional virtual storage assigned to the SQA is not detrimental to your planned system configuration, take no action.

To prevent this message from recurring during succeeding IPL procedures, specify the SQA parameter as the value used during the previous LPA cold start.

Problem Determination: Table I, items 2, 11, 25d, 29. In addition, have a list available of the SYS1.PARMLIB data set for this system.

IEA343A SQA REQUIRES LPA COLD START - REPLY YES OR CANCEL

Explanation: The nucleus initialization program (NIP) has determined that the SQA specified would overlap the virtual storage occupied by LPA used for cold start.

System Action: The system waits for the operator to reply. If the reply is YES, cold start is initiated. If the reply is CANCEL (EOB) the system defaults the SQA specification to that used during the previous LPA cold start.

Operator Response: Probable user error. Reply YES if cold start initiation is wanted. Signal EOB if the previous SQA specification is to be used.

IEA344I QUICK START FAILED FOR LPA ON ddd; COLD START INITIATED

Explanation: The CLPA parameter was not specified, and the SYS1.PAGE data set, for which LPA was specified, did not contain a reusable link pack area.

System Action: The system initiates a cold start for the link pack area.

Operator Response: None.

IEA345I MULTIPLE SYS1.PAGE DEFINITION ON ddd

Explanation: The nucleus initialization program (NIP) detected the specification of multiple SYS1.PAGE data sets for the direct access device mounted on device ddd.

System Action: The system requests respecification of the page data set.

Operator Response: Probable user error. Report this message to the system programmer.

Programmer Response: Correct the specification for the page data set.

IEA350I mem MODULE LIST

Explanation: This is a header message for the library listing requested by the operator. The modules specified in the SYS1.PARMLIB member mem are printed following this message.

System Action: The system prints the list and processing continues.

Operator Response: None.

IEA351I dsn REQUIRED FOR mem

Explanation: The nucleus initialization program (NIP) cannot find the data set dsn. The data set is required for member mem in the SYS1.PARMLIB.

System Action: The system issues message IEA335A and waits for the operator to reply.

Operator Response: Probable user error. Report the problem to the system programmer and reply in the format specified for message IEA101A as requested by the system programmer, or cancel the job.

Programmer Response: Correct the error.

Problem Determination: Table I, items 2, 25a, and 25d for data set dsn, 26c for SYS1.PARMLIB, and 29.

IEA352I LIST mem FOR prn INVALID - text

Explanation: The SYS1.PARMLIB member mem, which was defined for parameter prn, is invalid. text identifies the reason for the invalid specification:

Text	Meaning
MODNAME mod	where mod identifies the name of the invalid module specification.
LIBNAME MISSING	which indicates that the PARMLIB list did not properly define a module source library.
NO. OF ENTRIES	which indicates that the PARMLIB list contained too many module names; BLDL has more than X'7FFF' names.

System Action: The system prompts the operator for parameter respecification or cancellation by issuing message IEA355A.

Operator Response: Probable user error. Respond to message IEA355A then report this message to the system programmer.

Programmer Response: Correct the parameter list.

Problem Determination: Table I, items 2, 11, 25c, 29.

IEA353I prn INPUT TERMINATED AT mod

Explanation: The definition of the parameter prn failed for lack of storage as indicated by the preceding message. mod identifies the module which was to be loaded when the error was detected. If prn is CLPA, an LPA cold start has failed.

System Action: Processing continues. Modules specified before mod are added to the LPA. If prn is CLPA, the system will be placed in a X'3A' wait state.

Operator Response: Probable user error. Report this message to the system programmer.

Programmer Response: Make sure that there is adequate storage for the prn function being attempted. Respond as indicated for the wait state code if it occurs.

Problem Determination: Table I, items 2, 11, 29.

IEA354I CLPA FAILED - text

Explanation: The system link pack area (LPA) could not be created; text indicates the reason:

Text	Meaning
LPALIB UNAVAILABLE	The SYS1.LPALIB data set is not defined in the catalog or the data set could not be opened. The reason for the failure is given in the previous message.
LPALIB EMPTY	The SYS1.LPALIB data set did not contain any load modules.

DASD SPACE

The selected SYS1.PAGE data set does not contain enough auxiliary storage for the link pack area for all the modules in SYS1.LPALIB. The PAGE parameter for message IEA101A defined the SYS1.PAGE data set.

STORAGE UNAVAILABLE

There is not enough virtual storage to contain all the modules in SYS1.LPALIB. The number of modules in SYS1.LPALIB must be reduced if cold start is to be successful.

I/O ERROR

An I/O error occurred when the nucleus initialization program (NIP) attempted to read or write a record in the SYS1.PAGE data set designated to contain the LPA, or an I/O error occurred when NIP attempted to read a record from the SYS1.LPALIB directory.

System Action: The system follows this message with disabled wait state code X'3A'. If any modules were successfully loaded into the LPA, message IEA353I follows this message.

Operator Response: Probable user error. Report this message to the system programmer.

Problem Determination: Table I, items 2, 11, 29.

IEA355A RESPECIFY prm OR CANCEL

Explanation: The nucleus initialization program (NIP) has detected an error in the specification of the prm parameter.

System Action: The system waits for the operator to reply.

Operator Response: Reply in the format specified for message IEA101A, as requested by the system programmer.

Programmer Response: Make sure that the correct format was given to the operator.

IEA356I ALIAS aliasname OF MODULE modname IGNORED

Explanation: The entry for aliasname in the directory of SYS1.LPALIB specifies that it is the alias of modname, which is not in the directory for SYS1.LPALIB.

System Action: This message follows message IEA301I (specifying modname). The entry for aliasname will be ignored during the IPL LPA loading process. The module is not loaded into the link pack area.

Operator Response: None.

IEA357I ERRORS IN

IEALOD00	}	LIST
IEAPAK00		

error-description-system-action

Explanation: One or more errors were detected in processing the LPA load list (IEALOD00) or the LPA packing list (IEAPAK00) during IPL. The error descriptions and their meanings are:

- **DELIMITER FOLLOWING modname INVALID** - The left parenthesis starting a group of module names is missing, or the right parenthesis following a group of module names is missing, or a blank is not preceded by a left parenthesis or a comma. modname is the name of the last valid module found in the list preceding the error. ***START is substituted for modname if no valid names precede the erroneous delimiter in the list.
- **NAME FOLLOWING modname IMPROPER** - The name of a module in the list has more than eight characters. modname is the name of the last valid module found in the list preceding the invalid name. ***START is substituted for modname if no valid names precede the erroneous name.

- **modname INVALID** - The named module is not specified in the directory of SYS1.LPALIB, is the name of an alias (not a module), or was specified more than once in the LPA packing list.
- **I/O ERROR FOLLOWING modname** - An I/O error occurred while reading the list. modname is the last valid module name processed preceding the detection of the I/O error.
- **modname NOT FOUND IN LPA** - Module modname was specified on the IEALOD00 member, but was not found on the active LPA queue and had no LPA directory entry. The module is not loaded.

System Action: The system actions and their meanings are:

- **MODULE IGNORED** - The specified module name is ignored and processing of the list continues.
- **GROUP TERMINATED** - The list is scanned from the point of the error until the next right parenthesis is found, terminating the group. The modules specified within the group prior to the error are processed as the sole contents of the group. Processing continues at the start of the next group.
- **GROUP IGNORED** - The list is scanned from the point of the error until the next left parenthesis is found, starting the next valid group. All names scanned over are ignored.
- **LIST TERMINATED** - For IEALOD00, the modules specified within the list prior to the error were processed as the sole content of the list. The system continues processing as if the end of the list had been reached normally. For IEAPAK00, the group being processed is terminated. The modules specified within the group prior to the error are processed as the sole contents of the group. This is the last group of modules loaded as a packed unit. The system continues processing as if the end of the LPA packing list had been reached normally.

Operator Response: None.

IEA360I SPACE EXCEEDED - TRACE DECREASED TO nnnn ENTRIES

Explanation: The nucleus initialization program (NIP) has determined that there is not enough storage available for the specified number of trace entries. It has set the number of trace entries to the maximum that can be held in the available storage.

System Action: The trace table is reduced to nnnn entries and processing is resumed.

Operator Response: Probable user error. Report this message to the system programmer, asking for a different response to message IEA101A so that less storage is required.

Programmer Response: Make sure that sufficient real storage is available for the system specified.

Problem Determination: Table I, items 11, 29.

IEA361I SYS1.DUMP ON ser CONTAINS DATA

Explanation: The nucleus initialization program (NIP) has determined that the SYS1.DUMP data set is not empty.

System Action: Processing continues.

Operator Response: Execute the AMDPRDMP service aid program, specifying the 'GO' option after the completion of system initialization. The input to AMDPRDMP is SYS1.DUMP.

IEA362I SYS1.DUMP ON ser SMALLER THAN REQUESTED SIZE

Explanation: The nucleus initialization program (NIP) has determined that the SYS1.DUMP data set on the volume ser contains data and is smaller than requested.

System Action: The system requests redefinition of the SYS1.DUMP data set.

Operator Response: Probable user error. If the SYS1.DUMP data set must be on a direct access device, respond to message IEA322A without specifying size; then print the dump contained in SYS1.DUMP after the system is initialized.

Programmer Response: Make sure that the SYS1.DUMP data set allocated is large enough to satisfy the size requested in response to message IEA101A.

IEA363I mod NOT FOUND IN LPA [;CONSOLE ddd UNUSABLE]

Explanation: The nucleus initialization program (NIP) could not find module mod in the link pack area. CONSOLE ddd UNUSABLE appears when module mod provides functions needed for console ddd, and, as a result, ddd may not be used as an active console.

System Action: Except when module mod provides console functions, the system indicates which function was made inoperative by issuing message IEA208I, and then it continues processing. If the system cannot continue without module mod, the system enters the wait state code X'3B'.

Operator Response: Probable user error. Report the problem to the system programmer.

Programmer Response: Make sure that the missing routine is included in the LPA. The module must be added to SYS1.LPALIB if a cold start is used. The module must be defined in the SYS1.PARMLIB list referenced by the MLPA or FIX option if either of these options is used.

Problem Determination: Table I, items 2, 11, 29.

IEA370I PAGE ALGORITHM PARAMETERS
 LTH = nn, REPCT = nn, NFX = nnnn, MTIM = n
 LRC = nnnn, HRC = nnnn, LRD = nnnn, HRD = nnnn

Explanation: This message is a response to the display option of the paging algorithm (PAL) parameter specified for message IEA101A.

System Action: Following this message, the system issues message IEA338A so that the PAL parameter may be specified.

Operator Response: None.

IEA371I NFX PARAMETER DECREASED TO ALLOW SYSTEM FIX REQUIREMENTS

Explanation: The NFX specification for the paging algorithm (PAL) parameter of message IEA101A reserves too much real storage for page FIX requirements.

System Action: The value of the NFX subparameter is reduced to an acceptable value.

Operator Response: Probable user error. Report this message to the system programmer.

Programmer Response: Correct the specification for the NFX subparameter.

IEA380I TOTAL AUXILIARY STORAGE AVAILABLE 500 PAGES OR LESS - TSOAUX IGNORED

Explanation: See TSO message IKJ110I.

IEA381I MINIMUM OF 500 AUXILIARY PAGES ASSIGNED TO THE BACKGROUND

Explanation: See TSO message IKJ107I.

IEA382I CURRENT VALUE OF TSOAUX = nn% -nnnn PAGES

Explanation: See TSO message IKJ104I.

IEA383I TOTAL AVAILABLE STORAGE = nnnn PAGES

Explanation: See TSO message IKJ098I.

IEA384I AUXILIARY STORAGE AVAILABLE FOR BACKGROUND = nnnn PAGES

Explanation: See TSO message IKJ099I.

IEA385I AUXILIARY STORAGE AVAILABLE FOR TSO = nnnn PAGES

Explanation: See TSO message IKJ099I.

IEA386I INSUFFICIENT AUX STORAGE FOR SYSTEM OPERATION

Explanation: The SYS1.PAGE data sets contain insufficient auxiliary storage space to satisfy system requirements.
System Action: The system enters a disabled wait state with a code of X'3C'.
Operator Response: Probable user error. Report this message to the system programmer.
Programmer Response: Proceed as described for wait state code X'3C'.

Input/Output Supervisor Messages 2

IEA604A D adr,ser

Explanation: The operator replaced a required direct access volume without having received a mount request. In the message text, D indicates that the volume whose serial number is ser is to be demounted from the device whose unit address is adr, in hexadecimal.
Operator Response: Demount the volume. Then respond as indicated for message IEA605A, which follows this message.

IEA605A M adr,ser,,[jjj]

Explanation: M indicates that the volume whose serial number is ser is to be mounted on the device whose unit address in hexadecimal is adr. Message IEA604A or IEA606I precedes this message, indicating the reason for the mount request. In the message text, jjj is the name of the job in control during which intervention is required. If the job name cannot be determined, this field is left blank.
Operator Response: If the volume requested is not available, cancel the job. Otherwise, mount the indicated volume. (If message IEA606I precedes this message, the volume indicated in that message must first be demounted from the device.)

IEA606I adr,BAD VOLUME LABEL,cm,stat,senbbbbbb,, ser,[jjj]

Explanation: A permanent input/output error occurred while trying to read the volume serial number of the indicated volume. In the message text, in hexadecimal, the fields are:
 adr Unit address of the device.
 cm Operation code of the channel command word (CCW) during whose execution the error occurred. If the channel command word cannot be found, this field appears as **.
 stat Status portion of the channel status word (CSW).
 sens First 2 sense bytes for the error condition.

bbbbbb

Next 3 sense bytes for the error condition. This field appears only for devices that give more than 2 bytes of sense information.

ser

Serial number of the volume on which intervention is required.

jjj

The name of the job in control when intervention is required. If the jobname cannot be determined, this field is left blank.

Operator Response: Respond as indicated for message IEA605A, which follows this message.

IEA620I ddd TR = nnn,TW = nnn,SIO = nnnnn ERROR THRESHOLD REACHED

Explanation: The number of errors specified by either the read error threshold or the write error threshold has been exceeded. In the message text, the fields are:
 ddd

Unit address of the device.

TR = nnn

Number of temporary read errors.

TW = nnn

Number of temporary write errors.

SIO = nnnnn

Number of Start I/O operations.

Operator Response: Check the local operating procedures to see if the number of errors specified in the message text indicates that the volume should be reconditioned.

IEA700I ccc[-r] { jjj } sss ff[ddddddd]

Explanation: The control program detected an error during the execution of a GETMAIN macro instruction. The job step was abnormally terminated with a system completion code of ccc. This message provides additional information on the error. In the message text, the fields are:

ccc

system completion code

r

reason code. Included only when there are multiple reasons for issuing the message.

jjj

job name

sss

step name

ff

flag byte. A X'00' indicates that the GETMAIN macro instruction was issued via an SVC 4 instruction. A X'80' indicates that GETMAIN was entered via a branch and that job name jjj has been replaced by branch address aaa.

aaa

return address of the calling routine from register 14 if the entry to GETMAIN was not via an SVC instruction.

ddddddd

variable data in hexadecimal. Data is 1 to 3 complete words in length.

The length and meaning of hexadecimal data ddddddd is dependent on system completion code ccc and reason code r given in the message.

The meaning of the applicable reason codes is:

cccr Meaning

604-1 Parameter list for the GETMAIN macro instruction contained an invalid address, or the address of the parameter list was invalid.

804-1 Requested amount of virtual storage was not available.
 804-2 A negative length was specified.

The meaning of the variable data is:

cccr word 1 word 2 word 3

504 x1
 604 1 x1
 804 1 x2 x4
 804 2 x2
 B04 x2

where:

- x1 - Address of the GETMAIN parameter list. The first word of the parameter list is the address of the length list specified in the LA operand; the second word is the address of the address list specified in the A operand.
- x2 - The first byte is the number of the subpool for which the request was made; the last three bytes are the number of bytes requested.
- x4 - Number of bytes in the largest available block of virtual storage in your region.

Programmer Response: Refer to the explanation of completion code ccc in the System Codes publication for the complete response to this message.

IEA7011 ccc[-r] { j j j } sss ff[dddddddd]

Explanation: The control program detected an error during the execution of a FREEMAIN macro instruction. The job step was abnormally terminated with a system completion code of ccc. This message provides additional information on the error. In the message text, the fields are:

ccc system completion code
 r reason code. Included only when there are multiple reasons for issuing the message.
 j j j job name
 s s s step name
 ff flag byte. A X'00' indicates that the FREEMAIN macro instruction was issued via an SVC 5 instruction. A X'80' indicates that FREEMAIN was entered via a branch and that job name j j j has been replaced by branch address aaa.
 a a a return address of the calling routine from register 14 if the entry to FREEMAIN was not via an SVC instruction.
 d d d d d d d d variable data in hexadecimal. Data is 1 to 4 complete words in length.

The length and meaning of hexadecimal data d d d d d d d d is dependent on system completion code ccc and reason code r given in the message.

The meaning of the applicable reason codes is:

cccr	Meaning
305-1	Specified virtual storage area was not in named subpool.
305-2	Specified subpool could not be found.
605-1	Parameter list for the FREEMAIN macro instruction contained an invalid address, or the address of the parameter list is invalid.

The meaning of the variable length data is:

cccr	word 1	word 2	word 3
305 1	x1	x2	x3
305 2	x1	x2	x3
505	x4		
605 1	x4		

905	x1	x2	x3
A05	x1	x2	[x6]
B05	x1	x2	
D05	x1	x2	

where:

- x1 - The first byte is the number of the subpool for which the request was made; the last three bytes are the number of bytes requested.
 - x2 - Beginning address of the virtual storage area to be freed.
 - x3 - Address of the task control block (TCB) for the abending task.
 - x4 - Address of the FREEMAIN parameter list. The first word of the parameter list is the address of the length list specified in the LA operand; the second word is the address of the address list specified in the A operand.
 - x6 - Number of bytes of overlap into free area.
- Programmer Response: Refer to the explanation of completion code ccc in the System Codes publication for the complete response to this message.

IEA7021 ccc[-r] { j j j } sss ff[dddddddd]

Explanation: The control program detected an error during the execution of either a GETMAIN or FREEMAIN macro instruction. The job step was abnormally terminated with a system completion code of ccc. This message provides additional information on the error. In the message text, the fields are:

ccc system completion code
 r reason code. Included only when there are multiple reasons for issuing the message.
 j j j job name
 s s s step name
 ff flag byte. A X'00' indicates that the GETMAIN/FREEMAIN macro instruction was issued via an SVC 10 instruction. A X'80' indicates that GETMAIN/FREEMAIN was entered via a branch and that job name j j j has been replaced by branch address aaa.
 a a a return address of the calling routine from register 14 if the entry to GETMAIN/FREEMAIN was not via an SVC instruction.
 d d d d d d d d variable data in hexadecimal. Data is 1 to 3 complete words in length.

The length and meaning of hexadecimal data d d d d d d d d is dependent on system completion code ccc and reason code r given in the message.

The meaning of the applicable reason codes is:

cccr	Meaning
30A 1	Specified virtual storage area was not in named subpool.
30A 2	Specified subpool could not be found.
30A 3	Virtual storage area to be freed was not within caller's region (subpool FREEMAIN only).
30A 4	Zero length was not specified for subpool FREEMAIN.
80A-1	Requested amount of virtual storage not available.

The meaning of the variable length data is:

cccr	word 1	word 2	word 3
20A	x1	x2	
30A 1	x3	x4	x1
30A 2	x3	x4	x1

30A 3 x3 x4 x1
 30A 4 x3 x4 x1
 40A x3 x4
 80A 1 x3 x6
 90A x3 x4
 A0A x3 x4 [x7]
 B0A x3
 D0A x3 x4

where:

x1 - Address of the task control block (TCB) for the abending task.

x2 - Number of the subpool that was not freed.

x3 - The first byte is the number of the subpool for which the request was made; the last three bytes are the number of bytes requested.

x4 - Beginning address of the virtual storage area to be freed.

x6 - Number of bytes in the largest available block of virtual storage in your region.

x7 - Number of bytes of overlap into free area.

Programmer Response: Refer to the explanation of completion code ccc in the System Codes publication for the complete response to this message.

IEA7031 ccc[-r] jji sss MODULE ACCESSED xxxxxxxx

Explanation: During execution of a LINK, LOAD, ATTACH, or XCTL macro instruction, the control program encountered an error while loading module xxxxxxxx. The job step was abnormally terminated with a system completion code of ccc. This message provides additional information on the error. In the message text, the fields are:

ccc
 system completion code
 r
 reason code. Included only when there are multiple reasons for issuing the message.
 jji
 job name
 sss
 step name
 xxxxxxxx
 the name of the module being accessed at the time of the error.

This message is issued for the following completion codes:

ccc	r	Explanation of reason Code
106	D	Invalid record type in load module
106	E	Invalid address in load module
106	F	Uncorrectable input/output error
606		
706		
806	4	Specified entry point not found
806	8	Uncorrectable input/output error
806	C	SVC routine not in LPA
906		
A06		

Programmer Response: Refer to the explanation of completion code ccc in the System Codes publication for the complete response to this message.

IEA8011 { UNIDENTIFIED TASK } { JS } { ST } FAILED WHILE IN { STP }
 { jji sss } { UNIDENTIFIED TASK } MUST COMPLETE STATUS

Explanation: Either the job step task (JS) or a subtask (ST) associated with the jobname (jji) and the step name (sss) failed while operating in system (SYS) or step must complete (STP) status. If the job name or step name is unavailable, UNIDENTIFIED TASK replaces jji sss.

System Action: If SYS is specified, all tasks are made non-active. If STP is specified, all tasks in the same failing step are nondispatchable.

Operator Response: Notify the system programmer that a 'must complete' task failed.

Problem Determination: Table I, items 2, 5a, 15, 16, 29.

IEA8021 { jji sss } { ST } FAILED WHILE
 { UNIDENTIFIED TASK } { JS }
 OWNING SUPERVISOR LOCK

Explanation: Either the job step task (JS) or a subtask (ST) associated with the job name (jji) and step name (sss) specified, failed while the supervisor lock was set for the task. If the job name and step name are unavailable, jji and sss are replaced by UNIDENTIFIED TASK.

System Action: The task is abnormally terminated.

Operator Response: Notify the system programmer.

Problem Determination: Table I, items 5a, 15, 16, 29.

IEA8031 { JS }
 { ST } FAILED WHILE IN 'STEP MUST COMPLETE'
 STATUS DUE TO { Uhhhh }
 { Shhh }

Explanation: Either the job step task (JS) or a subtask (ST) failed while operating in 'step must complete' status for a resource with a STEP scope. If the phrase DUE TO appears, the error that caused the failure is represented by the system (Shhh) or the user (Uhhhh) completion code.

System Action: In the event of a subtask failure, the abnormal termination routine (ABEND) terminated the job step and propagated the completion code to the job step task.

Programmer Response: Locate the task that failed while operating in 'step must complete' status to determine the cause of the failure. Correct the error and run the job again.

Problem Determination: Table I, items 5a, 15, 16, 29.

IEA8041 { jji sss } SYSTEM DUMP FAILED - X
 { UNIDENTIFIED TASK }

Explanation: An attempt by ABEND to provide a system dump for job jji and step sss failed for one of these reasons:

- If X = 1, the data set to contain the dump was not in the system.
- If X = 2, the data set was full.
- If X = 3, an I/O error occurred.

If the job name and step name are unavailable, then UNIDENTIFIED TASK replaces jji and sss.

Operator Response: If X = 1, report the message to the system programmer.

If X = 2, execute the AMDPRDMP program and run the job again.

If X = 3, correct the I/O error and run the job again if possible.

Problem Determination: Table I, items 2, 5a, 29, or 30.

IEA8051 NO ENQUEUED RESOURCES - TASK STILL MUST COMPLETE

Explanation: The task identified by the preceding message (IEA8011) failed while operating in must-complete status but had no enqueued resources identified with the must-complete state.

System Action: The job step associated with the task is quiesced.

Operator Response: Notify the system programmer.

Problem Determination: Table I, items 2, 5a, 15, 16, 29.

**IEA806I j.s HAS BEEN TERMINATED DUE TO AN
UNCORRECTABLE I/O ERROR ON
THE PAGE DATA SET**

Explanation: A task has been terminated due to an I/O error that prevented a page from being transferred into real storage (system completion code X'28'). In the message text, j indicates the job name, and s, the step name.

Operator Response: None. Repeated occurrences of this message indicate that the page data set should be reallocated and formatted at the next IPL.

Problem Determination: Table I, items 1, 2, 5a, 13, 16, 29.

IEA807I 206-r jjj sss ff dddddddd [ddddddd]

Explanation: The control program detected an error during the execution of a LINK, LOAD, DELETE or XCTL macro instruction. The job step was abnormally terminated with a system completion code of 206. This message provides additional information on the error.

In the message text, the fields are:

r

reason code

jjj

job name

sss

step name

ff

always 0

ddddddd

address of LINK or XCTL parameter list in hexadecimal.

Always 0 for LOAD or DELETE macro instructions.

[ddddddd]

variable data in hexadecimal. Data is 1 to 2 complete words in length.

The meaning of hexadecimal data [ddddddd] is dependent on the reason code r given in the message. The meanings of the applicable reason codes are:

r Meaning

1 LINK or XCTL parameter list address invalid.

2 LINK, LOAD, XCTL, or DELETE address of EP/DE invalid.

3 LINK, LOAD, XCTL - DE supplied in parameter list too small to describe the requested module.

The meanings of the variable length data are:

r Word 1 Word 2

1

2 X1

3 X1 X2

where:

X1 is the address of EP/DE

X2 is the expected length of DE

Programmer Response: See the programmer response for system completion code 206.

IEA808I GTF TERMINATED DURING TRACE FORMATTING

Explanation: GTF encountered a severe error which caused immediate termination while the system dump routine (ABDUMP) was formatting the trace buffers in the GTF region. *System Action:* Trace formatting is terminated and ABDUMP continues its dump processing. The formatted trace output is incomplete as it does not include the most current trace entries.

Operator Response: Notify the system programmer and proceed according to the response documented for the error message or termination code that occurred upon termination of GTF.

**IEA809I INCORRECT LENGTH GTF RECORD - BUFFER
FOLLOWS**

Explanation: A GTF logical record with an incorrect length in its Record Descriptor Word was encountered while formatting the records in a GTF buffer. The minimum length record that can occur in an internal trace is 22 and the maximum length record is 44. The record encountered was found to be outside this range.

System Action: The entire GTF buffer which contains the incorrect length record is dumped in hexadecimal format following the error message. Trace formatting is then terminated and ABDUMP continues dump processing.

Operator Response: Report the message to the system programmer.

Problem Determination: Table I, items 2, 29 and have a copy of the formatted trace output available.

**IEA810E UNCORRECTABLE I/O ERROR ON LPA PAGE;
CREATE LPA ON NEXT IPL**

Explanation: An uncorrectable I/O error occurred while attempting to page in a warm start copy of a LPA page. Since the external storage for this LPA page cannot be read, the problem will recur on the next IPL unless a new LPA is created.

System Action: The task for which paging of the LPA page was being done will be abnormally terminated.

Operator Response: On the next IPL, create a new LPA via the CLPA parameter when specification of system parameters is requested.



Component Name	IEC
Program Producing Message	Data management.
Audience and Where Produced	For operator: console.
Message Format	<pre> xx IECnnns text xx Message reply identification (absent, if operator reply not required). nnn Message serial number, which is coded to indicate the data management function: 0nn End of volume 1nn Open 2nn Close 3nn Catalog management 4nn Checkpoint/restart 6nn Direct access device space management (DADSM) 7nn Tape label creation 8nn BTAM/QTAM 9nn Problem Determination and 3505/3525 s Type code: A Action; operator must perform a specific action. D Decision; operator must choose an alternative. E Eventual action; operator must perform action when he has time. I Information; no operator action is required. text Message text. </pre>
Comments	None.
Problem Determination	Refer to fold-out Tables I and II at the back of this publication for problem determination instructions.

End-Of-Volume Messages

IEC001 {A} M ddd,ser[,labtyp][,den],jjj,sss[,dsn]
 {E}

Explanation: M indicates that a volume is to be mounted on device ddd:

- If ser is a 6-digit serial number, the volume with that serial number is to be mounted on the device.
- If ser is SCRATCH, a scratch volume is to be mounted.
- If ser begins with a slash or L, the volume to be mounted is unlabeled; the number after the slash or L is an internal serial number assigned by the system to an unlabeled volume. If ser begins with L, the number after the L is of the form xxxyy, where xxx is the data set number and yy is the volume sequence number of the data set.
- If the device indicates a 1419/1275, ser is a stack of documents to be readied on the device.

Note: In the case of message IEC001E, no reference to a 1419/1275 will occur.

In the message text, labtyp and den appear only for tape volumes. The volume has the type of label specified by labtyp: SL for standard label, NSL for nonstandard label, or NL for no label; the density is as specified by den.

The volume is being used by step sss of job jjj. If a DISPLAY DSNNAME command is active, data set dsn contained on the volume is also specified in the message text.

Operator Response: If ser is SCRATCH, make sure that the file protection ring has been inserted in the volume.

Mount the volume on the device. If a scratch volume is to be mounted and a scratch volume is already on the device, mount another scratch volume. Then, ready the device.

IEC002E K ddd,ser[,labtyp][,den],jjj,sss
 [,SPACE = prm][,dsn]

Explanation: K indicates that the volume on device ddd is to be demounted and returned to the library:

- If ser is a 6-digit number, it is the serial number of the volume, which contains labels.
- If ser begins with L, the volume to be demounted is unlabeled; the number after the L is an internal serial number assigned by the system to an unlabeled volume and is of the form xxxyy, where xxx is the data set number and yy is the volume sequence number of the data set.

In the message text, labtyp and den appear only for tape volumes. The volume has the type of label specified by labtyp: SL for standard label, NSL for nonstandard label, or NL for no label; the density is as specified by den.

The volume is being used by step sss of job jjj.

For direct access volumes, if a DISPLAY SPACE command is active, the field SPACE = cccc,tttt,aaaa/yyyy,zzzz is specified: cccc

tttt Total number of free cylinders on the volume.

zzzz Total number of tracks in addition to the free cylinders.

aaaa

Areas or extents dividing the cylinders and tracks.

yyyy

Maximum number of contiguous free cylinders of the largest extent within the total remaining space.

zzzz

Number of tracks in addition to the free cylinders of the largest extent within the total remaining space.

If an error occurred during the listing of the parameters in the SPACE field, one of the following messages is specified:

- LSPACE-PERMANENT I/O ERROR
- LSPACE-NON-STANDARD OS VOLUME
- LSPACE-NOT A DIRECT ACCESS VOL
- LSPACE-INVALID PARAMETER
- LSPACE-UCB NOT READY

If a DISPLAY DSNAME command is active, data set dsn contained on the volume is also specified in the message text.

Operator Response: Demount the volume. Mark the serial number, label type, and density on the volume, if they are not so marked. Then return it to the library. If LSPACE-PERMANENT I/O ERROR was in the message, a permanent I/O error was encountered while trying to read the VTOC. Execute the IEHLIST utility program to list the VTOC of this volume. If errors occur, take appropriate action as indicated in the message.

Problem Determination: If LSPACE-INVALID PARAMETER was in the message, see Table I, items 2, 29.

**IEC003E R ddd,ser[,labtyp][,den],jjj,sss
[,SPACE = prm]**

Explanation: R indicates that the volume on device ddd is to be demounted and retained near the computer for use in the near future:

- If ser is a 6-digit number, it is the serial number of the volume, which contains labels.
- If ser begins with L, the volume to be demounted is unlabeled; the number after the L is an internal serial number assigned by the system to an unlabeled volume and is of the form xxxxy, where xxx is the data set number and yy is the volume sequence number of the data set.

In the message text, labtyp and den appear only for tape volumes. The volume has the type of label specified by labtyp: SL for standard label, NSL for nonstandard label, or NL for no label; the density is as specified by den. The volume is being used by step sss of job jjj.

For direct access volumes, if a DISPLAY SPACE command is active, the field SPACE = cccc,tttt,aaaa/yyyy,zzzz is specified:

cccc Total number of free cylinders on the volume.

tttt

Total number of tracks in addition to the free cylinders.

aaaa

Areas or extents dividing the cylinders and tracks.

yyyy

Maximum number of contiguous free cylinders of the largest extent within the total remaining space.

zzzz

Number of tracks in addition to the free cylinders of the largest extent within the total remaining space.

If an error occurred during the listing of the parameters in the SPACE field, one of the following messages is specified:

- LSPACE-PERMANENT I/O ERROR
- LSPACE-NON-STANDARD OS VOLUME
- LSPACE-NOT A DIRECT ACCESS VOL
- LSPACE-INVALID PARAMETER
- LSPACE-UCB NOT READY

Operator Response: Demount the volume. Mark the serial number, label type, and density on the volume, if they are not so marked. (The internally assigned number should appear externally on the volume in case a subsequent step needs the volume; for the subsequent mounting, the system will specify the volume by the internally assigned number.) Then retain the volume near the computer. If LSPACE-PERMANENT I/O ERROR was in the message, a permanent I/O error was encountered while trying to read the VTOC. Execute the IEHLIST utility program to list the VTOC of this volume. If errors occur, take appropriate action as indicated in the message.

Problem Determination: If LSPACE-INVALID PARAMETER was in the message, see Table I, items 2, 29.

IEC004E D ddd,ser[,labtyp][,den],jjj,sss [,SPACE = prm][,dsn]

Explanation: D indicates that the volume on device ddd is to be demounted and used subsequently as a scratch volume:

- If ser is a 6-digit number, it is the serial number of the volume, which contains labels.
- If ser begins with L, the volume to be demounted is unlabeled; the number after the L is an internal serial number assigned by the system to an unlabeled volume and is of the form xxxxy, where xxx is the data set number and yy is the volume sequence number for the data set.

In the message text, labtyp and den appear only for tape volumes. The volume has the type of label specified by labtyp: SL for standard label, NSL for nonstandard label, or NL for no label; the density is as specified by den.

The volume is being used by step sss of job jjj.

For direct access volumes, if a DISPLAY SPACE command is active, the field SPACE = cccc,tttt,aaaa/yyyy,zzzz is specified:

cccc Total number of free cylinders on the volume.

tttt

Total number of tracks in addition to the free cylinders.

aaaa

Areas or extents dividing the cylinders and tracks.

yyyy

Maximum number of contiguous free cylinders of the largest extent within the total remaining space.

zzzz

Number of tracks in addition to the free cylinders of the largest extent within the total remaining space.

If an error occurred during the listing of the parameters in the SPACE field, one of the following messages is specified:

- LSPACE-PERMANENT I/O ERROR
- LSPACE-NON-STANDARD OS VOLUME
- LSPACE-NOT A DIRECT ACCESS VOL
- LSPACE-INVALID PARAMETER
- LSPACE-UCB NOT READY

If a DISPLAY DSNAME command is active, data set dsn contained on the volume is also specified in the message text.

Operator Response: Demount the volume. Use it later when a scratch volume is requested. If LSPACE-PERMANENT I/O ERROR was in the message, a permanent I/O error was encountered while trying to read the VTOC. Execute the IEHLIST utility program to list the VTOC of this volume. If errors occur, take appropriate action as indicated in the message.

Problem Determination: If LSPACE-INVALID PARAMETER was in the message, see Table I, items 2, 29.

IEC007D E ddd,ser,jjj,sss,dsn

Explanation: E indicates that a program intended to write on the volume on device ddd; however, the expiration date for data set dsn on the volume has not occurred.

In the message text, ser is the 6-digit serial number of the volume, which contain labels. The volume is being used by step sss of job jji. For a tape volume, only the last 17 characters of the data set name (dsn) appear. This is as much as is contained in the tape's data set labels.

Operator Response: If the expiration date is to be ignored and the volume written on, enter REPLY xx,'U'.

If the expiration date is to be honored and the volume not written on, enter REPLY xx,'M'. The system will then request that a new volume be mounted.

For a direct access volume, however, do not enter REPLY xx,'M'. Terminate the job step and notify the programmer that the expiration date on the volume has not been reached.

Note: The operator should normally terminate any job attempting to update a system data set, if this message is issued. However, if a system data set is to be updated, the job stream should be set up so that no other concurrently running job uses the data set being updated; if the job stream is set up in this manner, the operator should be instructed to respond with REPLY xx,'U' to this message.

IEC009A F ddd,ser,jji,sss,dsn

Explanation: F indicates that the volume on device ddd is file protected; that is, its file protection ring is not inserted, so it can only be read. However, the volume is to be written on. In the message text, ser is the 6-digit serial number of the volume and dsn is the data set name. The volume is being used by step sss of job jji.

System Action: The system rewinds and unloads the volume.

Operator Response: If so specified by the programmer, insert a file protection ring in the volume, mount the volume, and ready the device. Otherwise, cancel the job.

IEC010D F ddd,ser,jji,sss,dsn

Explanation: F indicates that the volume on device ddd is file protected; that is, its file protection ring is not inserted, so it can only be read.

In the message text, ser is the 6-digit serial number of the volume and dsn is the data set name. The volume is being used by step sss of job jji.

Operator Response: If the volume should be file protected, enter REPLY xx,'U'.

If the volume must have a file protection ring, enter REPLY xx,'F'; the system will rewind and unload the volume. Then insert a file protection ring, mount the volume, and ready the device.

IEC012I { SEC VOL } /O ERR ddd,ser

Explanation: If I/O ERR appears in the message text, an uncorrectable input/output error occurred while processing tape labels; if SEC VOL appears, a security protected tape was mounted and the programmer had specified NL or NSL in the LABEL subparameter of the DD statement describing the data set.

In the message text, ser is the serial number of the volume and ddd is the unit address.

Operator Response: Respond as indicated when the system requests that a new volume be mounted.

Note: If I/O ERR appeared in the message text and the tape was an output tape, the tape labels have probably been destroyed. The tape may have to be relabeled or reinitialized with a tapemark before it can be used again.

Problem Determination: Table I, items 1, 2, 3, 13, 28, 29.

IEC014E D ddd

Explanation: D indicates that the volume on device ddd is to be

demounted. The control program has determined that this volume, mounted in response to an earlier mount message, either:

- Contains labels that cannot be read due to a permanent input/output error.
- Contains no labels or nonstandard labels when standard labels were specified.
- Contains standard labels when no labels or nonstandard labels were specified.
- Contains labels which are written in a density other than the density specified.

Operator Response: Demount the volume. The system will then request that a new volume be mounted. Mount a volume with the correct density and label type.

Problem Determination: Table I, items 1, 2, 3, 13, 28, 29.

IEC015I A37-rc,jji,sss,ddn[-#],ddd,ser

Explanation: The error occurred during end-of-volume processing. In the message text, A37-rc associates this message with system completion code A37 and with return code rc. Other fields in the message text are:

jji
job name

sss
step name

ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)

ddd
device address

ser
volume serial number

The values of rc and their meanings are as follows:

Return

Code	Meaning
04	An SVC 55 (EOV) was issued, usually by a CHECK, GET, or PUT routine, against a DCB which was not open.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: Probable user error. An open DCB may have been partially overlaid, closed by the user in a SYNAD routine, or automatically closed by a previous end-of-volume error where ignore was specified in the DCB ABEND exit routine. Correct the errors causing abnormal termination as indicated by the return code in the message text. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 15, 16 29. Table II, Format 3.

IEC016I 537-rc,jji,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred at an end-of-volume. In the message text, 537-rc associates this message with system completion code 537 and with return code rc. Other fields in the message text are:

jji
jobname

sss
step name

ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)

ddd
device address

ser

volume serial number
dsn

data set name

The values of rc and their meanings are as follows:

Return

Code Meaning

04 The volume serial number indicated was being used by another data set for tape input/output. Correct the volume reference to ensure that the same volume is not being used by more than one data set.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine. If the error is to be ignored, the system will attempt to close the DCB before returning to the user.

Programmer Response: Probable user error. Correct the error causing the abnormal termination as indicated by the return code in the message text. Then resubmit the job.

Problem Determination: Table I, items 1, 5a, 29.

IEC017I A ddd, ddn {1
2}

Explanation: A indicates that the volume (specified in DD statement ddn) on device ddd is recorded in ASCII and bears an American National Standard volume label or file header label. The accessibility field of the volume label (indicated by 1 in the message text) contains a nonblank character, or the file header label (indicated by 2 in the message text) contains a nonblank character other than one; this means that the volume or the file is security-protected and may not be processed by the operating system.

System Action: If the data set is being processed for input, then the DCB is closed and the volume is rewound and unloaded. If the data set is being processed for output, the volume is rewound and unloaded and a scratch volume is requested.

Programmer Response: Make sure that the correct volume and file were specified in the job control statements.

Problem Determination: Table I, items 1, 2, 13, 29.

IEC018D A ddd,ser,jjj,sss,dsn

recorded in ASCII and bears an American National Standard volume label, but the programmer did not specify American National Standard labels in the job control statements. In the message text, ser is the 6-digit serial number of the volume and dsn is the 17 character data set name from the existing HDE1 label. The volume is being used by step sss of job jjj.

System Action: The system waits for the operator's reply.

Operator Response: Enter REPLY xx,'U' to permit the system to create a new volume label or write a tape mark over the American National Standard volume label. Enter REPLY xx,'M' to permit the system to rewind the tape volume and issue a mount message for a scratch tape.

Programmer Response: Make sure that the job control statements specify American National Standard labels if they are to be used.

Problem Determination: Table I, items 1, 2, 13, 29.

IEC020I 001-x,jjj,sss,ddn,ddd,ser,dsn
NO ERROR HANDLING, (SYNAD), EXIT SPECIFIED
ERROR OCCURRED WHILE CLOSING DATA SET
NON-ACCEPTABLE ERROR
DCB EROPT = ABE OR AN INVALID CODE,
AND/OR NO SYNAD EXIT SPECIFIED
GET OR READ ISSUED AFTER END-OF-FILE

Explanation: A 001 system completion code was issued for step sss of job jjj for one of the following reasons:

- If x is 1, for BSAM, BISAM, BDAM or QSAM, no error handling (SYNAD) exit was specified.
- If x is 2, an error was encountered while attempting to close the data set.
- If x is 3, for QSAM, an error was encountered that could not be accepted.
- If x is 4, for QSAM, ABE or an invalid value for EROPT parameter in the DCB and/or no error handling (SYNAD) exit was specified.
- If x is 5, for QSAM, a GET was issued after end-of-file; for BSAM, a READ was issued after end-of-file.

In the message text, ddn is the data definition name of the DD statement describing the data set, ddd is the unit name, ser is the serial number of the volume, and dsn is the data set name.

Note: System completion code 001 is also issued when the logical record length and block specified in the data control block or DD statement differ from the logical record length and blocksize that occur in the data set.

Programmer Response: Correct any errors that caused the abnormal termination. Then execute the job step again.

Problem Determination: Table I, items 1, 3, 5a, 13, 29.

IEC021I NO SPACE IN PASSWORD DATA SET

Explanation: The password data set on the system residence device is full. No additional entries may be added until entries are deleted or a new password data set is created.

System Action: The job step is terminated.

Operator Response: Inform the programmer responsible for the installation that you have received this message.

Programmer Response: Delete outdated entries in the present password data set or create a new password data set.

Problem Determination: Table I, items 2, 25a, 29.

IEC022I 137-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during end-of-volume on a magnetic tape. In the message text, 137-rc associates this message with system completion code 137 and return code rc. Other fields in the message text are:

jjj

job name

sss

step name

ddn[-#]

DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)

ddd

device address

ser

volume serial number

dsn

data set name

The values of rc and their meanings are as follows:

Return

Code Meaning

04 An I/O error occurred while writing an end-of-volume label or a tape mark.

08 An I/O error occurred while positioning the tape in preparation for label processing.

0C An I/O error occurred reading a trailer label for a data set opened with the option INPUT or INOUT. If the data set was opened with the option RDBACK, the I/O error occurred reading the header label.

10 An I/O error occurred while positioning a magnetic tape at the end of the data set.

14 An I/O error occurred reading header labels for a data set opened for INPUT or INOUT. If the data set was

- opened for RDBACK, the error occurred while reading the trailer label.
- 18 An I/O error occurred while positioning a magnetic tape data set at the first data record.
- 1C An invalid trailer label was read during end-of-volume processing. Execute the IEBTPCH utility program to determine the contents of the volume. Take any corrective action necessary to recreate the volume so that the information may be accessed.
- 20 An invalid header label was read during end-of-volume processing. Execute the IEBTPCH utility program to determine the contents of the volume. Take any corrective action necessary to recreate the volume so that the information may be accessed.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine. If the error is to be ignored, the system will attempt to close the DCB before returning to the user.

Programmer Response: Probable user error unless an I/O error has occurred. Correct the errors that caused the abnormal termination as indicated by the return code in the message text. Then resubmit the job.

If I/O error has occurred, a defective volume or device may be the cause. Rerun the job, specifying a different volume or device. If a scratch volume was being used when the I/O error occurred, request a different volume. If that does not solve the problem, request a different device in the UNIT parameter of the DD statement. If a specific volume is needed, try requesting a different device in the UNIT parameter of the DD statement. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC0231 237-rc, jij, sss, ddn[-#], ddd, ser, dsn

Explanation: The error occurred during end-of-volume. In the message text, 237-rc associates this message with system completion code 237 and with return code rc. Other fields in the message text are:

jij
job name

sss
step name

ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)

ddd
device address

ser
volume serial number

dsn
data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	The block count in the DCB does not match that in the trailer label. A block of data has been missed or skipped (probably due to a hardware error.)
08	The DSNAME in a header label does not match that in the JFCB on the second or subsequent volume of a magnetic tape data set. Verify that the correct volume and DSNAME were specified.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine. If the error is to be ignored, the system will attempt to close the DCB before returning to the user.

Programmer Response: Probable user error unless hardware error has occurred. Correct the errors causing the abnormal termination as indicated by the return code in the message text. Then rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC0241 337-rc, jij, sss, ddn[-#], ddd, ser, dsn

Explanation: The error occurred when the end of a data set was reached. In the message text, 337-rc associates this message with system completion code 337 and with return code rc. Other fields in the message text are:

jij
job name

sss
step name

ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenated data set and not the first DD statement in the concatenation.)

ddd
device address

ser
volume serial number

dsn
data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	The end of a data set was reached, but no end-of-data-set routine (EODAD) was specified in the DCB.

System Action: The task is terminated.

Programmer Response: Probable user error. Correct the errors causing the abnormal termination as indicated by the return code in the message text. Then rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC0251 437-rc, jij, sss, ddn[-#], ddd, ser, dsn

Explanation: The error occurred at an end-of-volume. In the message text, 437-rc associates this message with system completion code 437 and with return code rc. Other fields in the message text are:

jij
job name

sss
step name

ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)

ddd
device address

ser
volume serial number

dsn
data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	The protect key in the TCB (TCBPKF) was not the same as that in the DEB (DEBDEBID). Correct any errors that may have caused the task control block or data extent block to be modified.

08 When FEOV was issued, it was found that the DCB pointer was invalid. Correct any errors that may have caused the DCB to be invalid.
System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine. If the error is to be ignored, the system will attempt to close the DCB before returning to the user.
Programmer Response: Probable user error. Correct the errors causing the abnormal termination as indicated by the return code in the message text. Then rerun the job.
Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC0261 637-rc, jjj, sss, ddn[-#], dev, vol, dsn

Explanation: The error occurred during end-of-volume for a data set on magnetic tape or an end-of-volume during concatenation. In the message text, 637-rc associates this message with system completion code 637 and with return code rc. Other fields in the message text are:

jjj
 job name
 sss
 step name
 ddn[-#]
 DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
 ddd
 device address
 ser
 volume serial number
 dsn
 data set name

The values of rc and their meanings are as follows:

Return

Code	Meaning
04	An I/O error occurred while reading a tape label, writing a tape mark, or positioning a magnetic tape volume.
08	Following user trailer label processing, an I/O occurred positioning a magnetic tape.
0C	Concatenation of data sets with unlike attributes was detected, but not specified in the DCB (i.e., DCBOFLGS bit 4 is 0).
10	An I/O error occurred while positioning a magnetic tape volume at a label, if the volume has standard labels, or at the data, if the volume does not have labels.
14	An I/O error in tape positioning occurred for a data set with the LEAVE option specified in the OPEN macro instruction or with the LEAVE option specified in the FEOV macro instruction.
18	An I/O error in tape positioning occurred for a data set opened with the REREAD option.
1C	An I/O error occurred in tape positioning when FEOV is issued for a data set with DISP = PASS and no OPEN option 2 specified.
20	An I/O error occurred during a rewind and unload of a private magnetic tape volume. No option 2 is specified in the OPEN macro instruction and the DISP is not PASS.
24	An I/O error occurred rewinding a scratch magnetic tape volume. Either FEOV with a REWIND option was issued, or no OPEN option 2 was specified when the DISP was not PASS.
28	An I/O error occurred during a rewind and unload of a magnetic tape volume. When the error occurred, the

- 2C system was attempting to unload a volume from the device to allow the mounting of a required volume.
- 2C An I/O error occurred while rewinding a magnetic tape volume prior to verifying the volume label.
- 30 An I/O error occurred performing a rewind and unload when the wrong volume was mounted in response to message IEC001A.
- 34 An I/O error occurred during end-of-volume processing while reading the volume label of a magnetic tape volume.
- 38 An I/O error occurred while positioning a tape without a label or with nonstandard labels.
- 3C An I/O error occurred while positioning a concatenated magnetic tape data set. If it has standard labels, the error occurred positioning at the labels. If it has no labels, the error occurred positioning at the data.
- 40 An I/O error occurred while positioning a magnetic tape data set that was opened with the option INPUT or INOUT. If it is a tape with standard labels, the error occurred positioning at the labels. If it is a tape with no labels, the error occurred positioning at the data.
- 44 An I/O error occurred while checking sense bytes to determine if a file protect ring is on a magnetic tape containing a data set opened for INOUT.
- 48 An I/O error occurred rewinding and unloading a magnetic tape volume in preparation for a look ahead mount.
- 4C An I/O error occurred in tape positioning following user header label processing.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine. If the error is to be ignored, the system will attempt to close the DCB before returning to the user.

Programmer Response: Probable user error unless an I/O error has occurred. Correct the errors causing abnormal termination as indicated by the return code in the message text. Then rerun the job.

If an I/O error has occurred, a defective volume or device may be the cause. Save the output from the failing job to aid in the analysis of the problem.

Rerun the job specifying a different volume or device. If a scratch volume was being used when the I/O error occurred, request a different volume. If that does not solve the problem, request a different device in the UNIT parameter of the DD statement. If a specific volume is needed, try requesting a different device in the UNIT parameter of the DD statement. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC0271 737-rc, jjj, sss, ddn[-#], ddd, ser, dsn

Explanation: The error occurred during end-of-volume or during allocation of a secondary quantity or direct access storage as requested in the SPACE parameter of the DD statement for the data set. In the message text, 737-rc associates this message with system completion code 737 and with return code rc.

Other fields in the message text are:

jjj
 job name
 sss
 step name
 ddn[-#]
 DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
 ddd

device address
ser
volume serial number
dsn
data set name

The values of rc and their meanings are as follows:

Return

Code Meaning

- 04 An I/O error occurred reading or writing a DSCB during end-of-volume processing.
- 08 An I/O error occurred reading a direct access volume label during end-of-volume processing.
- 0C An I/O error was detected by BLDL while searching for the TTR of a concatenated member.
- 10 An I/O error occurred writing a file mark for a data set on a direct access device.
- 14 An I/O error occurred while reading a DSCB preparing for user trailer label processing.
- 18 An I/O error occurred reading the volume label on a 2321 Data Cell.
- 1C An I/O error occurred while reading a format 3 DSCB.
- 20 An I/O error occurred during a look-ahead mount, and while reading a DSCB at end-of-volume.
- 24 A missing member name was detected by BLDL while searching for the TTR of a concatenated member.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine. If the error is to be ignored, the system will attempt to close the DCB before returning to the user.

Programmer Response: If an I/O error has occurred, a defective volume or device may be the cause. Save the output from the failing job to aid in the analysis of the problem.

Rerun the job specifying a different volume or device. If a scratch volume was being used when the I/O error occurred, request a different volume. If that does not solve the problem, request a different device in the UNIT parameter of the DD statement. If a specific volume is needed, try requesting a different device in the UNIT parameter of the DD statement. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC028I 837-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during end-of-volume for a sequential data set. In the message text, 837-rc associates this message with system completion code 837 and with return code rc. Other fields in the message text are:

jjj

job name

sss

step name

ddn[-#]

DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)

ddd

device address

ser

volume serial number

dsn

data set name

The values of rc and their meanings are as follows:

Return

Code Meaning

- 04 An I/O error occurred while reading or writing a JFCB or JFCB extension block.

- 08 No TTR was found for the JFCB extension. Specify more volume serial numbers for a larger volume count in the VOL parameter of the DD statement.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine. If the error is to be ignored, the system will attempt to close the DCB before returning to the user.

Programmer Response: Execute job step again.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC030I B37-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during end-of-volume. In the message text, B37-rc associates this message with system completion code B37 and with return code rc. Other fields in the message text are:

jjj

job name

sss

step name

ddn[-#]

DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)

ddd

device address

ser

volume serial number

dsn

data set name

The values of rc and their meanings are as follows:

Return

Code Meaning

- 04 During end-of-volume processing the system had to demount a volume in order to mount the next volume of the data set. It was unable to demount the volume for one of the following reasons:
 - The volume was permanently resident.
 - The volume was reserved.
 - Another job had data sets allocated on the volume.
 - There were OPEN data sets on the volume for the failing task.

For an output data set on a direct access device, the system might have needed to demount the volume for one of the following reasons:

- No more space was available on the volume.
- The data set already had 16 extents, but required more space.
- More space was required, but the volume table of contents (VTOC) was full. If additional space were allocated, another data set control block (DSCB) might have been needed, but could not have been written.

For an output data set on magnetic tape, a volume needed to be demounted because the reflective spot was encountered and more records were to be written. For an input data set on more than one volume, one of the volumes needed to be demounted so that the next one could be mounted, but the system was unable to demount the volume.

- 08 During end-of-volume processing, the system tried to extend to a DOS volume. The DOS VTOC for the volume could not be converted to the OS format for one of the following reasons:

- A split cylinder data set was located on cylinder zero.

- A split cylinder data set was located on the same cylinder as the VTOC.
- A split cylinder data set was located on the same cylinder as a non-split cylinder data set.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine. If the error is to be ignored, the system will attempt to close the DCB before returning to the user.

Programmer Response: Probable user error. For all cases, allocate as many units as volumes required.

For the first two cases, if the volume to be demounted is permanently resident or reserved, set up the JCL to allocate devices that are removable.

For the third case, change the JCL to request deferred mounting, or specify more volumes than units to prevent sharing of required units.

For the fourth case, rewrite the program or change the JCL insuring that there are no open data sets on volumes that must be demounted.

For the last three cases (08 return code) either scratch or move the split cylinder data set that is causing the error. In all cases, correct the errors and execute the job step again.
Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC031I D37-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred when an output operation to a direct access device was requested. In the message text, D37-rc associates this message with system completion code D37 and with return code rc. Other fields in the message text are:

jjj
 job name
 sss
 step name
 ddn[-#]
 DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
 ddd
 device address
 ser
 volume serial number
 dsn
 data set name

The values of rc and their meanings are as follows:

Return
Code **Meaning**
 04 A data set opened for output used all the primary space, and no secondary space was requested. Change the JCL specifying a larger primary quantity or add a secondary quantity to the space parameter on the DD statement.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine. If the error is to be ignored, the system will attempt to close the DCB before returning to the user.

Programmer Response: Probable user error. Correct the errors that caused the abnormal termination as indicated by the return code in the message text. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC032I E37-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred when an output operation was requested. The data set was on a direct access or magnetic

tape device. In the message text, E37-rc associates this message with system completion code E37 and with the return code rc. Other fields in the message text are:

jjj
 job name
 sss
 step name
 ddn[-#]
 DDname number if it is part of a concatenation and not the first DD statement in the concatenation.)
 ddd
 device address
 ser
 volume serial number
 dsn
 data set name

The values of rc and their meanings are as follows:

Return
Code **Meaning**
 04 A data set opened for output used all space available to it on the current volume, and no more volumes were available. Change the JCL specifying more volumes.
 08 On a data set opened for output, end-of-volume has found a DSCB with a duplicate data set name on the next volume, with a volume sequence number less than that in the DEB.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine. If the error is to be ignored, the system will attempt to close the DCB before returning to the user.

Programmer Response: Probable user error. Correct the errors causing abnormal termination as indicated by the return code in the message text. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

Open Messages

IEC101A M ddd,ser[,labtyp][,den],jjj,sss,dsn

Explanation: M indicates that a volume is to be mounted on device ddd:

- If ser is a 6-digit serial number, the volume with that serial number is to be mounted on the device.
- If ser is SCRATCH, a scratch volume is to be mounted.
- If ser begins with L, the volume to be mounted is unlabeled; the number after the L is an internal serial number assigned by the system to an unlabeled volume and is of the form xxxyy, where xxx is the data set number and yy is the volume sequence number for the data set.

In the message text, labtyp and den appear only for tape volumes. The volume has the type of label specified by labtyp: SL for standard label, NSL for nonstandard label, or NL for no label; the density is as specified by den.

The volume is being used by step sss of job jjj.

If a DISPLAY DSNAME command is active, data set dsn contained on the volume is also specified in the message text.

Operator Response: If ser is SCRATCH, make sure that the file protection ring has been inserted in the volume.

Mount the volume on the device; then, ready the device.

IEC104E D ddd,ser

Explanation: D indicates that the volume on device ddd is to be demounted and used subsequently as a scratch volume:

- If ser is a 6-digit number, it is the serial number of the volume, which contains labels.

- If ser begins with L, the volume to be demounted is unlabeled; the number after the L is an internal serial number assigned by the system to an unlabeled volume and is of the form xxxyy, where xxx is the data set number and yy is the volume sequence number of the data set.

Operator Response: Demount the volume. Use it later when a scratch volume is requested.

IEC105I ddd,jjj REDUCED ERROR RECOVERY REQUESTED

Explanation: A data set was opened on magnetic tape with a request to use the reduced error recovery facility. In the message text, ddd is the unit address and jjj is the job name.
Operator Response: None.

IEC106E R ddd,ser

Explanation: R indicates that the volume on device ddd is to be demounted and retained near the computer for use in the near future:

- If ser is a 6-digit number, it is the serial number of the volume, which contains labels.
- If ser begins with L, the volume to be demounted is unlabeled; the number after the L is an internal serial number assigned by the system to an unlabeled volume and is of the form xxxyy, where xxx is the data set number and yy is the volume sequence number of the data set.

Operator Response: Demount the volume. Mark the serial number on the volume, if it is not so marked. (The internally assigned number should appear externally on the volume in case a subsequent step needs the volume; for the subsequent mounting, the system will specify the volume by the internally assigned number.) Then retain the volume near the computer.

IEC107D E ddd,ser,jjj,sss,dsn

Explanation: E indicates that a program intended to write on the volume on device ddd; however, the expiration date for data set dsn on the volume has not occurred.

In the message text, ser is the 6-digit serial number of the volume, which contains labels. The volume is being used by step sss of job jjj. For a tape volume, only the last 17 characters of the data set name (dsn) appear. This is as much as is contained in the tape's data set labels.

Operator Response: If the expiration date is to be ignored and the volume written on, enter REPLY xx,'U'.

If the expiration is to be honored and the volume not written on, enter REPLY xx,'M'. If another volume can be used, that is, if the original request was for a scratch volume, the system will then request that a new volume be mounted. However, if another volume cannot be used, the system will terminate the job step.

For a direct access volume, however, do not enter REPLY xx,'M'. Terminate the job step and notify the programmer that the expiration date on the volume has not been reached.

Note: The operator should normally terminate any job attempting to update a system data set, if this message is issued. However, if a system data set is to be updated, the job stream should be set up so that no other concurrently running job uses the data set being updated; if the job stream is set up in this manner, the operator should be instructed to respond with REPLY xx,'U' to this message.

IEC109A F ddd,ser,jjj,sss,dsn

Explanation: F indicates that the volume on device ddd is file protected; that is, its file protection ring is not inserted, so it can only be read. However, the volume is to be written on.

In the message text, ser is the 6-digit serial number of the volume and dsn is the data set name. The volume is being used by step sss of job jjj.

System Action: The system rewinds and unloads the volume.

Operator Response: If so specified by the programmer, insert a file protection ring in the volume, mount the volume, and ready the device. Otherwise, cancel the job.

IEC110D F ddd,ser,jjj,sss,dsn

Explanation: F indicates that the volume on device ddd is file protected; that is, its file protection ring is not inserted, so it can only be read.

In the message text, ser is the 6-digit serial number of the volume and dsn is the data set name. The volume is being used by step sss of job jjj.

Operator Response: If the volume should be file protected, enter REPLY xx,'U'.

If the volume must have a file protection ring, enter REPLY xx,'F'; the system will rewind and unload the volume. Then insert a file protection ring, mount the volume, and ready the device.

IEC111E D ddd,ser

Explanation: D indicates that the volume on device ddd is to be demounted. The control program has determined that this volume, mounted in response to an earlier mount message, is not the requested volume. In the message text, ser is the 6-digit serial number of the volume that was actually mounted.

Operator Response: Demount the volume. The system will then request that the correct volume be mounted.

IEC112I { I/O ERR ddd,ser } { SEC VOL }

Explanation: If I/O ERR appears in the message text, an uncorrectable input/output error occurred while processing tape labels. If SEC VOL appears, a security protected tape was mounted and the programmer had specified NL or NSL in the LABEL parameter of the DD statement describing the data set, or the data set name on the tape did not match the data set name specified in the DSNAME parameter of the DD statement.

In the message text, ser is the serial number of the volume and ddd is the unit address.

System Action: The system may either abnormally terminate the task or demount the tape and request the operator to mount a scratch tape, even if a specific volume was requested in the VOL = SER parameter of the DD statement describing the data set.

Operator Response: Respond as indicated when the system requests that a new volume be mounted.

Note: If I/O ERR appeared in the message text and the tape was an output tape, the tape labels have probably been destroyed. The tape may have to be relabeled or reinitialized with a tapemark before it can be used again.

Problem Determination: Table I, items 1, 2, 3, 13, 28, 29.

IEC114E D ddd { ,ser,jjj,sss,ddn-n } { ,ddn-n }

Explanation: D indicates that the volume on device ddd is to be demounted. The control program has determined that this volume, mounted in response to an earlier mount message, either:

- Contains labels that cannot be read due to a permanent input/output error.
- Contains no labels or nonstandard labels when standard labels were specified.

- Contains standard labels when no labels or nonstandard labels were specified.
- Contains labels which are written in a density other than the density specified.
- Has a volume serial number other than the volume serial requested.

If ddn (DDNAME) is supplied in the message text, the tape volume to be demounted was recorded in ASCII; ser is the 6 digit serial number of the volume, jjj is the job name, sss is the step name, and n specifies the reason for demounting as follows:

if n equals

- 1 - The accessibility field of the volume label contains a nonblank character which means that the volume is security protected and may not be processed by the operating system.
- 2 - The accessibility field of the file header label contains a nonblank character other than one, which means that the file may not be processed by the operating system.
- 3 - The system cannot process the volume which is recorded in ASCII, because the ASCII option was not specified at system generation.
- 4 - The control program has determined that conflicting data control block attributes have been used to define the data set on the volume. Some of the conflicting attributes may be the following:
 BUFOFF greater than 99.
 BUFOFF not equal to L on OUTPUT or OUTIN.
 BUFOFF equal to L where RECFM is not equal to D.
 OPTCD not equal to Q where LABEL equals AL or AUL.
 OPTCD equal to Q where DSORG is not equal to PS.
 OPTCD not equal to Q where RECFM equals D.
 OPTCD equal to Q where RECFM equals V.
 LABEL equal to AL or AUL for a seven-track tape device.

System Action: The data set is not opened and processing continues.

Operator Response: Demount the volume. The system will then request that a new volume be mounted. Mount a volume with the correct density and label type.

Programmer Response: Probable user error. Respond as indicated for the following values of n:

- 1 - Make sure that the correct volume was specified in the job control statements.
- 2 - Make sure that the correct file and volume are being used.
- 3 - The ASCII option was not specified at system generation, so bit 6 in the CVTOPTA field of the communications vector table is 0. If it is 1, have available a record of the options specified at system generation.
- 4 - Make sure that the data control block attributes do not conflict.

Problem Determination: Table I, items 1, 2, 3, 5a, 13, 28, 29.

IEC119I ERROR-IMAGELIB, CODE = n

Explanation: An attempt to open SYS1.IMAGELIB was unsuccessful for one of the following reasons:

- CODE = 1 SYS1.IMAGELIB was not a cataloged data set.
- CODE = 2 The volume on which SYS1.IMAGELIB resides is not mounted.
- CODE = 3 An error occurred during an attempt to read the format 1 SYS1.IMAGELIB DSCB or in filling in the fields of the DEB.
- CODE = 4 No space was available in subpool 250 for constructing the DEB and the DCB for SYS1.IMAGELIB.

System Action: The related program was terminated if the error occurred when the output data set was being opened. If the error occurred during execution of the SETPRT macro, the

problem is passed a return code and determines further processing based on the nature of the error.

Operator Response:

- If CODE = 2, mount the proper volume and rerun the job.
- If CODE = 1 or 3, report the message to the system programmer.

Programmer Response:

- If CODE = 1, catalog SYS1.IMAGELIB.
- If CODE = 3, check the format 1 DSCB for errors. Call IBM for programming support if the problem persists.
- If CODE = 4, ensure that sufficient storage is available when the storage request is executed.

IEC120A M xxx, character set code [,FOLD][,VERIFY]

Explanation: M indicates a mounting request. The programmer has requested that the chain or train, specified by character set code, be used on UCS printer xxx.

Operator Response: Mount the train or chain that was requested and enter REPLY xx,'text' where text is the character set code.

To ignore the request and use the character set image currently loaded, enter REPLY xx,'U'.

Otherwise, mount a suitable alternate chain or train and enter REPLY xx,'text' where text is the alternate character set code followed, if applicable, by FOLD or F and/or VERIFY or V. (If FOLD or F is omitted but VERIFY or V is specified, indicate the omission of FOLD or F by specifying two consecutive commas -- for example, REPLY xx,'AN,,V'.)

If the mounting request cannot be satisfied with any available chain or train, enter REPLY xx,'CANCEL' or REPLY xx,'C' to cancel the UCS load. The system will terminate the job if the request occurred during execution of an OPEN macro instruction.

Note: See the publication *OS/VS2 Operator's Reference* GC38-0210, for sample printouts for the standard IBM chains and trains.

IEC121D V xxx, character set code [,FOLD]

Explanation: V indicates a verification request. The system has displayed the character set image, specified by character set code, on UCS printer xxx.

Operator Response: Verify that the image displayed corresponds to the requested image.

If the image is correct, enter REPLY xx,'VERIFIED' or REPLY xx,'V'.

If the image is incorrect, mount the correct chain or train and enter REPLY xx,'RETRY' or REPLY xx,'R'. If subsequent verifications are still incorrect, enter REPLY xx,'CANCEL' or REPLY xx,'C' to cancel the UCS load. The system will terminate the job if the request occurred during execution of an OPEN macro instruction.

Note: See the publication *OS/VS2 Operator's Reference*, GC38-0210 for sample printouts for the standard IBM chains and trains.

IEC122D xxx, character set code UCS IMAGE NOT FOUND

Explanation: The character set image, specified by character set code, to be loaded in the UCS buffer of printer xxx could not be found in the image library.

Operator Response: To correct an erroneous specification, mount the requested chain or train and enter REPLY xx,'text' where text is the correct character set code.

If an alternate character set can be used, mount the alternate chain or train and enter REPLY xx,'text' where text is the alternate character set code followed, if applicable, by FOLD or F and/or VERIFY or V. (If FOLD or F is omitted but VERIFY or

V is specified, indicate the omission of FOLD or F by specifying two consecutive commas -- for example, REPLY xx,'AN,,V'.) To ignore the request and use the character set image currently loaded, enter REPLY xx,'U'.
If no alternate character set can be used, enter REPLY xx,'CANCEL' or REPLY xx,'C' to cancel the UCS load. The system will terminate the job if the request occurred during execution of an OPEN macro instruction.
Problem Determination: Table I, items 1, 3, 5a, 15, 17a, 29.

IEC123D xxx, SPECIFY UCS PARAMETER

Explanation: The current job step did not specify UCS parameters and the character set currently loaded on UCS printer xxx cannot be assumed as a default option for one of the following reasons:

- The character set is unknown to the system.
- The character set is invalid because of a previous error condition.
- The character set is not a default character set.

Operator Response: For the first occurrence of this message, mount the chain or train of a suitable default character set and enter REPLY xx,'text' where text is the character set code followed, if applicable, by FOLD or F and/or VERIFY or V. (If FOLD or F is omitted but VERIFY or V is specified, indicate the omission of FOLD or F by specifying two consecutive commas -- for example, REPLY xx,'AN,,V'.) Note that this response should be used only the first time this message is produced. After the first occurrence of this message, enter REPLY xx,'U' to ignore the request and use the character set image currently loaded.

If no character set is available for the job step, enter REPLY xx,'CANCEL' or REPLY xx,'C'. The system will terminate the job if the request occurred during execution of an OPEN macro instruction.

Note: See the publication *OS/VS2 Operator's Reference*, GC38-0210 for sample printouts for the standard IBM chains and trains.

IEC124I xxx, ERROR OCCURRED WHILE LOADING FCB

Explanation: A permanent I/O error (forms control buffer parity error) persisted after two attempts were made to load the FCB. The error occurred while opening the data control block for printer xxx. This error can be caused by:

- A form control buffer parity error.
- An attempt to load an invalid FCB image.

System Action: The related program was terminated.

Operator Response: If the associated I/O error message (IEA000I) contains a X'02' in the first sense byte, an attempt was made to load an invalid FCB image.

Specify a substitute image or correct the one in error. An image is invalid if:

- Its specified length exceeds 180 lines.
- Its specified and actual lengths are not equal.
- There is an invalid channel specified.
- The last byte of the image is not X'1x'.

If IEA000I contains a X'04' in the first sense byte a buffer parity error occurred.

Problem Determination: Table I, items 18, 24, 30.

IEC125I ERROR - REPEAT REPLY

Explanation: An invalid response was made to a previous Universal Character Set (UCS) or Forms Control Buffer (FCB) message.

Operator Response: Enter the reply again, correctly.

IEC126I xxx, UNCORRECTABLE ERROR LOADING UCS

Explanation: A permanent input/output error (UCS parity error) persisted after ten attempts were made to load the UCS buffer. The error occurred while opening the data control block for UCS printer xxx. Subsequent output on this printer may be invalid.

Operator Response: Probable hardware error. None.

Problem Determination: Table I, items 1, 2, 13, 18, 30.

IEC127D xxx, image-id FCB IMAGE NOT FOUND

Explanation: The FCB buffer of printer xxx was not loaded because the FCB image specified by the image-id was not in the image library.

Operator Response: To correct an erroneous specification, enter REPLY xx,'text' where text is the correct or alternate FCB image-id to be used. The image-id can then be followed by VERIFY or V, or ALIGN or A.

Specifying VERIFY or ALIGN allows the operator to align forms to the new image.

The VERIFY option also provides a printout of the image loaded.

To ignore the request and use the FCB image currently loaded, enter REPLY xx,'U'.

If no alternate image can be used, enter REPLY xx,'CANCEL' or REPLY xx,'C' to cancel the FCB load. The system will terminate the job if the request occurred during execution of an OPEN macro. If the request occurred during execution of a SETPRT macro a return code (X'04') will be placed in register 15 and control returned to the program issuing the SETPRT macro.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

IEC128D V xxx, VERIFY FORMS ALIGNMENT

Explanation: V indicates a verification request. The system was requested to verify forms alignment to the FCB image printer xxx.

Operator Response: Verify that the forms are aligned to the forms control buffer image.

When forms are aligned, enter REPLY xx,'VERIFIED' or REPLY xx,'V'.

If the VERIFY option was specified, entering REPLY xx,'RETRY' or REPLY xx,'R' causes the FCB image to be printed again.

This can be repeated until forms are properly aligned.

If the image is incorrect or forms alignment is not possible, enter REPLY xx,'CANCEL' or REPLY xx,'C' to cancel the FCB image load. The system will terminate the job if the request occurred during execution of an OPEN macro. If the request occurred during execution of a SETPRT macro a return code of X'14' is placed in register 15 and control returned to the program issuing the macro.

IEC129D xxx, SPECIFY FCB PARAMETER

Explanation: The current job step did not specify FCB parameters and the image currently loaded on the printer xxx cannot be assumed as a default for one of the following reasons:

- The image is invalid because of a previous error condition.
- The image is not a default image.

Operator Response: For the first occurrence of this message, load the FCB buffer by entering REPLY xx,'text,' where text is the image-id to be used. STD1 or STD2 may be specified to load the IBM forms-control buffer images. In addition to the image-id, VERIFY or V or ALIGN or A can be coded. Specifying VERIFY or ALIGN allows the operator to align forms to the new image.

The VERIFY option also provides a printout of the image loaded.
 To ignore the request and use the image currently loaded, enter REPLY xx,'U'.
 If no image is available for the job step, enter REPLY xx,'CANCEL' or REPLY xx,'C'. The system will terminate the job if the request occurred during execution of an OPEN macro instruction.

IEC130I ddn - DD STATEMENT MISSING

Explanation: An OPEN macro instruction was issued for a data control block that specified ddn as the DDNAME. However, ddn does not appear in the name field of any DD statement for the job.
System Action: Processing continues. However, abnormal termination is likely if an attempt is made to read or write the data set.
Programmer Response: Probable user error. Supply the missing DD statement, and execute the job step again.
Problem Determination: Table I, items 1, 3, 5a, 15, 30.

IEC131I xx,jjj,sss,RDJFCB ISSUED FOR DCB WITH BLANK DDNAME

Explanation: A RDJFCB macro instruction was issued. A DCB in the parameter list had a blank DDNAME field.
 xx - the position of the DCB in the parameter list.
 jjj - job name
 sss - step name
System Action: The request for this DCB is ignored and a return code of 4 is passed in register 15.
Programmer Response: Correct the errors causing the DDNAME field to be blank and execute the job step again. The error is usually caused by not specifying DDNAME = when coding the DCB.

IEC134D A ddd,ser,jjj,sss,[dsn]

Explanation: A indicates that volume ser on device ddd bears a standard volume label or an American National Standard volume label, or the system is unable to determine whether the volume does or does not because the volume is unreadable. Possibly, the tape was written at a density that the tape device ddd cannot read. However, the programmer did not specify standard labels or American National Standard labels in the job control statements. In the message text, ser is the 6-digit serial number of the volume and dsn is the 17 character data set name from the existing HDR1 label. The volume is being used by step sss of job jjj.
System Action: The system waits for the operator's reply.
Operator Response: Enter REPLY xx,'U' to permit the system to create a new label or write a tape mark over the existing label. Enter REPLY xx,'M' to permit the system to rewind the tape and issue a mount message for a scratch tape.
Programmer Response: Make sure that the job control statements specify standard labels or American National Standard labels if they are to be used.
Problem Determination: Table I, items 1, 2, 13, 29.

IEC140I ddn,ser,DATA SET NOT ON VOLUME

Explanation: The data set number specified in the LABEL parameter of the DD statement for this data set does not exist on the indicated tape volume. ddn identifies the ddname of the DD statement for this data set. ser is the 6 character volume identification.
System Action: OPEN volume positioning continues with the next volume requested by the user.

Programmer Response: Check the sequence number in the VOLUME = (sequence) parameter of the DD statement; if omitted, 1 was assumed. Increase the volume sequence number by 1 for each message of this type.

IEC141I 013-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of an OPEN macro instruction. In the message text, 013-rc associates this message with system completion code 013 and with return jjj
 job name
 sss
 step name
 ddn[-#]
 DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
 ddd
 device address
 ser
 volume serial number
 dsn
 data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	American National Standard labels were specified in the LABEL parameter of the DD statement but are not supported by the system. Correct the LABEL parameter of the DD statement.
08	American National Standard labels were specified in the LABEL parameter of the DD statement, and the UNIT parameter specified a 7-track tape drive. American National Standard labels are valid only for 9-track units. Correct the LABEL and/or UNIT parameters on the DD statement.
0C	A buffer length of 0 was specified for a BDAM data set for which dynamic buffering was requested. Correct the DCB specifying a valid buffer length.
10	An OPEN macro instruction was issued for a null data set and BLKSIZE and BUFL are both 0. Correct the DCB and specify BLKSIZE or BUFL other than 0.
14	An OPEN macro instruction was issued with OUTPUT or OUTIN specified. DCB specifies DSORG = PO or POU, but the DSCB indicates that the data set is not partitioned. Change the DCB macro instruction DSORG parameter to PS; change the DD statement DSORG subparameter to PO; imply partitioned organization by allocating space for the directory in the SPACE parameter of the DD statement; or verify that the DSNAME and VOLUME parameters on the DD statement are correct.
18	An OPEN macro instruction was issued for a partitioned data set. The DSNAME parameter specified a member of the data set that could not be located.
1C	An OPEN macro instruction was issued for a partitioned data set, but an I/O error was encountered searching the directory.
20	An OPEN macro instruction was issued for a sequential data set using the queued access technique with RECFM = FB, but BLKSIZE is not a multiple of LRECL, or for variable-length records, blocksize (BLKSIZE) not four or greater than logical record length.
24	An OPEN macro instruction was issued with INPUT, INOUT, RDBACK, or UPDAT specified, but the DCB did not specify a MACRF of EXCP, GET, or READ.

- 28 An OPEN macro instruction was issued with OUTPUT or OUTIN specified, but the DCB did not specify a MACRF of EXCP, PUT, or WRITE.
- 2C A sequential data set using the queued access technique with exchange buffering was opened for input, and the buffer control block address was 0. Verify that DCBBUFCB was not incorrectly modified. This type of error often occurs if a DCB is shared by two or more tasks, or is opened and closed several times within one job step.
- 30 A sequential data set using the queued access technique with exchange buffering was opened for output, but the buffer control block address is 0. Verify that DCBBUFCB was not incorrectly modified. This type of error often occurs if a DCB is shared by two or more tasks, or is opened and closed several times within one job step.
- 34 An OPEN macro instruction was issued for a data set with BLKSIZE and BUFL equal to 0. The system determined that it had to obtain buffers but was unable to do so.
- 38 An OPEN macro instruction was issued for a sequential data set on a direct access device with track overflow, but the buffer control block address was zero. Verify that DCBBUFCB was not incorrectly modified. This type of error often occurs if a DCB is shared by two or more tasks, or is opened and closed several times within one job step.
- 3C A sequential data set was opened for INPUT or OUTPUT, but the buffer control block address was 0. Verify that DCBBUFCB was not incorrectly modified. This type of error often occurs if a DCB is shared by two or more tasks, or is opened and closed several times within one job step.
- 40 A sequential or direct data set was opened for input, but the buffer control block address was 0. Verify that DCBBUFCB was not incorrectly modified. This type of error often occurs if a DCB is shared by two or more tasks, or is opened and closed several times within one job step.
- 44 An OPEN macro instruction was issued for a data set on a direct access device for which chained scheduling was specified, but the buffer control block address was 0. Verify that DCBBUFCB was not incorrectly modified. This type of error often occurs if a DCB is shared by two or more tasks, or is opened and closed several times within one job step.
- 48 An OPEN macro instruction was issued for a sequential data set using the queued access techniques, but the buffer control block address was 0.
- 4C An OPEN macro instruction was issued for a sequential data set using the queued access technique, and the DCB specified BUFL smaller than BLKSIZE.
- 50 An OPEN macro instruction issued for a data set allocated to a printer did not have OUTPUT specified as an OPEN option.
- 54 An OPEN macro instruction was issued for a data set allocated to a 1419. No secondary control unit could be found.
- 58 An OPEN macro instruction was issued for a paper tape data set and concatenation with unlike attributes was specified. (i.e., DCBOFLGS bit 4 = 1). Set DCBOFLGS bit 4 to 0 and do not attempt to concatenate a data set on paper tape with data sets of unlike attributes.
- 5C An OPEN macro instruction was issued for a sequential data set using the queued access technique. The data set contained spanned variable

- length records larger than 32,756, but GET locate mode was not specified.
- 60 An OPEN macro instruction was issued for a data set with a DCB specifying RECFM = F, and BLKSIZE was not equal to LRECL. Correct DCB parameters to specify RECFM = FB, or make LRECL and BLKSIZE equal.
- 64 An OPEN macro instruction was issued for a null data set using an access method other than QSAM or BSAM. Correct DD statement to specify a real data set, or access the data set using BSAM or QSAM.
- 68 An OPEN macro was issued for a data set whose DCB specified BLKSIZE greater than the maximum allowed, which is 32,767.
- 6C An OPEN macro instruction was issued for a data set with OPTCD = T in the DCB, requesting track overflow, but the direct access device allocated does not support track overflow. Correct the DCB or allocate a device that supports track overflow by a specific request in the unit parameter or a generic name that applies only to those devices.
- 70 An OPEN macro instruction was issued for a data set on magnetic tape. A conflict exists among LABEL parameters on the DD statement, and DCBRECFM, DCBOPTCD, DCBBUFOF, and DCBUSASI give the appearance of mixed USASI and EBCDIC attributes to the data set; or OPTCD = Q was specified in the DCB for a data set on a device other than magnetic tape.
- 74 An OPEN macro instruction was issued for an optical character reader data set, but the option 1 on the OPEN macro instruction did not specify input.
- 78 An OPEN macro instruction was issued for an optical character reader data set. The BUFL parameter in the DCB was specified as zero, or incorrectly modified during execution.
- 7C An OPEN macro instruction was issued for an optical character reader data set. But LRECL parameter in the DCB was zero. Specify LRECL other than zero and rerun the job.
- 80 An OPEN macro was issued for an optical character reader data set, but the specified BUFL was less than LRECL. Specify BUFL equal to, or greater than, LRECL and rerun the job.
- 84 An OPEN macro instruction was issued for an optical character reader data set. The number of buffers specified in the buffer pool control block is not the same as that specified in the DCBBUFNO field.
- 88 An OPEN macro instruction was issued for a telecommunications device but the DCBDSORG did not specify TSO.

System Action: The task is terminated.
Programmer Response: Probable user error. Correct the errors causing abnormal termination as indicated by the return code in the message text. Rerun the job.
Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC142I 113-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of an OPEN macro instruction or an OPEN macro instruction with a TYPE = J operand. In the message text, 113-rc associates this message with system completion code 113 and with return code rc. Other fields in the message text are:

- jjj job name
- sss step name

- ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
- ddd device address
- ser volume serial number
- dsn data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	Either an I/O error occurred reading the JFCB during OPEN, or the JFCB does not exist.
08	An I/O error occurred reading a JFCB extension block during OPEN.
0C	An OPEN TYPE = J was issued, but no JFCB exit was found in the DCB exit list. Specify a JFCB exit, supply the JFCB.
10	An I/O error occurred when writing back the JFCB during OPEN.
14	An I/O error occurred when reading a concatenated JFCB for an indexed sequential data set.
18	An I/O error occurred reading a JFCB extension block for a direct or indexed sequential data set.

System Action: The task is terminated.
Programmer Response: Rerun the job.
Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC143I 213-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of an OPEN macro instruction for a data set on a direct access device. In the message text, 213-rc associates this message with system completion code 213 and with return code rc. Other fields in the message text are:

- jjj job name
- sss step name
- ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
- ddd device address
- ser volume serial number
- dsn data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	The format 1 DSCB for the data set could not be found on the first volume (or the volume indexed by the volume sequence number) specified by the DD statement. Make sure that the DSNAME and VOLUME parameters on the DD statement are correct. A recovery attempt request may be specified in the DCB ABEND exit routine.
08	An OPEN macro instruction was issued for a password protected data set, but the system was unable to locate the PASSWORD data set. Make sure that the PASSWORD data set exists on the system residence volume. If it does not exist, build it and execute the job step again.

- 0C An I/O error occurred reading a format 1 DSCB for a direct or indexed sequential data set.
- 10 An I/O error occurred reading a format 3 DSCB for a direct or indexed sequential data set.
- 18 An I/O error occurred writing back a format 1 DSCB. The data set may have been scratched or renamed during open processing, possibly by a concurrent job.
- 1C An I/O error occurred while reading a format 3 DSCB for a direct or indexed sequential data set.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: Probable user error. Correct the errors causing the abnormal termination as indicated by the return code in the message text. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC144I 313-rc, jij, sss, ddn[-#], ddd, ser, dsn

Explanation: The error occurred during execution of an OPEN macro instruction for a data set on a direct access device. In the message text, 313-rc associates this message with system completion code 313 and with return code rc. Other fields in the message text are:

jij
job name

sss
step name

ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)

ddd
device address

ser
volume serial number

dsn
data set name

The values of rc and their meanings are as follows:

Return

Code	Meaning
04	An I/O error occurred reading a format 2 or format 3 DSCB.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: If an I/O error has occurred, a defective volume or device may be the cause. You should save the output from the failing job to aid in the analysis of the problem.

Rerun the job specifying a different volume or device. If a scratch volume was being used when the I/O error occurred, request a different volume. If that does not solve the problem, request a different device in the UNIT parameter of the DD statement. If a specific volume is needed, try requesting a different device in the UNIT parameter of the DD statement. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC145I 413-rc, jij, sss, ddn[-#], ddd, ser, dsn

Explanation: The error occurred during execution of an OPEN macro instruction for a data set on magnetic tape or on a direct access device. In the message text, 413-rc associates this message with system completion code 413 and with return code rc. Other fields in the message text are:

jij
job name

sss

step name

ddn[-#]

DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)

ddd

device address

ser

volume serial number

dsn

data set name

The values of rc and their meanings are as follows:

Return

Code	Meaning
04	No unit is available for mounting the specified volume. The volume already on the allocated unit is either permanently resident or reserved. It could not be demounted in order to mount the required volume, or the volume cannot be demounted because another DCB is open on that device. Specify another device in the UNIT parameter of the DD statement.
08	An I/O error occurred positioning a magnetic tape volume.
0C	An I/O error occurred reading the volume label on a magnetic tape volume.
10	An I/O error occurred writing a tape mark.
14	An I/O error occurred writing EOF1 or EOF2 trailer label on a magnetic tape volume for a SYSOUT data set.
18	The specified data set was opened for input, but no volume serial number was specified on the DD statement. A recovery attempt request may be specified in the DCB ABEND exit routine.
1C	An OPEN macro instruction was issued for a data set, but volume sequence number on the associated DD statement was greater than the number of volumes containing the data set.
20	An I/O error occurred reading the volume label on a direct access volume.
24	An open macro instruction was issued for a data set on magnetic tape. A density was specified in the DCB DEN parameter which was incompatible with the recording density of the drive allocated to the data set. Change the DD statement to specify a tape drive with the recording density specified in the DCB macro instruction.
28	The system was unable to parallel mount all of the required volumes. Too few units have been allocated for the number of volumes required. Specify P or a unit control equal to the number of volumes requested in the UNIT parameter of the DD statement.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: Probable user error unless an I/O error has occurred. Correct the errors causing abnormal termination as indicated by the return code in the message text. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC146I 513-rc, jij, sss, ddn[-#], ddd, ser, dsn

Explanation: The error occurred during execution of an OPEN macro instruction for a data set on magnetic tape. In the message text, 513-rc associates this message with system completion code 513 and with return code rc. Other fields in the message text are:

jij
 job name
 sss
 step name
 ddn[-#]
 DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
 ddd
 device address
 ser
 volume serial number
 dsn
 data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	An OPEN macro instruction was issued for a magnetic tape data set allocated to a device that already has an open data set on it. Make sure that the first data set is closed before the second is opened, or allocate the second data set to a different device.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: Probable user error. Correct the errors causing abnormal termination as indicated by the return code in the message text. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC147I 613-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of an OPEN macro instruction for a data set on magnetic tape. In the message text, 613-rc associates this message with system completion code 613 and with return code rc. Other fields in the message text are:

jij
 job name
 sss
 step name
 ddn[-#]
 DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
 ddd
 device address
 ser
 volume serial number
 dsn
 data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	An I/O error occurred positioning a magnetic tape volume.
08	An I/O error occurred reading a label on a magnetic tape volume.
0C	An invalid label was read from a magnetic tape volume. Make sure that the correct volume was mounted, and that it contains standard labels. If it is the desired volume, recreate it, and rerun the job.
10	An I/O error occurred writing a tape label.
14	An I/O error occurred writing a tape mark after the header labels.

System Action: The task is terminated unless the error is to be ignored or recovered as specified in the DCB ABEND exit routine.

Programmer Response: Probable user error unless an I/O error has occurred. Correct the errors causing abnormal termination as indicated by the return code in the message text. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC148I 713-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of an OPEN macro instruction for a data set on magnetic tape or on a direct access device. In the message text, 713-rc associates this message with system completion code 713 and with return code rc. Other fields in the message text are:

jij
 job name
 sss
 step name
 ddn[-#]
 DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in concatenation.)
 ddd
 device address
 ser
 volume serial number
 dsn
 data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	A data set on magnetic tape was opened for INOUT, but the volume contained a data set whose expiration date had not been reached. The operator replied 'M' to message IEC107D. Specify a different volume on the DD statement, or open for input only by changing the OPEN macro instruction or by specifying input in the LABEL parameter of the DD statement.
08	An OPEN macro instruction was issued with INOUT for a data set on a direct access device with DISP = OLD specified on the DD statement. The expiration date on the data set had not been reached. The operator replied 'M' to message IEC107D. Specify a different volume on the DD statement, or open for input only by changing the OPEN macro instruction or by specifying input in the LABEL parameter of the DD statement.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: Probable user error. Correct the errors causing abnormal termination as indicated by the return code in the message text. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC149I 813-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of an OPEN macro instruction for a data set on magnetic tape. In the message text, 813-rc associates this message with system completion code 813 and with return code rc. Other fields in the message text are:

jij
 job name
 sss
 step name

ddn[-#]

DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)

ddd

device address

ser

volume serial number

dsn

data set name

The values of rc and their meanings are as follows:

Return

Code Meaning

04 An OPEN macro instruction was issued for a data set on magnetic tape, but the data set name on the header label did not match that in the JFCB. Verify that the DD statement specifies the correct DSNAME and volume serial number. If they are correct, ensure that the JFCB was not incorrectly modified prior to issuing the OPEN macro.

System Action: The task is terminated unless the error is to be ignored or recovered as specified in the DCB ABEND exit routine.

Programmer Response: Probable user error. Correct the errors causing abnormal termination as indicated by the return code in the message text. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC150I 913-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of an OPEN macro instruction or during end-of-volume for a password protected data set after the operator attempted to enter a password in response to message IEC310A. In the message text, 913-rc associates this message with system completion code 913 and with return code rc. Other fields in the message text are:

jjj

job name

sss

step name

ddn[-#]

DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)

ddd

device address

ser

volume serial number

dsn

data set name

The values of rc and their meanings are as follows:

Return

Code Meaning

04 An OPEN macro instruction was issued for a magnetic tape data set with American National Standard labels. The volume accessibility byte (offset X'0A') in the volume label is not blank. This indicates that the label was not written on an IBM system or that it was written by the user. If the volume accessibility byte is not blank, the tape cannot be used on an IBM system. Make sure that the correct volume is mounted. If it is the correct volume, it must be recreated for use on an IBM system.

08 An OPEN macro instruction was issued for a magnetic tape data set with American National Standard labels. The security byte in the header label was not blank

and not equal to X'F1'. This means that the label was either not created on an IBM system or was created by the user. Make sure that the correct volume is mounted. If it is the correct volume, it must be recreated for use on an IBM system.

- 0C An OPEN macro instruction was issued for a password protected data set, but the operator failed to supply the correct password in response to message IEC310A. Supply the operator with the correct password and execute the job step again, or have the correct password added to the PASSWORD data set.
- 10 An open macro instruction was issued to the VTOC for output processing by an unauthorized job step or job-step task. The ability to open the VTOC for output is restricted to authorized job steps or job step tasks. How to authorize a job step or job-step task is discussed in OS/VS2 Planning and Use Guide, GC28-0600.

System Action: The task is terminated unless the error is to be ignored (unless the return code is 0C which cannot be ignored) as specified in the DCB ABEND exit routine.

Programmer Response: Probable user error. Correct the errors causing abnormal termination as indicated by the return code in the message text. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC151I A13-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of an OPEN macro instruction for a data set on magnetic tape. In the message text, A13-rc associates this message with system completion code A13 and with return code rc. Other fields in the message text are:

jjj

job name

sss

step name

ddn[-#]

DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)

ddd

device address

ser

volume serial number

dsn

data set name

The values of rc and their meanings are as follows:

Return

Code Meaning

04 The OPEN macro instruction was issued for a data set on magnetic tape; the tape was positioned at the load point because the data set was not found. Make sure that the file sequence number in the LABEL parameter of the DD statement is correct. Also make sure that the volume is correct.

System Action: The job is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: Probable user error. Correct the errors causing abnormal termination as indicated by the return code in the message text. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC152I B13-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of an OPEN macro instruction for a data set on a 1403 printer with the

universal character set (UCS) special feature. In the message text, B13-rc associates this message with system completion code B13 and with return code rc. Other fields in the message text are:

- jjj job name
- sss step name
- ddn[-#] DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
- ddd device address
- ser volume serial number
- dsn data set name

The values of rc and their meanings are as follows:

Return

Code Meaning

- 04 An OPEN macro instruction was issued for a data set allocated to a printer. The operator replied 'CANCEL' to the message IEC122D because the UCS image could not be found in SYS1.IMAGELIB data set. Specify the correct character set type, or have the system programmer update the SYS1.IMAGELIB to include the associated UCS image and execute the job step again.
- 08 An OPEN macro instruction was issued for a data set allocated to a printer. A permanent I/O error was detected when the BLDL macro instruction was issued to locate the requested UCS image in the SYS1.IMAGELIB data set.
- 0C An OPEN macro instruction was issued for a data set allocated to a printer. A permanent I/O error persisted after two attempts were made to load the UCS buffer.
- 10 An OPEN macro instruction was issued for a data set allocated to a printer. A permanent I/O error was detected when an attempt was made to display the character set image on the printer for visual verification.
- 14 An OPEN macro instruction was issued for a data set allocated to a printer. The operator replied 'CANCEL' to the message IEC121D because the wrong UCS image was displayed for visual verification. Specify the correct character set type, or have the operator mount the proper chain and execute the job step again.
- 18 An OPEN macro instruction was issued for a data set allocated to a printer. A permanent I/O error was detected when an attempt was made to display the FCB image on the printer for visual verification.
- 1C An OPEN macro instruction was issued for a data set allocated to a printer. The operator replied 'CANCEL' to the message IEC128D because an incorrect FCB image was displayed for visual verification or forms alignment was not possible. Specify the correct FCB image-id and execute the job step again.
- 20 An OPEN macro instruction was issued for a data set allocated to a printer, but not enough storage was available to open SYS1.IMAGELIB.
- 24 An OPEN macro instruction was issued for a data set allocated to a printer, but the volume containing SYS1.IMAGELIB was either not mounted or not cataloged.

- 28 An OPEN macro instruction was issued for a data set allocated to a printer, but a permanent I/O error persisted while opening SYS1.IMAGELIB.
- 2C An OPEN macro instruction was issued for a data set allocated to a printer. A permanent I/O error was detected when the BLDL macro instruction was issued to locate the requested FCB image in the SYS1.IMAGELIB data set.
- 30 An OPEN macro instruction was issued for a data set allocated to a printer. A permanent I/O error persisted after two attempts were made to load the forms control buffer.
- 34 An OPEN macro instruction was issued for a data set allocated to a printer. The operator replied 'CANCEL' to the message IEC127D because the FCB image could not be found in SYS1.IMAGELIB data set. Specify the correct FCB image-id, or have the system programmer update the SYS1.IMAGELIB to include the associated FCB image and execute the job step again.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: Probable user error unless an I/O error has occurred. Correct the errors causing abnormal termination as indicated by the return code in the message text. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC153I C13-rc, jjj, sss, ddn[-#], ddd, ser, dsn

Explanation: The error occurred during execution of an OPEN macro instruction for a concatenated partitioned or graphics data set. In the message text, C13-rc associates this message with system completion code C13 and with return code rc. Other fields in the message text are:

- jjj job name
- sss step name
- ddn[-#] DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
- ddd device address
- ser volume serial number
- dsn data set name

The values of rc and their meanings are as follows:

Return

Code Meaning

- 04 The format 1 DSCB of a concatenated partitioned data set could not be located on the specified volume. Correct the DSNNAME and VOLUME parameters of the DD statement.
- 08 An I/O error occurred reading the JFCB of a concatenated partitioned data set.
- 0C An I/O error occurred reading the format 3 DSCB of a concatenated partitioned data set.
- 10 An OPEN macro instruction was issued specifying OUTPUT for a concatenated partitioned data sets. Output data sets cannot be concatenated.
- 18 A non-direct access device was allocated to a concatenated BPAM data set.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: Probable user error unless an I/O error has occurred. Correct the errors causing abnormal termination as indicated by the return code in the message text. Then submit the job again.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC154I 140-rc,ijj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of a RDJFCB macro instruction. In the message text, 140-rc associates this message with system completion code 140 and with return code rc. Other fields in the message text are:

ijj
job name
sss
step name
ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
ddd
device address
ser
volume serial number
dsn
data set name

The values of rc and their meanings are as follows:

Return

Code Meaning

04 A RDJFCB macro instruction was issued, but an I/O error occurred while reading the JFCB.

System Action: The task is terminated.

Programmer Response: Execute the job step again.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC155I 240-rc,ijj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of a RDJFCB macro instruction. In the message text, 240-rc associates this message with system completion code 240 and with return code rc. Other fields in the message text are:

ijj
job name
sss
step name
ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
ddd
device address
ser
volume serial number
dsn
data set name

The values of rc and their meanings are as follows:

Return

Code Meaning

04 A RDJFCB macro instruction was issued, but the DCB did not contain a foundation extension block. Specify a JFCB exit in the DCB exit list. If the DCB is correct, verify that it was not modified during execution.

08 A RDJFCB macro instruction was issued, but no EXLST address was found in the DCB. Specify a JFCB exit in the DCB exit list. If the DCB is correct, verify that it was not modified during execution.

0C A RDJFCB macro instruction was issued, but no JFCB exit was specified in the DCB exit list. Specify a JFCB exit in the DCB exit list and execute the job step again.

10 A RDJFCB macro instruction was issued, but the JFCB buffer is not within the user's storage. Correct any errors that may have caused the exit list to be incorrectly modified and execute the job step again.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: Probable user error. Correct the errors causing abnormal termination as indicated by the return code in the message text. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC156I 03D-rc,ijj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of a QISAM or BISAM OPEN macro instruction or a BDAM OPEN macro instruction. In the message text, 03D-rc associates this message with system completion code 03D and with return code rc. Other fields in the message text are:

ijj
job name
sss
step name
ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
ddd
device address
ser
volume serial number
dsn
data set name

The values of rc and their meanings are as follows:

Return

Code Meaning

04 An OPEN macro instruction was issued for an indexed sequential or direct data set. The volume serial numbers on the DD statement were not specified in the same order that the data set was created. Change the JCL respecifying the volume serial numbers in the correct order.

08 An OPEN macro instruction was issued for an indexed sequential data set. The first volume of the data set does not have a format 2 DSCB.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: Probable user error. Correct the errors causing abnormal termination as indicated by the return code in the message text. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

Close Messages

**IEC202E K ddd,ser[,labtyp][,den],ijj,sss
[,SPACE = prm][,dsn]**

Explanation: K indicates that the volume on device ddd is to be demounted and returned to the library:

- If ser is a 6-digit number, it is the serial number of the volume, which contains labels.
- If ser begins with L, the volume to be demounted is unlabeled; the number after the L is an internal serial

number assigned by the system to an unlabeled volume and is of the form xxxxy, where xxx is the data set number and yy is the volume sequence number for the data set.

In the message text, labtyp and den appear only for tape volumes. The volume has the type of label specified by labtyp: SL for standard label, NSL for nonstandard label, or NL for no label; the density is as specified by den.

The volume is being used by step sss of job jjj. For direct access volumes, if a DISPLAY SPACE command is active, the field SPACE = cccc,tttt,aaaa/yyyy,zzzz is specified: cccc

tttt Total number of free cylinders on the volume.

aaaa Total number of tracks in addition to the free cylinders.

yyyy Areas or extents dividing the cylinders and tracks.

zzzz Maximum number of contiguous free cylinders of the largest extent within the total remaining space.

Number of tracks in addition to the free cylinders of the largest extent within the total remaining space.

If an error occurred during the listing of the parameters in the SPACE field, one of the following messages is specified:

- LSPACE-PERMANENT I/O ERROR
- LSPACE-NON-STANDARD OS VOLUME
- LSPACE-NOT A DIRECT ACCESS VOL
- LSPACE-INVALID PARAMETER
- LSPACE-UCB NOT READY

If a DISPLAY DSNNAME command is active, data set dsn contained on the volume is also specified in the message text. Operator Response: Demount the volume. Mark the serial number, label type, and density on the volume, if they are not so marked. Then return it to the library. If

LSPACE-PERMANENT I/O ERROR was in the message, a permanent I/O error was encountered while trying to read the VTOC. Execute the IEHLIST utility program to list the VTOC of this volume. If errors occur, take appropriate action as indicated in the message.

Problem Determination: If LSPACE-INVALID PARAMETER was in the message, see Table I, items 2, 29.

IEC209I [jjj] [ser] ddd TR = nnn,TW = nnn,EG = nnn, CL = nnn, N = nnn,SIO = nnnnn

Explanation: This message is issued to indicate the number of errors accumulated on a particular volume. The message appears only if console output was specified for the ESV option at system generation (ESV = CON). In the message text, the fields are:

[jjj]

Job name. Included when available and pertinent to the issuing program.

[ser]

Serial number of the volume. Included when available and pertinent to the issuing program.

ddd

Unit address of the device.

TR = nnn

Number of temporary read errors.

TW = nnn

Number of temporary write errors.

EG = nnn

Number of erase gaps.

CL = nnn

Number of cleaner actions.

N = nnn

Number of noise blocks.

SIO = nnnnn

Number of Start I/O operations.

Operator Response: Check the local operating procedures to see if the number of errors specified in message text indicates that the volume should be reconditioned.

IEC210I 214-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of a CLOSE macro instruction for a data set on magnetic tape. In the message text, 214-rc associates this message with system completion code 214 and with return code rc. Other fields in the message text are:

jjj

job name

sss

step name

ddn[-#]

DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)

ddd

device address

ser

volume serial number

dsn

data set name

The values of rc and their meanings are as follows:

Return

Code Meaning

04 A I/O error occurred reading a user label on magnetic tape.

08 A I/O error positioning a magnetic tape volume during execution of a CLOSE macro instruction.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: If an I/O error has occurred, a defective volume or device may be the cause. Save the output from the failing job to aid in the analysis of the problem.

Rerun the job specifying a different volume or device. If a scratch volume was being used when the I/O error occurred, request a different volume. If that does not solve the problem, request a different device in the UNIT parameter of the DD statement. If a specific volume is needed, try requesting a different device in the UNIT parameter of the DD statement.

Rerun the job. Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC211I 314-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during the execution of a CLOSE macro instruction for a data set on a direct access device. In the message text, 314-rc associates this message with system completion code 314 and with return code rc. Other fields in the message text are:

jjj

job name

sss

step name

ddn[-#]

DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)

ddd

device address

ser

volume serial number

dsn

data set name

The values of rc and their meanings are as follows:

Return

Code Meaning

04 A I/O error occurred reading a DSCB for a data set on a direct access device during execution of a CLOSE macro instruction.

08 A I/O error occurred reading a format 1 DSCB during execution of a CLOSE macro instruction and standard user labels were specified.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: If an I/O error has occurred, a defective volume or device may be the cause. Save the output from the failing job to aid in the analysis of the problem.

Rerun the job specifying a different volume or device. If a scratch volume was being used when the I/O error occurred, request a different volume. If that does not solve the problem, request a different device in the UNIT parameter of the DD statement. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC212I 414-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of a CLOSE macro instruction for a data set on a direct access device. In the message text, 414-rc associates this message with system completion code 414 and with return code rc. Other fields in the message text are:

jjj

job name

sss

step name

ddn[-#]

DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)

ddd

device address

ser

volume serial number

dsn

data set name

The values of rc and their meanings are as follows:

Return

Code Meaning

04 A I/O error occurred writing a DSCB during execution of a CLOSE macro instruction.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: If an I/O error has occurred, a defective volume or device may be the cause. Save the output from the failing job to aid in the analysis of the problem.

Rerun the job specifying a different volume or device. If a scratch volume was being used when the I/O error occurred, request a different volume. If that does not solve the problem request a different device in the UNIT parameter of the DD statement. If a specific volume is needed, try requesting a different device in the UNIT parameter of the DD statement. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC213I 514-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of a CLOSE macro instruction. If the message text, 514-rc associates this

message with system completion code 514 and with return code rc. Other fields in the message text are:

jjj

job name

sss

step name

ddn[-#]

DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)

ddd

device address

ser

volume serial number

dsn

data set name

The values of rc and their meanings are as follows:

Return

Code Meaning

04 A I/O error occurred reading a JFCB during execution of a CLOSE macro instruction.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: Execute the job step again.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC214I 614-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of a CLOSE macro instruction for a data set on a direct access device. In the message text, 614-rc associates this message with system completion code 614 and with return code rc. Other fields in the message text are:

jjj

job name

sss

step name

ddn[-#]

DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)

ddd

device address

ser

volume serial number

dsn

data set name

The values of rc and their meanings are as follows:

Return

Code Meaning

04 A I/O error occurred writing a file mark for a data set on a direct access device during execution of a CLOSE macro instruction.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: If an I/O error has occurred, a defective volume or device may be the cause. Save the output from the failing job to aid in the analysis of the problem.

Rerun the job specifying a different volume or device. If a scratch volume was being used when the I/O error occurred, request a different volume. If that does not solve the problem request a different device in the UNIT parameter of the DD statement. If a specific volume is needed, try requesting a different device in the UNIT parameter of the DD statement. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC215I 714-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of a CLOSE macro instruction for a data set on magnetic tape. In the message text, 714-rc associates this message with system the message text are:

jjj
job name
sss
step name
ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
ddd
device address
ser
volume serial number
dsn
data set name

The values of rc and their meanings are as follows:

Return

Code	Meaning
04	An I/O error occurred writing trailer label 1 for a data set on magnetic tape during execution of CLOSE macro instruction.
08	An I/O error occurred writing trailer label 2 for a data set on magnetic tape.
0C	An I/O error occurred writing a tape mark during execution of a CLOSE macro instruction.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: If an I/O error has occurred, a defective volume or device may be the cause. Save the output from the failing job to aid in the analysis of the problem.

Rerun the job specifying a different volume or device. If a scratch volume was being used when the I/O error occurred, request a different volume. If that does not solve the problem request a different device in the UNIT parameter of the DD statement. If a specific volume is needed, try requesting a different device in the UNIT parameter of the DD statement. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC216I A14-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of a CLOSE macro instruction for a data set on a direct access device. In the message text, A14-rc associates this message with system completion code A14 and with return code rc. Other fields in the message text are:

jjj
job name
sss
step name
ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
ddd
device address
ser
volume serial number
dsn
data set name

The values of rc and their meanings are as follows:

Return

Code	Meaning
04	An I/O error occurred during execution of a CLOSE macro instruction attempting a partial release of space on a direct access device.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: If an I/O error has occurred, a defective volume or device may be the cause. Save the output from the failing job to aid in the analysis of the problem.

Rerun the job specifying a different volume or device. If a scratch volume was being used when the I/O error occurred, request a different volume. If that does not solve the problem, request a different device in the UNIT parameter of the DD statement. If a specific volume is needed, try requesting a different device in the UNIT parameter of the DD statement. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC217I B14-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of a CLOSE macro instruction for a partitioned data set opened for output to a member. In the message text, B14-rc associates this message with system completion code B14 and with return code rc. Other fields in the message text are:

jjj
job name
sss
step name
ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
ddd
device address
ser
volume serial number
dsn
data set name

The values of rc and their meanings are as follows:

Return

Code	Meaning
04	A duplicate name was found in the directory of a partitioned data set. The close routine attempted to add a member name to the directory using the STOW macro instruction, but a code of 4 was returned, indicating that the member already exists. Specify a different member name, or remove the old member name using the IEHPROGM utility, or specify DISP = OLD on the DD statement.
08	The close routine was unable to find a member of a partitioned data set. The close routine attempted to update the directory of a partitioned data set and replace a member name, but a code of 8 was returned, indicating that the member does not exist. Change the DD statement specifying DISP = MOD, which indicates that the specified member is to be added rather than replaced.
0C	The close routine attempted to update the directory of a partitioned data set; however, a code of 12 was returned by the STOW macro instruction, indicating that there is no space left in the directory. Execute the utility IEBCOPY to compress the data data set in place to release unused space in the directory, or copy the data set to a scratch volume, reallocate



space for the data set specifying more directory blocks, and then copy it back using IEBCOPY.

10 An I/O error occurred trying to update the directory of a partitioned data set.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: Probable user error unless an I/O error has occurred. Correct the errors causing abnormal termination as indicated by the return code in the message text. Then rerun the job.

If an I/O error has occurred, a defective volume or device may be the cause. Save the output from the failing job to aid in the analysis of the problem. Rerun the job specifying a different volume or device. If a scratch volume was being used when the I/O error occurred, request a different volume. If that does not solve the problem, request a different device in the UNIT parameter of the DD statement. If a specific volume is needed, try requesting a different device in the UNIT parameter of the DD statement. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC218I 117-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of a BSAM CLOSE macro instruction with a TYPE = T operand. In the message text, 117-rc associates this message with system completion code 117 and with return code rc. Other fields in the message text are:

jjj
job name

sss
step name

ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)

ddd
device address

ser
volume serial number

dsn
data set name

The values of rc and their meanings are as follows:

Return

Code Meaning

- 04 An I/O error occurred writing a file mark for a data set on a direct access device during execution of a CLOSE macro instruction with a TYPE = T operand.
- 08 A CLOSE macro instruction with a TYPE = T operand was issued for a data set that was opened with the options RDBACK and LEAVE or INOUT and REREAD. An I/O error occurred in tape positioning while performing a forward space file past a tape mark.
- 0C An I/O error occurred when writing the second tape mark following trailer labels during the execution of a CLOSE macro instruction with a TYPE = T operand.
- 10 An I/O error occurred in tape positioning during execution of a CLOSE macro instruction with a TYPE = T operand. A backspace file past the tape mark following trailer labels was being attempted.
- 14 An I/O error occurred in tape positioning during execution of a CLOSE macro instruction with a TYPE = T operand. The data set was opened with the options RDBACK and LEAVE or INOUT and REREAD.

- 18 An I/O error occurred in tape positioning during execution of a CLOSE macro instruction with TYPE = T operand. A forward space file was being performed past a tape mark preceding data for a data set with standard labels opened for RDBACK.
- 1C An I/O error occurred in tape positioning during execution of a CLOSE macro instruction with a TYPE = T operand. A forward space file was being performed past a tape mark preceding data for a data set with no labels opened for RDBACK.
- 20 An I/O error occurred in tape positioning during the execution of a CLOSE macro instruction with a TYPE = T operand for a data set with no labels opened for input, or a data set with standard labels opened for output.
- 24 An I/O error occurred in tape positioning during the execution of a CLOSE macro instruction with a TYPE = T operand. A forward space file past a tape mark preceding the data was being attempted.
- 28 An I/O error occurred in tape positioning during execution of a CLOSE macro instruction with a TYPE = T operand. A backspace file past the tape mark following data was being attempted for a data set opened with the options INPUT and LEAVE.
- 2C An I/O error occurred in tape positioning during the execution of a CLOSE macro instruction with a TYPE = T operand. A tape mark was written following the last data record. During this operation, end-of-volume condition was encountered. The close routine attempted to backspace file past the tape mark prior to calling EOVS, and encountered an I/O error.
- 30 An I/O error occurred in tape positioning during execution of a CLOSE macro instruction following user trailer label processing.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: If an I/O error has occurred, a defective volume or device may be the cause. Save the output from the failing job to aid in the analysis of the problem. Rerun the job specifying a different volume or device. If a scratch volume was being used when the I/O error occurred, request a different volume. If that does not solve the problem, request a different device in the UNIT parameter of the DD statement. If a specific volume is needed, try requesting a different device in the UNIT parameter of the DD statement.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC219I 217-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of a BSAM CLOSE macro instruction with a TYPE = T operand. In the message text, 217-rc associates this message with system completion code 217 and with return code rc. Other fields in the message text are:

jjj
job name

sss
step name

ddn[-#]
DD name (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)

ddd
device address

ser
volume serial number

dsn
data set name

The values of rc and their meanings are as follows:

Return

Code Meaning

04 An I/O error occurred reading the JFCB during execution of a CLOSE macro instruction with a TYPE = T operand.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: Execute the job step again.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC220I 317-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of a BSAM CLOSE macro instruction with a TYPE = T operand for a data set on a direct access device. In the message text, 317-rc associates this message with system completion code 317 and with return code rc. Other fields in the message text are:

jjj

job name

sss

step name

ddn[-#]

DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)

ddd

device address

ser

volume serial number

dsn

data set name

The values of rc and their meanings are as follows:

Return

Code Meaning

04 An I/O error occurred reading a DSCB during the execution of a CLOSE macro instruction with a TYPE = T operand.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: If an I/O error has occurred, a defective volume or device may be the cause. Save the output from the failing job to aid in the analysis of the problem.

Rerun the job specifying a different volume or device. If a scratch volume was being used when the I/O error occurred, request a different volume. If that does not solve the problem, request a different device in the UNIT parameter of the DD statement. If a specific volume is needed, try requesting a different device in the UNIT parameter of the DD statement. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC221I 417-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of a BSAM CLOSE macro instruction with a TYPE = T operand for a data set on a direct access device. In the message text, 417-rc associates this message with system completion code 417 and with return code rc. Other fields in the message text are:

jjj

job name

sss

step name

ddn[-#]

DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)

ddd

device address

ser

volume serial number

dsn

data set name

The values of rc and their meanings are as follows:

Return

Code Meaning

04 An I/O error occurred writing an updated DSCB during execution of a CLOSE macro instruction with a TYPE = T operand.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: If an I/O error has occurred, a defective volume or device may be the cause. Save the output from the failing job to aid in the analysis of the problem.

Rerun the job specifying a different volume or device. If a scratch volume was being used when the I/O error occurred, request a different volume. If that does not solve the problem, request a different device in the UNIT parameter of the DD statement. If a specific volume is needed, try requesting a different device in the UNIT parameter of the DD statement. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC222I 717-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of a BSAM CLOSE macro instruction with a TYPE = T operand for a data set on magnetic tape. In the message text, 717-rc associates this message with system completion code 717 and with return code rc. Other fields in the message text are:

jjj

job name

sss

step name

ddn[-#]

DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)

ddd

device address

ser

volume serial number

dsn

data set name

The values of rc and their meanings are as follows:

Return

Code Meaning

04 An I/O error occurred writing a tape mark following the last data record during execution of a CLOSE macro instruction with a TYPE = T operand.

08 An I/O error occurred during execution of a CLOSE macro instruction with a TYPE = T operand, writing trailer label 1 or trailer label 2.

0C An I/O error occurred writing the first tape mark following the trailer labels during execution of a CLOSE macro instruction with a TYPE = T operand.

10 An I/O error occurred reading trailer label 1 in order to update the DCB block count during execution of a CLOSE macro instruction with a TYPE = T operand.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: If an I/O error has occurred, a defective volume or device may be the cause. Save the output from the failing job to aid in the analysis of the problem.

Rerun the job specifying a different volume or device. If a scratch volume was being used when the I/O error occurred, request a different volume. If that does not solve the problem, request a different device in the UNIT parameter of the DD statement. If a specific volume is needed, try requesting a different device in the UNIT parameter of the DD statement. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC223I jji,sss,ddn[-#],ddd,ser,dsn

Explanation: A CLOSE macro instruction was issued for the specified data set. The system discovered an invalid control block. Either the data extent block (DEB) or the task control block (TCB) was incorrectly modified, or the DEB was not on the TCB DEB chain, or the protect key of the DEB in the DEBDEBID field was different from that of the TCBPKF field in the TCB. In the message text, the fields are:

jjj

job name

sss

step name

ddn[-#]

DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)

ddd

device address

ser

volume serial number

dsn

data set name

System Action: Processing is discontinued for the DCB in error. Other DCBs in the CLOSE parameter list will be processed.

Programmer Response: Probable user error. Correct any errors causing the control blocks to be incorrectly modified. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC225I rc,jjj,sss,ddn(-#),ddd,ser,dsn

Explanation: A CLOSE (TYPE = T) macro instruction was issued for the specified data set, but an invalid condition was encountered, indicated by the return code rc. The fields in the message text are:

jjj

job name

sss

step name

ddn(-#)

ddname followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.

ddd

device address

ser

volume serial number

dsn

data set name

The values of rc and their meanings are as follows:

Return

Code *Meaning*

00 The DCB parameter of the DD statement was not DSORG = PO or PS.

04 The DCB was opened for input to a member of a partitioned data set.

08 An input data set, with the CLOSE disposition of LEAVE, did not specify DSORG = PO or PS in the DCB.

0C Output processing was specified for a data set that did not specify a data set organization with DSORG = PO or PS in the DCB.

10 The reread option was specified for a data set that did not specify DSORG = PO or PS in the DCB.

System Action: Processing is discontinued for the DCB error. Other DCBs in the CLOSE (TYPE = T) parameter list will be processed normally.

Programmer Response: Probable user error. Consult OS/VS Data Management Macro Instructions, GC26-3784, correct the specification that is in error, then run the job again.

Problem Determination: Table I, items 1, 4, 15, 19, 25b, 29.

Catalog Management Messages

IEC301A {S JOB jji, STEP sss, DDNAME ddn [,CONC n]}
 {DSNAME dsn}

Explanation: S indicates that the data set referred to in the message text is security protected, and a password is required before the data set can be accessed.

If the message has the first format, a program is attempting to open the security protected data set defined in the DD statement whose data definition name is ddn; the data set is being opened by step sss of job jji. If the data set is part of a concatenated data set, CONC n appears in the message text to identify the concatenation number or the sequence position of the data set in question.

If the message has the second format, a program is attempting to scratch or rename the security protected data set.

Operator Response: If the indicated OPEN, SCRATCH, or RENAME function is authorized, enter REPLY xx,'yyyyyyyy', where yyyyyyy is the programmer supplied password for the data set referred to in the message text. The password can have a maximum of eight characters. For a data set that is part of a concatenation, the password entered must be the one supplied for concatenation number n. If the indicated function is not authorized or if no password was supplied, cancel the job.

If the program is attempting to scratch or rename the data set, a WRITE password must be supplied.

Checkpoint/Restart Messages

IEC400A M ddd,ser/dsn

Explanation: M indicates that a tape volume is to be mounted on device ddd for data set dsn. The ser is the six-digit serial number of the volume.

Operator Response: Mount the volume on the device. Then, ready the device.

IEC401A F ddd,ser/dsn

Explanation: F indicates that the volume on device ddd for output data set dsn is file protected; that is, its file protection ring is not inserted, so it can only be read. However, the volume is to be written on. The ser is the six-digit serial number of the volume.

System Action: The system rewinds and unloads the volume.
Operator Response: Insert a file protection ring in the volume, mount the volume, and ready the device.

IEC

IEC402D F ddd,ser/dsn

Explanation: F indicates that the volume on device ddd for input/output data set dsn is file protected; that is, its file protection ring is not inserted, so it can only be read. However, the volume is to be written on. The ser is the six-digit serial number of the volume.

Operator Response: If the volume should be file protected, enter REPLY xx,'U'.

If the volume must have a file protection ring, enter REPLY xx,'F'; the system will rewind and unload the volume. Then insert a file protection ring in the volume, mount the volume, and ready the device.

IEC403A M ddd,ser

Explanation: M indicates that a direct access volume is to be mounted on device ddd. If ddd is followed by a slash, the number after the slash is the bin number of a 2321 device. The ser is the six-digit serial number of the volume.

Operator Response: Mount the volume on the device. Then, ready the device.

Direct Access Device Space Management Messages

IEC601D M ddd,ser REPLY = SKIP VOL OR MOUNTING

Explanation: M indicates that a volume is to be mounted on device ddd, so that a data set can be scratched. The ser is the 6-digit serial number of the volume to be mounted.

Operator Response: If the volume can be mounted, enter REPLY xx,'MOUNTING'; then, mount the volume and ready the device. If the volume cannot be mounted but the job step is to continue, enter REPLY xx,'SKIP VOL'; the system will ignore the volume.

If the volume cannot be mounted and the job step must not continue unless the data set or volume is scratched, terminate the job step.

Tape Label Creation Messages

IEC701D M ddd, VOLUME TO BE LABELED ser

Explanation: M indicates that a volume is to be mounted on device ddd. If ser is a 6-digit serial number, a standard label containing the serial number will be written on the volume. If ser is absent, a nonstandard label will be written on the volume.

Operator Response: For the first appearance of this message mount a volume on device ddd, ready the device, and enter REPLY xx,'M'. The volume mounted should be a scratch volume, unless the programmer supplied a volume to be used. Inspect the tape for irregularities:

- If irregularities appear, remove the bad section of tape or, if the volume was a scratch volume, substitute another volume. Then, mount the correct or substituted volume, ready the device, and enter REPLY xx,'M'.
- If the irregularities are uncorrectable and the volume was supplied by the programmer, enter REPLY xx,'S'.
- If no irregularities are found, mount the tape volume again, ready the device, and enter REPLY xx,'M'.
- If only this message is repeated, enter REPLY xx,'S'. Report the message sequence to the programmer, asking him to check the program for improper recording characteristics. If the program is not at fault, a customer engineer should be called to check the tape drive.

If this message is repeated immediately after message IEC703I a label cannot be written on the volume because the volume is file protected:

- If the volume is to be labeled, insert a file protection ring in the volume, mount the volume, ready the device, and enter REPLY xx,'M'.
- If the volume is not to be labeled, demount the volume, mount a new scratch volume with a file protection ring, ready the device, and enter REPLY xx,'M'.
- If only this message is repeated, enter REPLY xx,'S'. Report the message sequence to the programmer.

Problem Determination: Table I, items 1, 2, 15, 28, 29.

IEC703I ddd, VOLUME IS FILE PROTECTED

Explanation: The volume on device ddd is file protected; that is, its file protection ring is not inserted, so it can only be read. A label cannot be written on the volume.

System Action: The system rewinds and unloads the volume. Immediately or in a short time, the system issues message IEC701D.

Operator Response: Respond as indicated for message IEC701D, which follows this message.

IEC704A L ddd

Explanation: L indicates that label information is required for the output tape volume mounted on device ddd.

System Action: The system will write a standard volume label containing information supplied by the operator.

Operator Response: Enter REPLY xx,'ser,yyyy' where ser is the one to six character serial number of the volume and yyyy consisting of one to ten characters specifying the owner's name or similar identification. The yyyy field may be omitted. The one to six character volume serial number may include special characters but not embedded blanks or commas. The one to ten characters of the owner identification is not so restricted.

If the tape volume is not to be used, enter REPLY xx,'M'.

IEC705I TAPE ON ddd, ser IS labtyp,den BPI

Explanation: A standard volume label has been created, rewritten, or destroyed on output tape mounted on device ddd. In the message text, ser is the serial number of the volume.

The volume has the type of label specified by labtyp: SL for standard label, NSL for nonstandard label, or NL for no label; the density is as specified by den.

Operator Response: At the end of the job, make any necessary changes to the contents label.

Problem Determination: Table I, items 1, 2, 15, 28, 29.

Btam/Qtam Messages

IEC801I lna THRESHOLD TRANS = nnn DC = nnn IR = nnn TO = nnn

Explanation: During QTAM or BTAM certain errors occurred before a specified transmission count was reached on a line. The errors are data check errors, intervention required errors, or non-text time-out errors.

In the message text, the fields are:

lna

Line address, in hexadecimal.

TRANS = nnn

Number of transmissions, in decimal, before an error threshold was reached.

DC = nnn

Number of data check errors, in decimal, in the above number of transmissions.

IR = nnn

Number of intervention required errors, in decimal, in the above number of transmissions.

TO = nnn

Number of non-text time-out errors, in decimal, in the above number of transmissions.

Operator Response: None.

**IEC802I Ina LINE TOTALS TRANS = nnnnnnnn DC = nnnnnn
IR = nnnnnn TO = nnnnnn**

Explanation: This message is produced, at the request of the user, to indicate total counts for a line being used in BTAM processing.

In the message text, the fields are:

Ina

Line address, in hexadecimal.

TRANS = nnnnnnnn

Total number of transmissions, in decimal.

DC = nnnnnn

Total number of data check errors, in decimal.

IR = nnnnnn

Total number of intervention required errors, in decimal.

TO = nnnnnn

Total number of non-text time-out errors, in decimal.

Operator Response: None.

**IEC804A Ina CONTROL UNIT NOT OPERATIONAL. REPLY
CONT OR POST**

Explanation: A not operational SIO condition occurred in a line during BTAM or QTAM processing. In the message text, Ina is the line address.

Operator Response: Make sure the control unit is operational. Enter one of the following replies:

- REPLY xx, 'CONT'. The system retries the condition. If the retry is successful, processing continues; if the retry is not successful, this message is issued again.
- REPLY xx, 'POST', for BTAM. The operation is posted comple-with-error and the not-operational SIO bit will be on in the DECERRST field of the data event control block (DECB).
- REPLY xx, 'POST', for QTAM. The system ignores the line until a STARTLN macro instruction is issued or sent.

If a reply is not entered before the requesting job is canceled, the system may enter wait state. If the problem recurs, call IBM for hardware support.

IEC805I I/O ERROR - CHECKPOINTS TERMINATED

Explanation: An uncorrectable input/output error occurred while writing the current checkpoint record in the checkpoint data set. The record could not be written.

System Action: Processing continues, but no checkpoint records are written.

Operator Response: Either allow the job to continue, or restart the job at the last checkpoint by reloading the program. If the job is restarted, processing will continue as usual and checkpoint records will be written as specified.

Problem Determination: Table I, items 1, 2, 3, 5a, 15, 29.

**IEC806I Ina, LINE UNAVAILABLE, ENDING STATUS NOT
RECEIVED**

Explanation: The error occurred during execution of the QTAM open line group. The line, Ina, failed to return ending status to commands within 30 seconds.

Operator Response: Check the control unit to determine whether the line is in CE mode. If the line is in CE mode, it should be taken out of that mode, ending status should be sent for that command, and the line should be restarted. To send ending status for that command, the customer engineer should return the following sequence:

Channel End
Device End
Unit Check
Equipment Check

To restart the line, the appropriate message must be sent to a QTAM message processing program. The message processing program will then issue a STARTLN macro instruction for that line. If the system has the operator control facility, a STARTLN operator control message for that line may be entered directly from the telecommunications control terminal. If the line is not in CE mode and the problem recurs, call IBM for hardware support.

IEC807I cuu ONLINE TEST xx yy tt nn id

Explanation: This message reports the results of an online test in which BTAM sends test messages to a remote computer or terminal, or in which BTAM sends a request-for-test message specifying a test type (X field) of 0. This message appears once for each online test, following transmission of all requested test messages.

In the message text, the fields are:

cuu

Address of the communication line (channel and unit).

xx

Test type specified in the request-for-test message.

yy

Number of test message transmissions requested, as specified by the Y field of the request-for-test message.

tt

Number of time-out errors that occurred during the test message transmissions.

nn

Number of NAK responses to BTAM-transmitted test messages.

id

Terminal identification sequence of the terminal to which the BTAM-transmitted test message or request-for-test message was sent, for multipoint terminals only.

Operator Response: None.

IEC808I cuu ONLINE TEST xx yy tt ll dd

Explanation: This message reports the results of an online test in which BTAM receives test messages from a remote computer or terminal. This message appears once for each online test, following receipt of all test messages from the remote computer or terminal.

In the message text, the fields are:

cuu

Address of the communication line (channel and unit).

xx

Test type specified in the request-for-test message received from the remote computer or terminal.

yy

Number of test message transmissions received from the remote computer or terminal.

tt

Number of time-out errors that occurred while receiving test messages.

ll

Number of lost-data errors that occurred while receiving test messages.

dd

Number of data checks that occurred while receiving test messages.

Operator Response: None.

IEC809I Ina CONTROL UNIT NOT OPERATIONAL

Explanation: This message indicates that a not operational SIO condition occurred in a line during BTAM or QTAM processing. In the message text, Ina is the line's address.
Operator Response: Reactivate the appropriate control unit.

```

IEC815I  { cuu tttt yy ERS z
          { cuu xx tttt THRESHLD
          { cuu xx tttt yy eeee zzzz yy eeee zzzz yy eeee zzzz
            yy eeee zzzz
          { cuu ww tttt eeeeee zzzz eeeeeee zzzz eeeeeee zzzz
            eeeeeee zzzz
  
```

Explanation: This message provides the results of a scan of the error file of an IBM 2715 Transmission Control Unit. The scan occurs when the error threshold for one of the area stations connected to the 2715 is exceeded (threshold value is eight) or when manually requested at the 2715, the 2740 terminal attached to the 2715, or the central system console. BTAM prints the message on the master console, the teleprocessing console, or the system maintenance console, depending on the routing code specified at the 2715.

In all four formats of the message text, cuu is the address in EBCDIC of the communications line (channel and unit), xx is the address in hexadecimal of the area station for which the error scan is reported, tttt is the time (0001 - 2400) when the error occurred, and ww is the address in hexadecimal of a particular adapter within the 2715. Fields appearing uniquely within a message format are described below.

The first format of the message is issued when five or more of the eight errors involved a particular one of the devices attached to the area station. In the message text, yy is the address in hexadecimal of the device for which the errors occurred, and z is the number of errors (from decimal 5 to 8) that occurred for the device.

The second format of the message indicates that the threshold value of eight has been reached for the area station whose address is xx, but that no one device attached to the station accounted for as many as five of the errors.

The third format of the message is issued twice whenever an error scan for a particular area station is manually requested at the 2715, the 2740 terminal attached to the 2715, or the central system console. The address of device yy for which the error data eeee was recorded at time zzzz is given four times in each message; the two messages together thus provide information about the eight most recent error occurrences for area station xx.

The fourth format of the message is issued twice whenever an error scan for a particular 2715 adapter is manually requested at the 2715, the 2740 terminal attached to the 2715, or the central system console. The error data eeeeeee for adapter ww recorded at time zzzz is given four times in each message; the two messages together thus provide information about the eight most recent error occurrences for adapter ww.
Operator Response: None.

**IEC900I INVALID ABEND CODE PASSED TO MODULE
xxxxxxx**

Explanation: The module xxxxxxx is an OPEN/CLOSE/EOV Problem Determination routine. It did not recognize the passed abnormal termination code, so it issued an Fxx abnormal termination code where xx =

- 13 for OPEN
- 14 for CLOSE
- 17 for CLOSE TYPE = T
- 37 for EOV.

Register 12 contains the abnormal termination code passed to the module.

System Action: The task is terminated.

Programmer Response: None.

Problem Determination: Table I, items 1, 4, 5a, 7b, 16, 29. Table II, Format 3.

**IEC901I UNABLE TO RECOVER DUE TO I/O ERR ON
JOBQUEUE**

Explanation: The error was encountered in OPEN/CLOSE/EOV and recovery was attempted. During the recovery attempt, an I/O error occurred reading or writing a JFCB extension block.
System Action: The job is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: Correct the errors causing recovery to be attempted. Then resubmit the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

**IEC950I 003-x 3525 ASSOCIATED DATA SET I/O SEQUENCE
ERROR**

Explanation: This is an explanatory message for the system completion code 003. A sequence I/O error has occurred for a 3525 reader punch. In the message text, x defines the nature of the error.

- If x is 1, the error occurred because of a READ I/O sequence error.
- If x is 2, the error occurred because of a PUNCH I/O sequence error.
- If x is 3, the error occurred because of a PRINT I/O sequence error.

System Action: The system terminates the task.

Programmer Response: Probable user error. Specify the I/O macro instructions in the proper sequence and rerun the job.

Problem Determination: Table I, items 1, 5a, 15, 16, 29.

**IEC951I 004 INVALID FORMAT CARD OR INVALID DEVICE
FOR OMR**

Explanation: Either the format card for Read Column Eliminate (RCE) or for Optical Mark Read (OMR) is invalid, or the device indicated with OMR is ineligible for OMR. Register 15 has the return code X'05.'

System Action: The system terminates the task.

Programmer Response: Probable user error. Verify the referenced fields and rerun the job.

Problem Determination: Table I, items 1, 5a, 15, 16, 29.

**IEC952I 004 CONFLICTING/INVALID DCB FUNC OR
RELATED PARAMETER**

Explanation: This is an explanatory message for system completion code 004. A conflicting or invalid DCB parameter (FUNC or related parameter) was specified. The contents of register 15 indicate the nature of the error:

Register 15 Contents in Hexadecimal	Explanation
01	An invalid DCB FUNC parameter was specified.
02	An invalid combination of the DCB FUNC parameter and CNTRL macro instruction was specified.
03	Conflicting associated data set access methods were specified.



04 An invalid DCB was specified with a 3505 or 3525.

System Action: The system terminates the task.

Programmer Response: Probable user error. Verify the referenced fields and rerun the job.

Problem Determination: Table I, items 1, 5a, 15, 16, 29.

IEC953I 004 DATA PROTECTION IMAGE NOT FOUND

Explanation: This is an explanatory message for the system

completion code 004. A data protection image was not found. This is indicated by a X'06' return code in register 15.

The image was not found for one of the following reasons:

1. It is not in the SYS1.IMAGELIB data set.
2. The volume containing SYS1.IMAGELIB is not mounted.
3. The SYS1.IMAGELIB data set is not cataloged.

System Action: The system terminates the task.

Programmer Response: Probable user error. Verify the referenced fields and rerun the job.

Problem Determination: Table I, items 1, 5a, 15, 16, 29.

Telecommunications Access Method Messages (IED)

Component Name	IED
Program Producing Message	TCAM (Telecommunications Access Method).
Audience and Where Produced	For operator: console. For system programmer: console or operator control station.
Message Format	xx IEDnnns xx Message identifier (absent, if operator reply not required). nnn Message serial number. s Type code: A Action; operator must perform a specified action. D Decision; operator must choose an alternative. I Information; no operator action is required.
Associated Publications	OS/VS TCAM Programmer's Guide, GC30-2034.
Problem Determination	Refer to fold-out Tables I and II at the back of this publication for problem determination instructions.



IED0011 TCAM JOB jji,sss,proc ADDRESS OF AVT addr

Explanation: A TCAM Message Control Program (MCP) identified in the message text by the job name jji, the step name sss, and the procedure step name proc, is being started. In the message text, addr is the absolute address of the beginning of the Address Vector Table (AVT).
System Action: Processing continues.
Programmer Response: None.
Operator Response: None required. This address may be used to alter the MCP from the console, if requested by the systems programmer.

IED002A SPECIFY TCAM PARAMETERS

Explanation: At least one of the following operands has been omitted from the INTRO macro instruction: STARTUP = (S =), KEYLEN = (K =), LNUNITS = (B =) or, if DISK = YES is coded in INTRO, CPB = (D =). If any of these operands is omitted from the INTRO macro instruction at assembly, it must be specified at execution time.
System Action: The system enters a wait state until the proper response is received. The message will then be repeated until the required keywords and 'U' are specified.
Programmer Response: If the operator enters REPLY xx,'U', the system will issue message IED004A, which identifies and asks for the missing keyword, unless 'U' is the missing keyword. Provide the required values according to the directions for dynamic specification of INTRO operands at INTRO execution time as provided in the OS/VS TCAM Programmer's Guide (GC30-2034).
Operator Response: Enter the values for the required operands that were omitted and for other INTRO operands according to the detailed directions for dynamic specification of INTRO operands that should have been provided by the system programmer. If the system programmer has not provided the information, contact him.
Problem Determination: Table I, items 2, 10, 29.

IED003A INVALID KEYWORD xxxx

Explanation: An invalid response keyword has been entered in a response to message IED002A. In the message text, xxxx represents the four characters of the unrecognizable keyword.
System Action: The system enters a wait state until the response is provided. All keywords to the right of the unidentified four characters are ignored.
Operator Response: Probable user error. Enter a new response, respecifying the keyword in error, if required. Since all operands to the right of the keyword in error are ignored, all such operands must be respecified.
Problem Determination: Table I, items 2, 10, 29.

IED004A REQUIRED PARAMETER MISSING. SPECIFY xxx

Explanation: A 'U' has been coded at the end of a response to message IED002A at execution time, indicating that all operands have been specified, but a value has not yet been specified for one or more of the following operands: STARTUP = , KEYLEN = , LNUNITS = or, if DISK = YES is coded, CPB = .
In the message text, xxx is the name of the missing operand.
System Action: The system enters a wait state until the response is received.
Programmer Response: Provide the operator with the necessary information to complete the response.
Operator Response: Probable user error. Enter a value for the specified operand in your response to this message. If the system programmer has not provided you with this information, contact him.
Problem Determination: Table I, items 2, 10, 29.

IED005A MSUNITS (M) SPECIFICATION NOT PERMITTED. CONTINUE RESPONSE

Explanation: Either MSUNITS = 0 was coded in the INTRO macro instruction or the MSUNITS = operand was omitted from the INTRO macro instruction. As a result, the operator

may not assign buffer units to a storage message queues data set in response to the message IED002A.

System Action: The system enters a wait state until the response is continued.

Programmer Response: If a message queues data set in storage is required, cancel the job, code a positive integer in the MSUNITS = operand of the INTRO macro instruction, and reassemble and reexecute the MCP.

Operator Response: Probable user error. Either continue with the response, or contact the system programmer for information.

Problem Determination: Table I, items 2, 10, 29.

IED006A INVALID OPERAND ON KEYWORD. RESPECIFY xxx

Explanation: The keyword indicated by xxx was coded with an incorrect value in the operator's response to the previous message. Either a decimal value was not within an acceptable range, a non-decimal integer was coded when a decimal value was needed, or a character string more than eight characters long was coded.

System Action: The system enters a wait state until the response is entered. All keywords to the right of the invalid keyword are ignored.

Programmer Response: Provide a valid value for the incorrect keyword.

Operator Response: Probable user error. Enter a new response, specifying (if required) the keyword with a valid value. Since all keywords to the right of the one in error are ignored, all such keywords should also be respecified. If you do not know what a valid value is, notify the systems programmer.

Problem Determination: Table I, items 2, 10, 29.

IED007I xxx IS AN ILLEGAL DESTINATION

Explanation: This message is generated whenever the terminal name table sort routine is unable to calculate a valid offset into the terminal name table after it has been sorted into collating sequence. The destination named in the message to be in an invitation, cascade or distribution list. A terminal which has been specified as an alternate destination by the ALTDEST = operand of a TERMINAL or TPROCESS macro instruction, or a station that does not have the capability to accept messages will also generate this message.

System Action: A return code of X'10' is passed to the initialization routine (IEDQOA) in register 15. IEDQOA does not call any of the other INTRO non-resident initialization routines but writes out the error message IED065I and returns to INTRO which passes control to the next instruction.

Programmer Response: Probable user error. The incorrect ALTDEST = operand, or the invalid cascade or distribution entry (indicated by xxx) should be corrected, and the Message Control Program reassembled and executed again.

Problem Determination: Table I, items 5a, 10, 29.

IED008I TCAM OPEN ERROR xxx = y IN DCB zzz descriptor

Explanation: In attempting to open the data set represented by the DD statement named zzz, TCAM's open executors encountered an error. xxx is a three-digit code indicating what type of data set was being opened when the error was encountered. Possible codes and their meanings are as follows:

Code	Explanation
040	The error occurred in opening a line group data set.
041	The error occurred in opening a message queues data set.

In the message text, y is a one-byte reason code naming the specific error that was encountered, and descriptor is a one-word abbreviation corresponding to y. If no asynchronous

error routine is provided, the value in register 0 following the ABEND will be meaningless. Possible values for y upon entry to user's asynchronous error routines are:

xxx-y		
Code in Console		
Reg. 0	Code	Meaning
01	040-1	There is not enough virtual storage to build a data extent block (DEB) for a line group data set.
02	040-2	Incompatible stations are specified in the same line group.
03	040-3	The device class field of the first unit control block (UCB) for a station in the line group specifies something other than telecommunications of graphics.
04	040-4	An unsupported control unit is specified for this line group.
05	040-5	The adapter-type and model-type bits in a unit control block (UCB) specify something other than those devices supported by TCAM.
06	040-6	The device characteristics specified for stations in this line group are not consistent with the devices specified on the DD statement.
07	040-7	1) There is not enough virtual storage to build a line control block (LCB) for a line group, 2) the PGFIX routine, to fix a line control block in real storage, failed, or 3) more than 32 lines were specified in a line group.
08	040-8	1) There is not enough virtual storage to build a station control block (SCB) for a switched line, or 2) the PGFIX routine, to fix a station control block in real storage, failed.
09	040-9	The binary synchronous interface specified in the data control block does not agree with that specified in a unit control block (UCB) for a line in this line group.
0A	041-1	An incorrect length is specified for the address vector table (AVT) in order to support switched message queuing. Disk queuing is specified in a DCB macro defining a message queues data set, but the INTRO macro that generates the AVT specified DISK = NO.
0B	041-2	The key length specified by the KEYLEN = operand of the INTRO macro does not agree with the key length specified in the IEDQDATA DD statement of the IEDQXA utility used to format the message queues data set.
0C	041-3	Dissimilar disk types are defined for message queuing.
0D	041-4	The OPTCT = operand for this DCB specifies something other than reusable or nonreusable queuing.
0E	041-5	A GETMAIN macro was issued by TCAM to obtain virtual storage to build a data extent block (DEB) for a message queues data set, but there was not enough virtual storage to satisfy the request.
0F	041-6	1) A GETMAIN macro was issued by TCAM to obtain virtual storage to build input/output blocks (IOBs) for a message queues data set, but there was not enough virtual storage to satisfy the request, or 2) the PGFIX routine failed while attempting to fix input/output blocks in real storage.

- 10 041-7 The message queues data set was allocated but not formatted correctly; the last record number written on a track is zero.
- 11 040-A No valid unit control block (UCB) addresses were found for this line group; all UCB addresses checked were zero.
- 12 040-B The sum of the header prefix size plus the number of bytes reserved in the first buffer of each message by the RESERVE = operand of the line group DCB macro is equal to, or greater than, the size of the buffers assigned to the lines in the group for input; thus, there is no room in the buffers for data.
- 13 040-C There is no data set for the type of queuing specified by the terminal table entry for a line or line group.
- 14 040-D The QUEUES = operand of a TERMINAL macro specified an unopened data set because each terminal entry for each line in this line group specified an unopened data set. The data set for this line group cannot be opened.
- 15 040-E A queue control block (QCB) was found that specified a relative line number of zero.
- 16 040-F The optional features specified in the unit control block (UCB) do not agree with those reflected in the device characteristics entry for this line.
- 17 040-G 1) There was not enough virtual storage to satisfy a GETMAIN request to build a TCAM control area in the subpool, or 2) the PGFIX routine failed while attempting to fix a TCAM assembled data area or load module in real storage.
- 17 041-G 1) There was not enough virtual storage to satisfy a GETMAIN request to build a TCAM control area in the subpool, or 2) the PGFIX routine failed while attempting to fix a TCAM assembled data area or load module in real storage.
- 18 040-H An invitation list is not specified for each line in the line group.

- 03 040-3 Check the addresses specified in the line group DD statements to be sure that the line addresses are valid.
- 04 040-4 Check the addresses specified in the line group DD statements to be sure that the line addresses are valid.
- 05 040-5 Check the addresses specified in the line group DD statements to be sure that the line addresses are valid.
- 06 040-6 Check the addresses specified in the line group DD statements to be sure that the line addresses are valid.
- 07 040-7 1) Specify a larger region size on the JOB statement for the MCP; 2) reduce the amount of fixed real storage specified for TCAM or 3) recode the line groups with 32 or less lines specified per line group.
- 08 040-8 1) Specify a larger region size on the JOB statement for the MCP; or 2) reduce the amount of fixed real storage specified for TCAM.
- 09 040-9 Check the type of interface specified in the INVLIST = operand of the DCB macro against the bit settings specified in the UCBs for each line in this line group.
- 0A 041-1 Specify DISK = YES in the INTRO macro, reassemble, and execute the job again.
- 0B 041-2 Reassemble the job with the proper length specified in the KEYLEN = operand of the INTRO macro and rerun the MCP, restart the TCAM job and override the KEYLEN = value by entering REPLY xx,'K = nn U' in response to message IED002A, or reformat the disk to the proper key length using the IEDQXA utility and rerun the MCP.
- 0C 041-3 Make sure that the disk types specified for message queuing are similar.
- 0D 041-4 Check and correct the contents of the DCB field.
- 0E 041-5 Specify a larger region size on the JOB statement for the MCP.
- 0F 041-6 1) Specify a larger region size on the JOB statement for the MCP, or 2) reduce the amount of fixed real storage specified for TCAM.
- 10 041-7 Reformat the data set using the IEDQXA utility and rerun the MCP job.
- 11 040-A Specify DD statements with valid UNIT = operands.
- 12 040-B Specify a larger buffer size for the input on the BUFSIZE = and BUFIN = operands of the line group DCB macro, reassemble, and rerun the job. (If a DD statement is used instead of specifying the RESERVE = operand, a reassembly is not required.)
- 13 040-C If virtual storage queuing is being used, verify that data sets were provided at INTRO execution time; if disk queuing is being used, ensure that the disk message queues data sets are opened before opening any line groups.
- 14 040-D If virtual storage queuing is be used, verify that data sets were provided at INTRO execution time. If disk queuing is being used, ensure that the disk message queues data sets are opened before opening any line groups.

System Action: The action taken depends upon the return code provided by the user's asynchronous error routine. If no error routine is provided, TCAM will terminate with the system completion code indicated in the message text by xxx.

Programmer Response: Probable user error. No action is required if the programmer has provided a user ABEND entry in the problem program exit list named by the EXLIST = operand of the DCB macro instruction whose DD statement is named zzz. The routine specified by the entry is given control from the TCAM open error handler routine. If no user routine is provided, TCAM issues and ABEND macro instruction for the MCP causing it to terminate abnormally with the system completion code indicated in the message text by xxx. Probable PGFIX error. If real storage required for TCAM fixed data area is greater than the real storage available, reduce the amount of fixed real storage specified for TCAM. Programmer response for probable values for y are:

xxx-y
Code in Console

- | Reg. 0 | Code | Programmer Response |
|--------|-------|---|
| 01 | 040-1 | Specify a larger region size on the JOB statement for the MCP. |
| 02 | 040-2 | Specify similar stations in the line group; reassemble and rerun the MCP. |

- 15 040-E Each TERMINAL macro must specify an unframed decimal integer between 1 and 255, inclusive (zero is invalid).
- 16 040-F Verify that all DD statements specify the correct type of UCB for the lines being opened.
- 17 040-G 1) Specify a larger region on the JOB statement for the MCP, or 2) reduce the amount of fixed real storage specified for TCAM.
- 17 041-G 1) Specify a larger region on the JOB statement for the MCP; or 2) reduce the amount of fixed real storage specified for TCAM.
- 18 040-H Either remove excessive DD cards or reassemble the MCP with an invitation list included for each line in the line group.

Problem Determination: Table I, items 1, 2, 5a, 10, 13, 29.

IED009I CHECKPOINT DISK ALLOCATION ERROR - DATA SET NOT OPENED

Explanation: The amount of disk space specified on the DD statement for the checkpoint data set is insufficient for minimum checkpoint requirements. The checkpoint data set is not opened.

System Action: The checkpoint facility is not available to the Message Control Program (MCP). Limited processing continues without checkpoint.

Programmer Response: Probable user error. If the checkpoint facility is required, terminate the MCP, reallocate the checkpoint data set giving it more space, and run the MCP job again with DISP = NEW coded in the DD statement for the checkpoint data set.

Problem Determination: Table I, items 5a, 10, 29.

IED010I CHECKPOINT - INSUFFICIENT CORE
 { DATA SET NOT OPEN xxx }
 { ENVIRON xxx }
 { INCIDENT xxx }
 { CKREQ name xxx }

Explanation: A GETMAIN macro instruction issued by a checkpoint routine cannot be satisfied because insufficient virtual storage is available. The xxx qualifier is the number of bytes of storage requested. For a checkpoint request record the name qualifier is the name of the process entry in the terminal table for which a checkpoint request record would have been taken had sufficient virtual storage been available. *System Action:* If the data set was not opened, processing will continue without the checkpoint facility. If the data set has been opened successfully, the checkpoint record indicated in the message was not taken, but the checkpoint facility is still active and will continue processing.

Programmer Response: Probable user error. Specify a larger region and do a TCAM warm restart. A warm restart uses the checkpoint facility to recreate the environment prior to a normal shutdown. The warm restart is specified as the STARTUP = W operand of the INTRO macro instruction or as a REPLY xx,'S = W,U' response to message IED002A.

Problem Determination: Obtain an ABEND dump of the Message Control Program taken immediately after the error message was issued.

IED011I SYSTEM INTERVAL CANNOT BE ALTERED

Explanation: A system interval of zero or no system interval at all was specified in the INTVAL = operand of the INTRO macro instruction or in the operator's response to a message issued at execution time, or the Time-Sharing Option (TSO) is

active and an operator command was entered to modify the value of the interval. The interval, a time during which polling and addressing are suspended on multipoint lines to polled stations, cannot be altered.

System Action: The requested action is not taken. Normal processing continues.

Operator Response: If the interval feature is required, close down the system. Either reassemble with a positive value specified in the INTVAL = operand of the INTRO macro instruction and restart, or restart the job with a non-zero value provided in the REPLY xx,'l = nn,U' response to message IED001A. If the interval feature is not required, refrain from entering the MODIFY id, INTERVAL = SYSTEM[,nn] operator commands.

Problem Determination: If a non-zero system interval is specified and this response is received, see Table I, items 2, 29.

Have a listing of the Message Control Program available. Have the console listing or the terminal listing for the device which entered the command available.

IED012I TSO SESSION ON LINE xxx COMMAND REJECTED

Explanation: An operator command to stop the line xxx has been entered, but a TSO session is currently in progress on the line.

System Action: The command is rejected. Normal processing continues.

Operator Response: None. Information only. If the line must still be stopped, wait until the TSO session has been completed and reenter the command.

Problem Determination: Table I, items 2, 10, 29. If TSO is not currently active, or if xxx in the response does not agree with the value specified in the command. Instruct the terminal user to retain the terminal listing or record what is currently displayed on the graphics device.

IED013I STOP REQUEST FOR SELF - VARY COMMAND REJECTED

Explanation: An operator command to stop a line was entered, but the line specified is associated with the station that entered the command.

System Action: The line is not stopped. Normal processing continues.

Operator Response: None.

IED014I TCAM ALREADY IN SYSTEM

Explanation: The TCAM initialization routine has detected the presence of another Message Control Program (MCP) in this system.

System Action: Initialization of the second MCP is terminated. A return code of X'04' is returned to the user immediately following the INTRO macro instruction in the MCP. If the MCP is not halted, results are unpredictable, and may cause the previous MCP to also become unpredictable.

Programmer Response: Close down the MCP currently in the system before attempting to restart the MCP for which this message is issued. An invalid procedure in closing down the previous MCP may leave a non-zero value in CVT+X'FO'. When TCAM starts, the word must be zero to avoid this error condition. Make sure there is no other TCAM MCP operating before attempting to set this word to zero.

Problem Determination: Table I, items 2, 29.

IED015I TCAM AP OPEN ERROR 043-x yyy zzz

Explanation: In attempting to open the application program data set represented by the DD statement named yyy in the

job named zzz, TCAM's Open Executors encountered an error. In the message text, x is a one-byte reason code naming the specific error that was encountered. Possible values for x and their explanations are:

- 01 An application program OPEN has been issued but there is no Message Control Program (MCP) active in the system.
- 02 The QNAME = parameter of a DD statement for an application program is not the name of a process entry in the terminal table, or the process entry named is inconsistent with the DCB macro instruction format.
- 03 A process entry named on a DD statement associated with an application program is currently being used by another data control block.
- 04 Insufficient virtual storage was available in the MCP to build internal control blocks.
- 05 Insufficient virtual storage was available in the application program area to build internal control blocks, or a PGFIX failure for the process entry work area occurred.

System Action: TCAM will terminate the application program with a system completion code of 043.

Operator Response: Report this message to the system programmer.

Programmer Response: The possible values of x and their appropriate responses are:

- 01 Verify that an MCP is active before attempting to start an application program.
- 02,03 Recode the QNAME = parameter specifying the name of a valid process entry.
- 04 Specify a larger region size in the JOB statement for the MCP.
- 05 Specifying a larger region size in the JOB statement for the application program or restart the system, specifying a larger system queue space.

Problem Determination: Table I, items 2, 10, 29.

IED016I STATION xxx NOT FOUND

Explanation: An operator command referring to a station named xxx was entered, but xxx is not an entry in the TCAM terminal table.

System Action: The action requested by the command is not taken. Normal processing continues.

Operator Response: Verify the spelling of the station name. Remember that lower-case characters entered from a station other than the system console are not generally equivalent to upper case characters. Respecify the command.

Problem Determination: If the station name is correct, and the response is still received, see Table I, items 2, 10, 29. Instruct the terminal user to retain the terminal listing or record what is currently displayed on the graphics device.

IED017I LINE xxx NOT OPEN

Explanation: An operator command referring to a line named xxx is entered, but the line is either not open or has been opened idle.

System Action: The requested action is not taken. Normal processing continues.

Operator Response: Verify that the line referred to is open and active. Reenter the command. If the line is open but inactive, it may be activated with a VARY (line), ONTP operator command before reentering the command which provided this response.

Problem Determination: Table I, items 2, 10, 29. Instruct the terminal user to retain the terminal listing or record what is currently displayed on the graphics device.

IED018I xxx COMMAND INVALID

Explanation: An operator command is entered, and a field in the operand list is incorrectly formatted, or required operands are missing, or operands are in the incorrect order. In the message text, xxx is the verb of the command in error.

System Action: The requested action is not taken. Normal processing continues.

Operator Response: Check the required format of the operator command and correct the operand in error. Respecify the command.

Problem Determination: Table I, items 2, 10, 29. Instruct the terminal user to retain the terminal listing or record what is currently displayed on the graphics device.

IED019I xxx ALREADY STARTED

Explanation: An operator command to start the line or station named by xxx is entered. The line or station is already active.

System Action: The command is ignored and normal processing continues.

Operator Response: None.

IED020I xxx STARTED

Explanation: An operator command to start the line or station named xxx is entered. The line or station is started, and the message is a confirmation of the action taken.

System Action: The line or station is started. Normal processing continues.

Operator Response: None.

IED021I AUTO POLL STARTED FOR xxx

Explanation: An operator command to start autopolling on the line named xxx was entered. This response confirms that the action was taken.

System Action: Autopolling begins for the line named xxx. Normal processing continues.

Operator Response: None.

IED022I AUTO POLL ALREADY STARTED FOR xxx

Explanation: A request to start autopolling on the line named xxx was entered. The line is already being autopollled.

System Action: Normal processing continues.

Operator Response: None.

IED023I TRACE STARTED FOR xxx

Explanation: An operator command to start TCAM's line I/O interrupt trace was entered for the line named xxx. This message confirms that the action has been taken. The line I/O interrupt trace is a sequential recording in virtual storage of I/O interrupts on a line.

System Action: I/O trace is started on the line named xxx. Normal processing continues.

Operator Response: None.

IED024I TRACE ALREADY STARTED FOR xxx

Explanation: An operator command to start TCAM's line I/O interrupt trace for the line named xxx was entered, but I/O trace was already active for this line.

System Action: Normal processing continues.

Operator Response: None.

IED025I xxx ALREADY STOPPED

Explanation: An operator command to stop line or station xxx is entered. This line or station is not currently active.

System Action: Normal processing continues.

Operator Response: None.

IED0261 xxx STOPPED

Explanation: An operator command to stop the line or station named xxx is entered. The line or station is stopped. This message confirms the action taken.

System Action: The line or station stops. Normal processing continues.

Operator Response: None.

IED0271 AUTO POLL STOPPED FOR xxx

Explanation: A request to stop autopolling on the line named xxx was entered. This message confirms that autopolling has been stopped.

System Action: Autopolling stops on the line. Processing continues.

Operator Response: None.

IED0281 AUTO POLL ALREADY STOPPED FOR xxx

Explanation: An operator command to stop autopolling on the line named xxx was entered. Autopolling on the line is not in progress at this time.

System Action: Processing continues.

Operator Response: None.

IED0291 TRACE STOPPED FOR xxx

Explanation: An operator command to stop line I/O interrupt trace for the line named xxx was entered. This response confirms that tracing is stopped.

System Action: Line I/O trace is stopped on the line. Processing continues.

Operator Response: None.

IED0301 TRACE ALREADY STOPPED FOR xxx

Explanation: An operator command to stop line I/O interrupt trace on the line named xxx is entered. Line I/O trace is not currently active on this line.

System Action: Processing continues.

Operator Response: None.

**IED0311 xxx QUEUE SIZE = yyy QUEETYP = bb,
STATUS = zzz,...PRIORITY = aaa,...**

Explanation: An operator command to display the queue for the station named xxx is entered. This message displays the fields of the queue. In the message text, yy is the number of messages currently on the queue; zzz is the equivalent of the status bits currently on; aaa represents the priority levels for the priority queues associated with the master queue for the station; and bb is the queuing type for this queue.

System Action: Processing continues.

Operator Response: None.

IED0321 xxx LNSTAT = zzz,...ERR = aaa,...

Explanation: An operator command to display the status of the line named xxx is entered. In the message text, zzz is the equivalent of the status bits currently on in the line control block, and aaa represents the equivalent of the bits currently on in the message error record for the line.

System Action: Processing continues.

Operator Response: None.

**IED0331 xxx STATUS = yyy,...INTENSE = zz IN-SEQ = aaa
OUT-SEQ = bbb**

Explanation: An operator command to display the fields of the entry for the station named xxx is entered. In the message text, yyy represents the equivalents of the status bytes of the entry, zz is the setting of the error recording field, and aaa

and bbb are the input and output sequence numbers, respectively.

System Action: Processing continues.

Operator Response: None.

IED0341 xxx HAS NO yyy OPTION

Explanation: An operator command to display or modify the contents of the option field named yyy for the station named xxx is entered. No option field named yyy exists for this station.

System Action: The requested action is not taken. Processing continues.

Programmer Response: Verify that the option named yyy is spelled correctly and is defined for the station named xxx. Reenter the command.

Problem Determination: If the option field named by yyy exists for the station named xxx, and the message recurs see Table I, items 2, 10, 29. Instruct the terminal user to retain the terminal listing or record what is currently displayed on the graphics device.

IED0351 xxx OPTION yyy = zzz

Explanation: An operator command to display the contents of the option field named yyy for the station xxx is entered. In the message text zzz represents the requested contents.

System Action: Processing continues.

Operator Response: None.

IED0361 xxx ACTIVE = yyy,...

Explanation: An operator command to display the list of active stations associated with the line named xxx is entered. In the message text, yyy represents the entries which meet this requirement.

System Action: Processing continues.

Operator Response: None.

IED0371 xxx INACTIVE = yyy,...

Explanation: An operator command to display the list of inactive stations associated with the line named xxx is entered. In the message text, yyy represents the names of the entries which meet this requirement.

System Action: Processing continues.

Operator Response: None.

IED0381 xxx IS ON LINE yyy zzz aaa

Explanation: An operator command to display the line information associated with the station named xxx is entered. In the message text, yyy is the dname of the line on which the station is an entry, zzz is the relative line number and aaa is the unit control block identification (the hardware address) of the line associated with the station.

System Action: Processing continues.

Operator Response: None.

IED0391 NO STATIONS INTERCEPTED

Explanation: An operator command requesting the display of the list of all currently intercepted (held) stations in the system is entered. No stations are currently being held.

System Action: Processing continues.

Operator Response: None.

IED0401 INTERCEPTED STATIONS = xxx,...

Explanation: An operator command requesting display of the list of all stations which are currently intercepted (held) is

entered. In the message text, xxx represents the name of the stations which meet this requirement.

System Action: Processing continues.

Operator Response: None.

IED0411 PRIMARY = xxx

Explanation: An operator command requesting display of the name of the current primary operator control station is entered. In the message text, xxx is the name of the current primary control station.

An operator command requesting that the station named xxx be made the primary operator control station is entered. This response confirms that the action was taken.

System Action: Processing continues. If the command entered was MODIFY id,PRIMARY = xxx, the named station is made the primary operator control station.

Operator Response: Retry the command.

IED0421 xxx ALREADY PRIMARY

Explanation: An operator command requesting that the station named xxx be made the primary operator control station was entered, but xxx is already the primary operator control station.

System Action: Processing continues.

Operator Response: None.

IED0431 SECONDARY = xxx,...

Explanation: An operator command requesting display of the list of all secondary operator control stations is entered. In the message text, xxx represents the names of all entries which meet this requirement. The system console (SYSCON) will not be listed as a secondary operator control station unless there are no other secondary stations. If the primary operator control station is not the system console, it will be listed as a secondary station.

System Action: Processing continues.

Operator Response: None.

IED0441 xxx NOT ELIGIBLE FOR PRIMARY

Explanation: An operator command requesting that the station named xxx be made the primary operator control station was entered, but xxx is not eligible to be made the primary (i.e., it is not defined as a secondary operator control station).

System Action: The primary operator control station remains unchanged. Processing continues.

Operator Response: Retry the command.

Problem Determination: If the station is a valid secondary operator control station, see Table I, items 2, 10, 29. Save the terminal listing for the device which entered the command available.

IED0451 SYSTEM INTERVAL ALREADY ACTIVE

Explanation: An operator command to activate the system interval is entered, but a previous request has already been honored.

System Action: Processing continues. The system interval is being activated already.

Operator Response: None.

IED0461 LINE FOR xxx IS OUTPUT ONLY STATION

Explanation: An operator command to start or stop a terminal for entering messages is received, but the line has no capability to enter messages. In the message text, xxx is the name of the station to be started or stopped.

System Action: The requested action is not taken. Processing continues.

Operator Response: Retry the command.

Problem Determination: If the station named xxx in the response is not an output only station or is not identical to the named specified in the command, see Table I, items 2, 29. Instruct the terminal user to retain the terminal listing or record what is currently displayed on the graphics device.

IED0471 SYSTEM INTERVAL IS { xxx ACTIVE }

Explanation: If the message text includes xxx, an operator request to change the system interval has been entered and the response (this message) confirms that the requested action has been taken. If the message text contains ACTIVE, an operator request to start or stop a line group has been entered but the system interval is active, the message indicates that the request is rejected.

System Action: The value of the system interval has been changed to xxx, or the command has been rejected.

Operator Response: None.

IED0481 POLLING DELAY FOR xxx IS yyy

Explanation: An operator command to change the polling interval for the line on which the station named xxx is a member to a new value of yyy is entered. This message verifies that the requested action is taken.

System Action: The polling delay for the line group on which the named station is a member is changed to yyy. Processing continues.

Operator Response: None.

IED0491 OLT CONTROLS LINE xxx COMMAND REJECTED

Explanation: A command to start or stop a line was entered, but the line is currently controlled by the Online Test (OLT) feature.

System Action: The requested function is not performed. Processing continues.

Operator Response: Refrain from attempting to start or stop the line until it is freed for use by OLT.

Problem Determination: If the line named by xxx is not identical to that specified in the command, or if online test is not active in the system, see Table I, items 2, 10, 29. Save the terminal listing for the device which entered the command.

IED0501 xxx OPTION yyy MODIFIED

Explanation: An operator command to modify the contents of the option field named yyy associated with the station named xxx is entered. This message confirms that the requested action is taken.

System Action: The option field is modified as requested. Processing continues.

IED0511 xxx SET FOR HOLD, SEQ-OUT = yyy

Explanation: An operator command to intercept (hold) the station named xxx is entered. This message confirms that the action is taken. In the message text, yyy is the output sequence number associated with the station at the time the station is intercepted.

System Action: The named station is intercepted. Processing continues.

Operator Response: None.

IED0521 xxx ALREADY SET FOR HOLD

Explanation: An operator command to hold the station named xxx was entered, but the station is already intercepted.

System Action: The requested action is not taken. Processing continues.



Operator Response: Retry the command.

IED053I xxx ALREADY RELEASED

Explanation: An operator command to release the station named xxx is entered. The station is already released.

System Action: The requested action is not taken. Processing continues.

Operator Response: None.

IED054I xxx RELEASED, SEQ-OUT = yyy

Explanation: An operator command to release the station named xxx is entered. This message confirms that the station is released. In the message test, yyy is the sequence number for output currently associated with the station.

System Action: The station named xxx is released. Processing continues.

Operator Response: None.

IED055I I/O TRACE CANNOT BE ALTERED

Explanation: An operator command to start or stop the TCAM line I/O interrupt trace facility was entered, but there is no trace table available into which entries can be made.

System Action: The requested action is not taken. Processing continues.

Operator Response: If the trace feature is required, close down the system and restart; when message IED002A is issued, enter REPLY xx,'T = nn,U,' where nn is a non-zero value. Otherwise, refrain from attempting to start or stop the trace facility.

Problem Determination: If a non-zero value is specified for trace and the message recurs, see Table I, items 2, 10, 29. Instruct the terminal user to retain the terminal listing or record what is currently displayed on the graphics device.

IED056I xxx OPTION yyy DATA FORMAT INVALID

Explanation: An operator command to modify the contents of the option field named yyy associated with the station named xxx is entered, but the data format specified in the command differs from the definition of the option field format.

System Action: The option field is not modified. Processing continues.

Operator Response: Verify that the type specified in defining the option matches that specified in the command. Respecify the command.

Problem Determination: If the types are identical and the problem recurs, or if the station named xxx or the option named yyy in the response do not agree with the corresponding values in the command, see Table I, items 2, 10, 29. Instruct the terminal user to retain the terminal listing or record what is currently displayed on the graphics device.

IED057I xxx NOT CAPABLE OF AUTOPOLL

Explanation: An operator command to start or stop autopolling on the line named xxx is entered, but the line is not capable of being autopollled (per its unit control block).

System Action: The requested action is not taken. Processing continues.

Operator Response: None.

IED058I xxx SENSE COUNT = yy SETTING = zz

Explanation: An operator command to modify the setting of the sense information for the station or line named by xxx is entered. yy is the requested sense count and zz is the requested sense type. This message confirms that the requested action is taken.

System Action: Sense information is modified for the station or line named. Processing continues.

Operator Response: Retry the command.

Problem Determination: If the line or station named xxx, the sense count, or the setting in the response do not agree with the corresponding values in the command, see Table I, items 2, 8, 10, 29. Instruct the terminal user to retain the terminal listing or record what is currently displayed on the graphics device.

IED059I xxx LIST STATUS = zzz,...

Explanation: An operator command to display the status of the invitation list for the line named xxx is entered. In the message text, zzz represents the equivalents of the status information bits.

System Action: Processing continues.

Operator Response: None.

IED060I xxx CANNOT BE HELD

Explanation: An operator command to hold the station named xxx is entered, but the station is not capable of being held (for instance, it is on a line which is not open or has been opened idle, or no HOLD macro has been coded in the Message Control Program).

System Action: The requested action is not taken. Processing continues.

Operator Response: None.

IED061I POLLING DELAY FOR xxx CANNOT BE ALTERED

Explanation: An operator command to modify the polling interval for the line associated with the station named xxx is entered, but the line is a switched (dial) line.

System Action: The requested action is not taken. Processing continues.

Operator Response: None.

IED062I xxx OPTION yyy CANNOT ACCEPT SPECIFIED DATA

Explanation: An operator command to modify the contents of the option field named yyy associated with the station named xxx is entered, but the data to replace the current setting of the option field is greater in length than the field.

System Action: The requested action is not taken. Processing continues.

Operator Response: Verify that the data length defining the option is not less than that specified in the command. Reenter the corrected command.

Problem Determination: If the replacement data will fit in the option field and the problem recurs, or if the station named xxx or the option named yyy in the response do not agree with the corresponding values in the command, see Table I, items 2, 29. Instruct the terminal user to retain the terminal listing or record what is currently displayed on the graphics device.

IED063I CLOSEDOWN IN PROGRESS - [yyy] COMMAND REJECTED

Explanation: System closedown is in progress. All further operator commands will be rejected.

System Action: The requested action is not taken. System closedown continues.

Operator Response: Refrain from entering TCAM operator commands.

IED064I LINE addr CONTROL UNIT NOT OPERATIONAL

Explanation: The Transmission Control Unit (TCU) to which the specified line is connected is not operational. The line is not immediately available for message transmission.

System Action: Processing continues, but stations on the line named by addr cannot be used for message transmission.
Operator Response: Probable user error. The TCAM job that is being started may be cancelled and restarted after the control unit is made operational, or after the TCU is made operational this line may be activated by entering VARY (line),ONTP. If the control unit is online and the problem recurs, see Table I, item 30.

IED065I INITIALIZATION ERROR xxx

Explanation: The non-resident initialization routines have returned a decimal return code, represented in the message text by xxxx, to the INTRO macro instruction. This code is passed on to the user's next instruction by the INTRO macro instruction. The values of xxxx and their meanings are:

- 0004 The Message Control Program (MCP) initialization routine has detected the presence of another MCP in this system.
- 0008 Sufficient virtual storage was not available to satisfy a GETMAIN request in one of the non-resident initialization routines.
- 0012 Sufficient virtual storage was not available to satisfy a GETMAIN request in one of the non-resident initialization routines.
- 0016 A terminal definition error. The module has found one or more incorrectly specified TERMINAL macro instructions, while sorting the terminal name table.
- 0020 One of the following errors in defining the primary operator control terminal:
 - a) The terminal defined as the primary operator terminal could not be found in the terminal name table.
 - b) The primary operator control terminal did not have send and receive capabilities.
 - c) The primary operator control terminal was not defined as being a possible secondary operator control terminal.
- 0024 An error occurred while sorting the device ID table for a concentrator terminal. One of the following errors occurred:
 - a) The terminal-name table offset in the device ID table was not found in the offset table.
 - b) The device-dependent fields of the terminal entry, pointed to by the device ID entry did not indicate a concentrator or attached terminal.

System Action: Initialization of the MCP is terminated. The error code is returned to the user in register 15 by the INTRO macro instruction. If the MCP is not halted when INTRO's return code is non-zero, results are unpredictable.

Programmer Response: If xxxx is 0008 or 0012, either increase the region size, or specify smaller optional features. If xxxx is 0004, close down the MCP currently in the system before attempting to restart the MCP for which this message is issued. If xxxx is 0016 or 0020, verify that the terminal table entries are correct in the assembly, close down the MCP currently in the system, and reassemble and restart the job with the corrected entries.

Operator Response: Contact the system programmer.

Problem Determination: Table I, items 5a, 10, 29.

IED067I TCAM INITIALIZATION BEGUN

Explanation: The parameters on the IEDQDATA DD statement have been examined and found satisfactory. Formatting of the message queues data set by the IEDQXA utility has begun.

System Action: Processing continues.

Programmer Response: None. Information only.

Operator Response: None. Information only.

IED068I UNABLE TO OPEN IEDQDATA

Explanation: An attempt has been made to format a message queues data set on disk by the IEDQXA utility program, but the IEDQDATA DD statement for this utility is missing. This message may be due to a possible error while attempting to read the JFCB for the IEDQDATA DD statement.

System Action: The IEDQXA utility abnormally terminates with an error code of 20 in register 15.

Programmer Response: Probable user error. Supply the missing DD statement and resubmit the initialization job. Have a listing of the utility JCL available before calling IBM for programming support.

Operator Response: Contact the system programmer.

IED069I INVALID KEYLEN FOR IEDQDATA

Explanation: Either the DCB = operand of the IEDQDATA DD statement for the IEDQXA formatting utility program has been omitted, or DCB = KEYLEN = integer has been coded on this DD statement and the integer is less than 31.

System Action: The IEDQXA utility abnormally terminates with a return code of 8 in register 15.

Programmer Response: Probable user error. Supply a correct IEDQDATA DD statement and resubmit the initialization job. If the problem recurs, have a listing of the utility JCL available before calling IBM for programming support.

Operator Response: Contact the system programmer.

IED070I IEDQDATA DOES NOT SPECIFY CONTIG SPACE IN CYLINDERS

Explanation: The SPACE = keyword on the IEDQDATA DD statement for the IEDQXA disk-initialization utility has specified CYL but not CONTIG, or CONTIG but not CYL, or neither. The following is an example of a properly coded SPACE = parameter:

```
//IEDQDATA DD (other operands),SPACE =  
(CYL,(2,2),,CONTIG)
```

System Action: The IEDQXA utility abnormally terminates with a return code of 16.

Programmer Response: Probable user error. Correct the SPACE = parameter on the IEDQDATA DD statement and resubmit the initialization job. If the problem recurs, have a listing of the utility JCL available before calling IBM for programming support.

Operator Response: Contact the system programmer.

IED071I UNEQUAL PRIMARY AND SECONDARY EXTENTS ON IEDQDATA

Explanation: The SPACE = keyword on the IEDQDATA DD statement for the IEDQXA disk-initialization utility does not specify a number of cylinders for secondary allocation equal to the number of cylinders specified for primary allocation; TCAM requires that the primary and secondary allocation be equal.

System Action: The IEDQXA utility abnormally terminates with a return code of 16 in register 15.

Programmer Response: Probable user error. Respecify the SPACE = parameter of the IEDQDATA DD statement so that the primary and secondary allocation are equal, and resubmit the initialization job. Have a listing of the utility JCL available before calling IBM for programming support.

Operator Response: Contact the system programmer.

IED072I I/O ERROR ON IEDQDATA

Explanation: An I/O error from which recovery cannot be made has occurred during an attempt to format a message queues data set by means of the IEDQXA utility.

System Action: Initialization is terminated with a return code of 12 in register 15. The data set is not completely formatted.

Programmer Response: Use the IEHPROGM system utility to scratch the data set, and resubmit the initialization job. If possible, try to avoid the allocation of the same area, as it probably contains a bad track.

Operator Response: Start TCAM only if it does not require the message queue data set defined by the IEQDATA DD statement in the message text. Otherwise, contact the system programmer. If the problem recurs, use the IBCDASDI independent utility to assign alternates for defective tracks on the volume being used.

IED074I TCAM INITIALIZATION COMPLETE

Explanation: A message queues data set on disk has been completely formatted by the IEDQXA utility program, and is ready for use by a TCAM Message Control Program.

System Action: Normal end of job.

Operator Response: None. Information only.

IED075I END OF EXTENT. RECORD COUNT IS rrrrrrrr, TIME IS nnnn SEC

Explanation: One extent (volume) of a message queues data set residing on disk has been formatted by the IEDQXA utility program. The record count, indicated by xxx, is the cumulative total. That is, xxx is the total number of records formatted thus far in the entire data set, and not just in this one extent.

rrrrrrr = cumulative record count

nnnn = cumulative elapsed time

System Action: Processing continues.

Operator Response: None. Information only.

IED076I TCAM NON-REUSABLE DISK THRESHOLD CLOSEDOWN

Explanation: The message queues data set located on nonreusable disk has received enough messages so that the percentage of the data set area on disk specified by the THRESH = operand of the DCB macro instruction for the data set has been exceeded.

System Action: The system begins a flush closedown of the TCAM MCP. A flush closedown sends all queued messages to their destinations before closing.

Operator Response: Contact the system programmer.

Programmer Response: Reformat the non-reusable disk message queue data set with the IEDQXA utility, and start the job with S = C coded for the INTRO macro instruction. If this message is followed by a system completion code 045 with a user code of 001, the THRESH = value specified was too high, and register 6 points to a CPB.

Problem Determination: If the value in CPB+X'2D' (3 bytes in length) greatly exceeds the total number of records formatted in the non-reusable disk data set, check Table I, items 5a, 10, 29.

IED077I xxx OPTION yyy DATA CHARACTER INVALID

Explanation: An operator command to modify the contents of the option field named yyy associated with the station named xxx is entered, but the contents of the modification data do not agree with the framing characters surrounding the data.

System Action: The requested action is not taken. Processing continues.

Operator Response: Verify that the data specified within the framing characters is invalid for the framing characters used. Reenter the correct command.

Problem Determination: If the data is valid and the problem recurs, or if the station named xxx or the option named yyy in

the response do not agree with the corresponding values in the command, check Table I, items 2, 10, 29. Instruct the terminal user to retain the terminal listing or record what is currently displayed on the graphics device.

IED078I DLQ TERM ERROR

Explanation: The station named in the DLQ = operand of the INTRO macro is not eligible to be a dead-letter queue, since it is a TSO station.

System Action: The terminal number of the terminal defined as the dead-letter queue is not stored in the address vector table (AVT) and normal processing continues.

Programmer Response: Probable user error. If no action is taken, the dead-letter queue is not defined for this Message Control Program (MCP). If a dead-letter queue is desired, terminate the job, specify a valid station for the

DLQ = operand of INTRO (either by recoding INTRO and re-assembling, or by entering REPLY xx,'Q = name,U' to message IED002A at execution time) and resubmit the job.

Problem Determination: Table I, items 5a, 10, 29.

IED079I ENDING STATUS NOT RECEIVED FROM LINE addr-LINE UNAVAILABLE

Explanation: The Transmission Control Unit to which this line is connected is not operational. An interrupt indicating successful completion of the initial channel program has not occurred for this line, and the line is not available for sending or receiving.

System Action: The error message is written to the console and the next line in the line group is checked to see if the initial channel program has completed. If it has not, the error message is written again.

Operator Response: Attempt to start the line by entering VARY (addr),ONTP.

Problem Determination: Table I, item 30.

IED080I START OF TCAM SYSTEM DELAY

Explanation: Someone has entered MODIFY id,INTERVAL = SYSTEM which activated the system interval.

System Action: Polling and addressing on multipoint lines are suspended for the duration of the interval currently defined for the system. Switched (dial) lines are not affected. If there are no dial lines in the system, this message will be followed by what seems to be a system WAIT state. At the end of the interval, operations will automatically resume.

Operator Response: None. At the end of the system interval, normal operations will resume. Changing the length of the delay interval with an operator command will not affect this delay, only subsequent ones. TCAM may be stopped or cancelled during a system delay.

IED081I END OF TCAM SYSTEM DELAY

Explanation: The system interval has expired.

System Action: The Message Control Program is resuming normal operations.

Operator Response: None. Information only.

IED082I CHECKPOINT DISK ERROR -- DATA SET NOT OPENED

Explanation: Either the control record for the checkpoint data set could not be read during a restart, or none of the environment records could be read during a restart. As a result, the checkpoint data set is not open.

System Action: The checkpoint data set is not opened, the environment is not reconstructed, and the checkpoint facility is not available to the Message Control Program. Limited processing continues.

IED094I CORE REQUESTED FOR ON-LINE TEST NOT AVAILABLE

Explanation: The amount of virtual storage requested by the OLTEST = operand of the INTRO macro instruction is not available. However, the minimum amount of virtual storage required to run one on-line test is available.

System Action: Only one on-line test may be run at a time. Limited processing continues.

Programmer Response: Probable user error. If more than one on-line test is to be run simultaneously, close down the Message Control Program (MCP) and rerun with a larger region specified.

Problem Determination: Table I, items 10, 29.

IED095I MODIFY OLT REJECTED - OLT NOT ACTIVE

Explanation: The request for an on-line test (OLT) is rejected because the subtask that handles the requests has either terminated or was never activated (because OLTEST = 0 (O = 0) was specified in the INTRO macro).

System Action: The command is rejected. Normal processing continues.

Operator Response: Close down the TCAM MCP and rerun; when message IED002A is issued, enter REPLY xx,'O = nn,U', where nn is a non-zero value.

Problem Determination: Table I, items 10, 29.

**IED096I { CHECKPOINT } CONTROL NO LONGER ACTIVE
 { OPERATOR }
 { COMWRITE }**

Explanation: The indicated subtask of TCAM has abnormally terminated, and the related functions will no longer be performed.

System Action: Limited processing continues.

Programmer Response: Determine the reason for the abnormal termination, correct and rerun. Close down the TCAM job and rerun.

Problem Determination: Table I, items 5a, 10, 29.

IED097I TCAM IS CLOSED DOWN

Explanation: A TCAM shutdown has been completed and control has returned to the code which follows the READY macro instruction coded in the Message Control Program.

System Action: Normal end of job.

Programmer Response: None.

Operator Response: None.

IED098I DCB OPEN FOR MESSAGE PROCESSING PROGRAM - jjj

Explanation: A TCAM shutdown has started, but a TCAM DCB in an application program is still open.

System Action: The shutdown will not complete until the shutdown is performed for the DCBs.

Operator Response: Cancel the job named jjj. Inform the application programmer that his job was cancelled so that shutdown of the Message Control Program could proceed.

IED099I ROUTINE LOADED

Explanation: The routine that was called by the command MODIFY id,DEBUG = L,yyy is loaded and initialized.

System Action: Normal processing continues.

Operator Response: None. Information only.

IED100I ROUTINE DEACTIVATED

Explanation: The routine designated in the command MODIFY id,DEBUG = D,yyy is deactivated and deleted.

System Action: Normal processing continues.

Operator Response: None. Information only.

IED101I RESTART IN PROGRESS

Explanation: The requested operation cannot be processed because TCAM is being restarted.

System Action: The command is ignored. Normal processing continues.

Operator Response: Reenter the command after the restart is completed. If the problem recurs, obtain a SYSABEND dump of the region in which the Message Control Program resides.

Problem Determination: Table I, item 29.

IED102I INVALID OPERAND

Explanation: The format of the command MODIFY id,DEBUG = subparameter, routine is incorrect.

System Action: The command is ignored. Normal processing continues.

Operator Response: Probable error caused by improper command specification. Check for errors in one or more of the following operands:

- A subparameter other than L or D is specified.
- An invalid routine name is specified. Valid names are IEDQFE10, IEDQFE20 and IEDFE30. Reenter the command with the correct format.

Problem Determination: Table I, items 2, 29.

IED103I ROUTINE ALREADY ACTIVE

Explanation: An operator command requesting activation of a debugging routine is entered, but the routine is already active.

System Action: The command is ignored. Normal processing continues.

Operator Response: None.

Problem Determination: Table I, items 2, 11, 29. Have available the AMDSADMP output, formatted using AMDPRDMP showing the nucleus and the TCAM REGION.

IED104I ROUTINE NOT ACTIVE

Explanation: A request has been made to deactivate a debugging routine that is not active.

System Action: The command is ignored. Normal processing continues.

Operator Response: None.

Problem Determination: Table I, items 2, 11, 29. Have the operator control console listing available. Have available the AMDSADMP output, formatted using AMDPRDMP and showing the nucleus and the TCAM region.

IED105I RETURN CODE = xx

Explanation: A user-written routine has passed a return code to a debugging routine of the operator control facility.

System Action: Normal processing continues.

Programmer Response: The indicated return code probably denotes an exceptional condition in the user routine. Determine the problem from the return code given and correct the problem.

IED106I MULTIPLE REQUEST

Explanation: The routine requested is already active in the system.

System Action: The request is ignored. Normal processing continues.

Programmer Response: The requested routine was probably not loaded via a program other than by the MODIFY id, DEBUG = x,yyy operator command. Determine how the module was loaded previously and correct.

Problem Determination: Table I, items 2, 11, 29. Have available the AMDSADMP output, formatted using AMDPRDMP and showing the nucleus and the TCAM region.
Operator Response: Notify the system programmer.

IED1071 COMWRITE NOT ACTIVE

Explanation: A request has been made to activate a debugging routine which requires that the FE Common Write task (COMWRITE) be active. COMWRITE is not active because COMWRTE = YES was not specified on the INTRO macro instruction.

System Action: The request is ignored. Normal processing continues.

Programmer Response: Probable user error. Instruct the operator to enter REPLY xx,'G = YES' as a response to message IED002A to insure proper initialization of the debugging aids. Make sure that a DD card is present specifying the COMWRITE data set, either on magnetic tape or disk.

Operator Response: Notify the system programmer.

Problem Determination: Table I, items 2, 11, 29. Have available the output of AMDSADMP, formatted by AMDPRDMP showing the nucleus and the TCAM region.

IED1091 ROUTINE NOT DELETED

Explanation: A request has been made to deactivate a routine, and the SVC 9 (DELETE) function failed.

System Action: The routine is not deleted. Normal processing continues.

Programmer Response: This message is a result of a failure of the DELETE function of the OS supervisor. The requested module to be deleted could not be found by OS; however, it was found by the TCAM operator control facility.

Problem Determination: Table I, items 2, 11, 29. Have available the AMDSADMP output, formatted by AMDPRDMP showing the nucleus and TCAM region.

IED1101 LESS THAN 4 ENTRIES

Explanation: An attempt has been made to activate the subtask control block (STCB) trace dump, but there are less than four STCB trace entry slots in the STCB trace table.

System Action: The STCB trace dump is not activated. Normal processing continues.

Programmer Response: Probable user error. The IEDQFE20 printing utility requires a minimum of four trace entries in order to properly function. If this message recurs frequently, instruct the operator to restart the MCP, specifying a larger value for nn in the response REPLY xx,'A = nn,U' to the message IED002A.

Operator Response: Contact the system programmer.

Problem Determination: Table I, items 2, 5a, 10, 13, 29.

IED1111 NO TRACE TABLE

Explanation: An attempt has been made to activate the subtask control block (STCB) trace dump, but no STCB trace table has been provided.

System Action: The STCB trace dump is not activated. Normal processing continues.

Programmer Response: Probable user error. If a trace facility is required, close down and restart the Message Control Program (MCP), specifying a non-zero integer value for nn in the response REPLY xx,'A = nn,U' to message IED002A.

Operator Response: Contact the system programmer.

Problem Determination: Table I, items 2, 5a, 10, 29.

IED1121 TCAM REQUESTED COMWRITE CLOSEDOWN

Explanation: TCAM is closing down and is closing the FE Common Write (COMWRITE) subtask.

System Action: Normal end of job follows.

Operator Response: None. Information only.

IED1131 I/O ERROR addr,statsens,recordtype,COMWRITE CLOSING

Explanation: A permanent I/O error has been detected on the indicated device. In the message text, addr, is the hardware line address, statsens is the CSW status byte and sense byte, and recordtype is the type of record (BUFF, IOTR, or STCB) being written when the I/O error occurs.

System Action: The FE Common Write (COMWRITE) task terminates abnormally with a system completion code of 044.

Operator Response: Probable hardware error. Check recording medium (tape or disk) for damage. If COMWRITE is required, TCAM must be stopped and restarted specifying another device for COMWRITE.

Problem Determination: Table I, items 18, 30.

IED1141 Sxxx ABEND COMWRITE CLOSING

Explanation: The FE Common Write (COMWRITE) task has abnormally ended with the system completion code indicated by xxx.

System Action: The COMWRITE task is terminated with the indicated code.

Programmer Response: A system completion code of 044 is normally caused by invalid or missing JCL. Examine the job control statements, and ensure that a COMWRITE DD card exists and is valid. Rerun the job.

Operator Response: Contact the system programmer.

Problem Determination: Table I, items 5a, 29.

IED1151 userid DATA AREA EXCEEDS CORE

Explanation: This message is caused by an invalid parameter list being passed to the FE Common Write (COMWRITE) task.

System Action: The request is ignored. Normal processing continues.

Operator Response: Contact system programmer.

Programmer Response: Probable user error. Examine the user routine using 'userid' and correct any errors.

Problem Determination: Table I, items 2, 11, 29. Have the COMWRITE output data set. Have available the AMDSADMP output, formatted by AMDPRDMP, showing the nucleus and the TCAM region.

IED1161 userid PARMLIST NOT ON FULLWORD BOUNDARY

Explanation: This message is caused by an invalid parameter list being passed to the FE Common Write (COMWRITE) task.

System Action: The request is ignored. Normal processing continues.

Operator Response: Contact the system programmer.

Programmer Response: Probable user error. Examine the user routine using 'userid' and correct any errors.

Problem Determination: Table I, items 2, 11, 29. Have the COMWRITE output data set. Have available the AMDSADMP output formatted by AMDPRDMP, showing the nucleus and the TCAM region.

IED1171 userid BLKSIZE EXCEEDS DEVICE SPECS

Explanation: A parameter list passed to the FE common write (COMWRITE) task describes a block of data whose length exceeds the maximum that the device containing the COMWRITE data set can handle.

System Action: The request is ignored. Normal processing continues.

Operator Response: Contact system programmer.

Programmer Response: Probable user error. Examine the user routine using 'userid' and correct any error.

Problem Determination: Table I, items 2, 11, 29. Have the COMWRITE output data set. Have available the AMDSADMP output, formatted by AMDPRDMP, showing the nucleus and the TCAM region.

IED118I PERMANENT I/O ERROR ON TRACE UNIT

Explanation: While reading the SYSUT1 data set, a permanent I/O error has been encountered.

System Action: Processing terminates.

Operator Response: Check the recording medium (tape or disk) of the trace data set for damage. If the medium is tape, clean the device.

Problem Determination: Table I, items 18, 30.

IED119I UNABLE TO OPEN ddname

Explanation: The system was unable to open the data set named ddname.

System Action: Processing terminates.

Operator Response: Probable user error. Check and correct the job control language for the indicated data set and rerun the job. This message is normally caused by the lack of a DD statement or by the ddname being misspelled.

Problem Determination: Table I, items 1, 2, 29.

IED120I BLOCK = PARM REQUIRES TAPE INPUT

Explanation: The BLOCK = keyword parameter was specified in the EXEC statement for the COMEDIT formatting utility, but the SYSUT1 DD card specified a direct access device.

System Action: The trace data set is formatted with the BLOCK = parameter ignored. Normal processing continues.

Programmer Response: None.

Problem Determination: Table I, items 1, 5a, 29. Instruct the operator to cancel the job, requesting a dump and save the output.

IED121I REQUESTED TIME NOT FOUND

Explanation: The time specified in the BLOCK = parameter of the EXEC statement for the COMEDIT printing utility was not found on the tape data set described by the SYSUT1 DD statement. Two conditions may cause the error:

- There were no subtask control blocks (STCBs) or buffers on the trace data set.
- The time specified is later than the latest time recorded in the trace data set.

System Action: Processing terminates. No printout is provided.

Programmer Response: Probable user error. Ensure that STCBs are being traced and the BLOCK = parameter is correctly specified. The time stamp fields in the various trace records on tape are chronologically earlier than the BLOCK = parameter.

Problem Determination: Table I, items 1, 2, 29. Have a listing of the COMWRITE data set available.

IED122I INVALID MESSAGE CHAIN

Explanation: The chaining sequence of the message queues data set has been invalidated.

System Action: Processing terminates.

Programmer Response: None.

Problem Determination: Before calling IBM for programming support make sure that a listing of the message queues data set is available.

IED123I INVALID PARAMETERS

Explanation: While scanning the EXEC statement parameters for the IEDQXB or IEDQXC printing utilities, an error has been detected.

System Action: If the IEDQXB utility is being used, the error is noted on the SYSPRINT data set. For either utility, processing terminates.

Programmer Response: Probable programmer error. Check and correctly specify the parameters on the EXEC statement. For the proper specification of parameters, refer to the OS/VS TCAM Programmer's Guide GC30-2034).

Problem Determination: Table I, items 1, 2, 29.

IED124I QUEUE HAS BEEN WRAPPED

Explanation: While running the IEDQXC printing utility, the message queues data set has run out of space and started to overlay the beginning of the data set (wrap-around).

System Action: Since the message queues data set can no longer be formatted reliably, the IEDQXA printing utility is terminated.

Programmer Response: In order to obtain the printed output from the message queues, process it via a system utility. To avoid the wrap-around in the future, format a larger message queues data set with the IEDQXA utility.

Problem Determination: Before calling IBM for programming support, make sure that a listing of the message queues data set is available.

IED125I xxx BYTES NEEDED

Explanation: The operator entered MODIFY id,DEBUG = x,yyy, but insufficient storage exists for loading the requested debugging aid.

System Action: The requested debugging aid is not loaded. Normal processing continues.

Programmer Response: Specify a larger region size for the TCAM Message Control Program (MCP).

Operator Response: Specify a larger region size for the TCAM MCP, if possible. Otherwise, contact the system programmer.

Problem Determination: Table I, items 2, 10, 11, 29. Have available the AMDSADMP output formatted by AMDPRDMP showing the nucleus and TCAM region.

IED126I OLT REQUEST REJECTED, NO DCHB FOR CONTROL TERMINAL

Explanation: This message is issued when a Test Request Message (TRM) specifies a control terminal which does not have a Device Characteristics Record in the Device Characteristics Block (DCHB) library. Before a terminal can be used as an on-line test control terminal, it is necessary to define the device characteristics by executing a Telecommunications On-line Test Executive (TOTE) configuration run.

System Action: The TRM is cancelled. Normal processing continues.

Operator Response: Before a terminal can be used as an on-line test control terminal it is necessary to define the device characteristics by executing a TOTE configuration run. If the configuration has been run, check the contents of the DCHB to ensure that the configuration is correct. Reenter the TRM.

Problem Determination: If there is a record in the DCHB for the control terminal and the problem recurs, obtain and have available the following before calling IBM for programming support:

- The TRM that was cancelled.
- The configuration for the terminal.

- The contents of the DCHB.
- Any error printouts received.

IED127I OLT REQUEST REJECTED, CONTROL TERMINAL UNIDENTIFIED

Explanation: This message is issued when the symbolic name of the control terminal specified in the Test Request Message (TRM) is not contained in the TCAM terminal table.

System Action: The TRM is cancelled. Normal processing continues.

Operator Response: Reenter the TRM and specify a valid control terminal. If there is a valid translate table for the TRM, no more than eight characters between the prefix and the first slash, and the control terminal is identical to the name of an entry in the TCAM terminal table, obtain and have available the following before calling IBM for programming support:

- A listing of the TCAM Message Control Program.
- The TRM that was cancelled.
- The control terminal printout.

IED128I ALTERNATE PRINTER REQUESTED BY OLT ALREADY IN USE

Explanation: This message is issued when the alternate printer requested in the option field of a Test Request Message (TRM) has already been assigned to another On-line Test (OLT). The TRM is cancelled and must be reentered to initiate an OLT.

System Action: The TRM is cancelled. Normal processing continues.

Operator Response: Reenter the TRM and specify an alternate printer not in use.

Problem Determination: If this problem recurs and the alternate printer is not in use, obtain and have available the following before calling IBM for programming support:

- A listing of the TCAM Message Control Program.
- The TRM that was cancelled.
- The control terminal printout.

IED129I OLT REQUEST REJECTED, C. T. LINE CANNOT BE STARTED

Explanation: This message is issued when TCAM cannot start the control terminal line and returns an error code to the request to start a line. The Test Request Message (TRM) is cancelled.

System Action: The TRM is cancelled. Normal processing continues.

Operator Response: Attempt to restart the line by entering VARY (line),ONTP. Reenter the TRM.

Problem Determination: If the problem recurs, obtain and have available the following before calling IBM for programming support:

- The TRM.
- The control terminal printout.

IED130I OLT REQUEST REJECTED, CONTROL TERMINAL NOT OPEN

Explanation: This message is issued when TCAM cannot open the control terminal. The problem could be that the required DD card is missing from the TCAM JCL. The Test Request Message (TRM) is cancelled.

System Action: The TRM is rejected and normal processing continues.

Operator Response: Check JCL for a DD card for the control terminal. Restart the Message Control Program with a valid DD card for this terminal. Reenter the TRM.

Problem Determination: If the problem recurs, obtain and have available the following before calling IBM:

- The TRM.
- The control terminal printout.

IED131I TRM CANCELLED, NOT ENTERED FROM SWITCHED C. T.

Explanation: This message is issued when a Test Request Message (TRM) has specified a control terminal on a switched line but the TRM was entered from some other terminal. To use a switched terminal as control terminal, the TRM must be entered from the terminal.

System Action: The TRM is cancelled and normal processing continues.

Operator Response: Reenter the TRM from the specified control terminal.

Problem Determination: If the problem recurs when the TRM is entered from the control terminal, obtain and have available the following before calling IBM:

- The TRM that was entered.
- The control terminal printout.

IED132D CAN OLT USE FOR NON-CONCURRENT MODE LINES

xxx,xxx,xxx,xxx... (up to 11 lines)

Explanation: This message is issued when exclusive use of specified lines xxx,...,xxx is needed for the duration of testing, where xxx is the physical address of the lines.

System Action: TCAM continues normal processing. The On-line Test (OLT) enters a wait state for three minutes. If the response is not received at the end of this time, the OLT is cancelled, and normal processing continues.

Operator Response: If all activity on specified lines can be suspended for the duration of the test, enter REPLY xx,'YES'. Otherwise, enter REPLY xx,'NO'.

IED133I C. T. REQUESTED BY OLT ASSIGNED TO ANOTHER OLT

Explanation: This message is issued when the control terminal device requested in the Test Request Message (TRM) has already been assigned to another On-line Test (OLT). The TRM is cancelled and must be reentered to initiate an OLT.

System Action: The TRM is cancelled. Normal processing continues.

Operator Response: Reenter the TRM and specify a control terminal not in use.

Problem Determination: If this problem recurs and the control terminal is not in use, have the following available before calling IBM for programming support:

- A listing of the TCAM Message Control Program.
- The TRM that was cancelled.
- The control terminal printout.

IED134I xxxxxxxx TERMINAL FAILED, OLT CANCELLED

Explanation: This message is issued when an unrecoverable error occurs while the telecommunications on-line test executive or an On-line Test (OLT) is trying to communicate with a remote control terminal or alternate printer terminal, where xxxxxxxx is the symbolic name of the terminal. The OLT is cancelled.

System Action: Normal processing continues. The OLT is cancelled.

Operator Response: Reenter the Test Request Message (TRM).

Problem Determination: If the problem recurs, obtain and have available the following before calling IBM:

- The TRM that was entered.
- The control terminal printout.

IED135I message

Explanation: Messages with this number are directed to the control terminal for CE communication. The meaning of the message is found in the 'TOTE/Configurator User's Guide'.
System Action: Normal processing continues.
Operator Response: Refer to 'TOTE/Configurator User's Guide'.

IED136D message

Explanation: Messages with this number are directed to the control terminal for CE communication and require a response. The meaning of the message and the proper responses are found in the 'TOTE/Configurator User's Guide'.
System Action: The On-line Test goes into wait state until a response is received. Normal processing continues.
Operator Response: Refer to 'TOTE/Configurator User's Guide'.

IED138I ERROR SORTING DEVICE ID TABLE, xxxx

Explanation: An error occurred while sorting the device ID table. xxxx identifies the terminal name being processed when the error occurred.
System Action: A return code of X'18' is passed to the initialization routine (IEDQOA) in register 15. IEDQOA issues error message IED065I, suspends calling other INTRO, nonresident, initialization routines, and returns to INTRO, which passes control to the next instruction.
Problem Determination: Execute the AMASPZAP service aid program to obtain a dump of module IEDQOA at the point the error message was issued. Table I, items 3, 10, 16, 29.

Master Scheduler Messages (IEE)

Component Name	IEE
Program Producing Message	Master scheduler.
Audience and Where Produced	For operator: console.
Message Format	xx IEE ⁿ nn ^s text xx Message reply identification (absent, if operator reply not required). nnn Message serial number. s Type code: A Action; operator must perform a specific action. D Decision; operator must choose an alternative. E Eventual action; operator must perform action when he has time. I Information; no operator action is required. W Wait; processing stopped until action is determined and performed. text Message text.
Comments	None.
Problem Determination	Refer to fold-out Tables I and II at the back of this publication for problem determination instructions.

IEE025I UNIT ddd HAS NO PATHS

Explanation: A vary command was entered for a device having no available path.

System Action: The command is not executed.

Operator Response: Enter a VARY PATH command to make a path available.

Problem Determination: Table I, items 2, 11, 29.

IEE026I cm NOT SUPPORTED.

Explanation: If the command indicated by cm in the message text is LOG or WRITELOG, the system log is not being supported for one of these reasons:

- One or both of the log data sets, SYS1.SYSVLOGX and SYS1.SYSVLOGY, were not cataloged and mounted during system start.
- The system log task terminated abnormally.

If cm is DDR SYSRS, dynamic device reconfiguration (or the SYSRES option of dynamic device reconfiguration) is not supported by OS/VS2. The system cannot complete the SWAP request entered by the operator.

System Action: The system did not execute the command.

Operator Response: Probable user error. If cm is LOG or WRITELOG, and if the system log is supposed to be kept, report the message to the system programmer at the installation. If cm is an RJE central command, reenter the command after RJE is started and has completed initialization.

Problem Determination: Table I, items 2, 7ab, 17ab, 29. If the function denoted by the command is supported, and any necessary data sets are cataloged and mounted, and you must have the function before proceeding, check Table I, items 11, 29.

IEE032I WRITELOG COMMAND PENDING. CLASSNAME = x.

Explanation: A WRITELOG command was entered to write the currently recording system log data set, SYS1.SYSVLOGX or SYS1.SYSVLOGY, on the system output writer of class x. However, execution of a previously entered WRITELOG command is still pending.

System Action: The WRITELOG command will be honored after execution of the previously issued WRITELOG command has completed.

Operator Response: None.

IEE033I HALT OR WRITELOG CLOSE COMMAND HAS BEEN ISSUED

Explanation: A HALT or WRITELOG CLOSE command was entered to close the data control block of the data set currently recording. However, the execution of a previously entered HALT or WRITELOG CLOSE command has not completed.

System Action: The second HALT or WRITELOG CLOSE command is ignored. After execution of the first command has completed, the log is no longer supported.

Operator Response: None.

IEE034I WRITELOG EXECUTION DEFERRED. NO BACKUP DATASET

Explanation: A WRITELOG command was entered to write a system log data set (either SYS1.SYSVLOGX or SYS1.SYSVLOGY) on a SYSOUT device. However, the other system log data set is currently being written, or waiting to be written, on a SYSOUT device.

System Action: None; the log data sets have not been switched.

Operator Response: Reenter the command after the alternate log data set has been written to the SYSOUT device.

IEE0371 LOG NOT SUPPORTED

Explanation: For this loading of the system, the system log is not being supported because:

- Both log data sets, SYS1.SYSVLOGX and SYS1.SYSVLOGY, were not cataloged during system initialization.
- A WRITELOG command was issued before log initialization occurred.

Operator Response: None, unless the system log should be supported. In that case, report this message to the programmer responsible for the system. If the data sets are not cataloged, they should be cataloged and the system started again.

Problem Determination: If you must have the log function before proceeding, see Table I, items 2, 7ab, 29.

IEE0381 LOG NOT SUPPORTED. ser NOT MOUNTED.

Explanation: For this loading of the system, the system log is not being supported because a volume containing a system log data set (SYS1.SYSVLOGX and SYS1.SYSVLOGY) is not mounted. The volume's serial number is ser.

Operator Response: None, unless the system log should be supported. In that case, mount volume serial number ser and start the system again.

Problem Determination: Table I, items 2, 7ab, 29. If you must have the log function before proceeding, check item 11.

IEE0391 LOG SYS1.SYSVLOG {X} NOT FOUND ON ddd

Explanation: The data control block for the SYS1.SYSVLOGX or SYS1.SYSVLOGY data set, as indicated in the message text, could not be opened because the data set could not be found on the volume on device ddd.

System Action: The log is no longer supported.

Operator Response: Report this message to the programmer responsible for the system at the installation.

Problem Determination: Table I, items 7a, 25bd, 29.

IEE0401 LOG I/O ERROR ON ddd

Explanation: During execution of a LOG command or a WTL macro instruction, an uncorrectable input/output error occurred while writing text into the system log data set, SYS1.SYSVLOGX or SYS1.SYSVLOGY, on device ddd.

System Action: The text is written in the alternate system log data set.

Operator Response: None.

Problem Determination: Table I, items 2, 29.

IEE0411 LOG NOW RECORDING ON SYS1.SYSVLOG {X} ON ddd

Explanation: The SYS1.SYSVLOGX or SYS1.SYSVLOGY data set, as indicated in the message text, is located on device ddd and is currently recording.

Operator Response: None.

IEE0421 LOG DATA SET SYSVLOG {X} ON ddd CLOSED

Explanation: The data control block for the SYS1.SYSVLOGX or SYS1.SYSVLOGY data set, as indicated in the message text, was closed for one of the following reasons:

- At IPL time, if both the SYS1.SYSVLOGX and SYS1.SYSVLOGY data sets are not empty, the data control block for the data set containing the least data is closed.
- The data set is full.
- An input/output error occurred while processing the data set.

- A WRITELOG command was issued.

Operator Response: None.

IEE0431 LOG DATA SET {X} QUEUED TO SYSOUT CLASS x

Explanation: The SYS1.SYSVLOGX or SYS1.SYSVLOGY data set, as indicated in the message text, was queued to be written on the system output writer of class x for one of the following reasons:

- The data set is full.
- An input/output error occurred.
- A WRITELOG command was issued.

System Action: The data set is queued to system output and the alternate data set is opened and made available for log entries.

Operator Response: None.

IEE0441 {LOG}ABEND COMPLETION CODE = hhh

Explanation: During the execution of the system log or System Management Facilities function, the task abnormally terminated with the completion code hhh, in hexadecimal.

System Action: The system log or System Management Facilities function is no longer supported.

Operator Response: Report this message to the programmer responsible for the system at the installation.

Problem Determination: If the indicated function is required before proceeding, see Table I, items 2, 7ab, 11, 29.

IEE0451 LOG INACTIVE

Explanation: Both log data sets, SYS1.SYSVLOGX and SYS1.SYSVLOGY, are currently being written or waiting to be written on system output devices. During this time, all previously entered log records are held in storage.

System Action: Subsequent log records will be honored when a log data set is written on system output and becomes available for log entries. Until then, incoming log entries will be sent to the operator via message IEF1471.

Operator Response: None, unless a system output device needs to be started.

IEE0461 LOG NOW ACTIVE

Explanation: A log data set was written on system output (SYSOUT) and is now available for log entries.

System Action: Log records are now written in the log data set currently recording.

Operator Response: None

IEE0471 WRITELOG DEFERRED, INSUFFICIENT QUEUE SPACE

Explanation: The operator entered the WRITELOG command to have the contents of a log data set put in one of the output queues. However, there was not enough system queue space to allow the log to be written.

System Action: The system will retry the WRITELOG operation each time a task enters allocation until the operation has completed.

Operator Response: As active jobs and system tasks start and stop, display the output queues until it is evident that the log has been written. It is not necessary to reenter the WRITELOG command. If the transfer does not complete and there are no tasks starting or stopping, it may be necessary to start a task (perhaps an initiator) so that the WRITELOG operation can complete.

IEE050A SMF OPTION CANCELED - REPLY U TO CONTINUE

Explanation: During execution of the System Management Facilities function, the task abnormally terminated.

System Action: No jobs in the system will terminate until the reply U is given. All data currently residing in the System Management Facilities buffers will be preserved. It is necessary to restart the system in order to reinstate the System Management Facilities function.

Operator Response: If the system should proceed without recording System Management Facilities records, enter REPLY xx,'U'. If the System Management Facilities function must be active, restart the system and inform the programmer responsible for the system.

Problem Determination: If the indicated function is required before proceeding, see Table I, items 2, 7ab, 11, 29.

IEE0511 SQA{addr1 addr2 ffff }
{addr1K addr2K ffff }

Explanation: In response to a DISPLAY command with SQA in its operand, the message gives the high and low boundaries of the system queue area and the amount of free space within. addr1 is the 5 byte address of the low boundary, addr2 is the 5 byte address of the high boundary, ffff is the amount of free space and K indicates that the address is rounded to the nearest multiple of 1024.

Operator Response: None.

IEE0901 cm-x I/O ERROR DUMP TERMINATED

Explanation: During execution of a dump command, an uncorrectable input/output error occurred. If x is 1, the error occurred before the dump was taken. If x is 2, a partial dump was taken.

System Action: Dump command processing is terminated.

Operator Response: If x is 2, invoke the AMDPRMST service aid program to print the partial dump. If x is 1, enter the command again.

Problem Determination: Table I, items 2, 7a, 29.

IEE0911 cm-x SYS1.DUMP DATA SET FULL OR IN USE

Explanation: While writing a core image dump into the SYS1.DUMP data set, one of the following occurred:

- If x is 1, a unit exception was detected on tape.
- If x is 2, the data set is full.
- If x is 3, the data set is in use.

System Action: Dump command processing is terminated.

Operator Response: If x is 1, rewind and unload the tape and mount another nonlabel tape. Reissue the command. If x is 2, execute the AMDPRDMP service aid program to print the dump or mount a new SYS1.DUMP tape, and reissue the command. If x is 3, enter the command again when the current dump is complete.

IEE0921 CORE DUMP SUCCESSFULLY COMPLETED

Explanation: The processing of the dump command has successfully completed.

Operator Response: Execute the AMDPRDMP service aid program to print the dump data set.

IEE0931 op OPERAND IS INVALID REPLY FOR DUMP COMMAND

Explanation: In response to a dump command, the operand op is invalid.

System Action: The command was not executed.

Operator Response: Probable user error. Correct the operand, and reissue the dump command.

IEE094D SPECIFY OPERAND(S) FOR DUMP COMMAND

Explanation: A dump command has been issued from the operator's console. This message allows the operator to specify the storage locations to be dumped.

System Action: Dump command processing waits pending the operator's reply.

Operator Response: If a full dump is desired, reply U. If the dump is to represent storage locations, reply STOR = (x,y,[x,y]) where x represents starting addresses in decimal or hexadecimal, and y represents ending addresses in decimal or hexadecimal format. The decimal addresses must represent a multiple of 1024 (1K). For example:

STOR = (0BA040,0CA044) - HEX

STOR = (00456K,00508K) - DEC

Note: SDATA may also be specified with STOR. Refer to Operator Reference Manual for further explanation.

IEE0951 cm-x-retcde INVALID RETURN CODE FROM SVC DUMP

Explanation: During execution of a dump command an unusual condition occurred. If x is 1, the return code (retcde) from SVC dump is not valid. If x is 2, there is a system error in the SVC dump interface.

System Action: Dump command processing is terminated.

Operator Response: Enter the command again.

IEE0961 cm-x SYS1.DUMP DEVICE NOT SPECIFIED OR SUPPORTED

Explanation: During execution of a dump command, one of the following occurred:

- If x is 1, no SYS1.DUMP data set was specified at system initialization.
- If x is 2, the SYS1.DUMP data set is not allocated to tape or direct access (2321 direct access is not supported).

System Action: Dump Command processing is terminated.

Operator Response: Probable user error. The SYS1.DUMP data set must be allocated to tape or direct access at IPL time.

Problem Determination: Table I, items 2, 7a, 29.

IEE101A READY

Explanation: Nucleus initialization has been completed and the master scheduler has received control.

System Action: The system entered wait state so that the TOD clock could be set.

Operator Response: Enter a SET DATE command.

IEE1021 hh.mm.ss ACTIVE DISPLAY [id]
STRADDR ENDADDR LSQS
stradr endadr gspa

R SUBT NAME1 NAME2 NAME3
y xx jjjjjj sssssss aaaaaaa

Explanation: This is the control line of the status display indicated by the DISPLAY A or MONITOR A command. The label line names identify the job step being executed, where:

stradr is the starting real storage address of the task (if the job step is executing in an ADDRSPC = REAL region), or the starting virtual address (if the job step is executing in a virtual region). This five-digit decimal number is a multiple of 1024 and is followed by the letter K (such as 00040K). The field is 00000K when an initiator is waiting for storage, a data set, or work.

endadr

is the ending real storage address of the task (if the job step is executing in an ADDRSPC = REAL region), or the

ending virtual address (if the job step is executing in a virtual region). This five-digit decimal number is a multiple of 1024 and is followed by the letter K (such as 00040K). This field is 00000K when an initiator is waiting for storage, a data set, or work.

gspa

is the number of pages, in decimal, of storage allocated for LSQA for the job step. For TSO region displays, the number of LSQA pages will be zero.

y

indicates whether the job step is executing in ADDRSPC = REAL or a virtual region.

R - indicates ADDRSPC = REAL

V - indicates virtual

For TSO region displays, the TSO region number will be displayed.

xx

is the number, in decimal, of the subtasks created in the step. For TSO, this field indicates the number of users.

jjjjjjj

is one of the following:

- The job name for a job attached by an initiator.
- The procedure name for a system task, such as RDR or WTR.
- The identifier for an initiator.
- MASTER SCHEDULER for the master scheduler.
- STARTING for a system task being allocated.

sssssss

is one of the following:

- The step name of a job attached by an initiator.
- The identifier for a system reader or a system writer.
- The job name for an initiator processing a job step. In this case, if the region addresses in the message text are zeros, the initiator is waiting for storage or a data set.
- Blank for the master task, for a system task being allocated, or for an initiator waiting for work. In this case, if the region addresses in the message text are zeros, the initiator is waiting for work.
- The step name for a procedure called by a step (field aaaaaaaa).

aaaaaaa

is one of the following:

- The step name for a step that called a cataloged procedure (field ssssss).
- Blanks if there is no cataloged procedure.

[id]

A three-digit decimal identification number. It is used in conjunction with the CONTROL C,D command for cancelling status displays being written on typewriter or printer consoles or being displayed in-line (not in a display area) on a display (CRT) console. This identification number does not appear when the display is presented in a display area on a display console.

Note: The STRADDR, ENDADDR and R fields are repeated for each additional region occupied by the task.

Operator Response: None.

IEE102I TIME SHARING y a1 a2 qs x

Explanation: As a result of DISPLAY ACTIVE command, the Time Sharing regions will be shown as above where:

y

is the region number.

a1

is the beginning address of the time sharing region.

a2

is the ending address of the time sharing region.

qs

is the amount of LSQS within that region.

x

is the number of users for that region.

All of the above are decimal numbers.

Operator Response: None.

IEE103I S proc[.ident][,ddd][,ser][,DSNAME = dsn] *

Explanation: In systems with automatic START commands, this message is issued at system initialization to permit the operator to retain or reject the automatic commands.

In the message text, the fields are:

proc

Cataloged procedure name.

ident

Identifier.

ddd

Device name.

ser

Serial number of the volume.

dsn

Data set name.

*

Indicates an automatic START command.

System Action: The commands retained in response to this message are executed.

Operator Response: Enter a SET command to indicate which of the automatic commands are to be retained:

- In the AUTO subparameter, specify Y if a command is to be retained and N if a command is to be rejected. (For example, if three messages are issued and the three commands are to be rejected, include the subparameter AUTO = NNN. If only the third command of the three commands specified is to be rejected, include the subparameter AUTO = YYN.)
- If all the commands are to be retained, the AUTO subparameter may be omitted.
- If all the commands are to be rejected, the subparameter AUTO = NONE may be included.

IEE110I [REPLY IDS: xx][READY UNITS: ddd]
[AVR MOUNT PENDING]

Explanation: In response to a DISPLAY command with R in its operand, the system is displaying the following information:

REPLY IDS: xx

The messages whose message identifiers, xx, are listed above are awaiting replies.

READY UNITS: ddd

The devices, ddd, listed above are waiting for mount requests to be fulfilled. If one of the devices is a data cell, the message text will appear as ddd/b where ddd is the device address and b is the bin number.

AVR MOUNT PENDING

A volume listed in message IEF504A is waiting to be mounted.

Operator Response: For each xx listed, find the last message on the console printout with that identifier and reply as indicated by the message.

For each ddd listed, find the last mount message on the console printout for that device (and bin number, if applicable) and mount the indicated volume.

If AVR MOUNT PENDING is specified, find the last message (or group of messages) numbered IEF504A on the console printout and mount each unmounted volume as indicated by the message.

IEE1111 NO OUTSTANDING REQUESTS

Explanation: In response to a DISPLAY command with R in its operand, this message indicates that there are no messages awaiting replies and there are no unfulfilled mount requests.
Operator Response: None.

IEE114A DATE = yy.ddd,CLOCK = hh.mm.ss
IEE114A DATE = yy.ddd, CLOCK = hh.mm.ss GMT-REPLY WITH SET PARM OR U.

Explanation: The time-of-day clock was operative, and the current date and time are displayed to the operator for verification. In the message, yy specifies the year (00-99), ddd, the day (001-366), hh, the hour (00-23), mm, the minute (00-59), and ss, the second (00-59).

System Action: The system waits until the operator responds.

Operator Response: If the date and time indicated in the message text are correct, and no other SET parameters are wanted, enter REPLY xx,'U'.

If the local and GMT dates and times indicated in the message text are correct, and one or more of the SET parameters is wanted, enter REPLY xx,'parm', where parm may be Q, AUTO, PROC, or any combination of the three. Do not press the TOD clock enable switch.

If the local and GMT dates and/or times indicated in the message are incorrect, enter REPLY xx,'parm', where parm may be CLOCK = hh.mm.ss and/or DATE = yy.ddd. (Use the date and time formats indicated above, and GMT if GMT is to be changed.) If any other SET parameters are wanted, they may be included in the reply as shown above. After the appropriate response had been made, press the TOD enable switch and signal end-of-block.

Note: The TOD clock settings are entirely dependent on the operator's response to this message. If the CLOCK and/or DATE and GMT parameters are specified, the clock will be updated in accordance with both parameters. If only one parameter is specified, the clock will be updated in accordance with that parameter, the value not specified will be assumed to be correct. If GMT is not specified, the local time will be updated.

If your first reply to this message includes such SET parameters as Q, AUTO and PROC the second time this message is issued only the DATE and CLOCK parameters you entered are indicated but the other parameters (Q,AUTO,PROC) have been acknowledged. If they were correct in your first reply, enter REPLY XX,'U' and your first reply will be accepted.

Note: If you enter a date of 99.366 the system will set a date of 01.001. (A 'high date' would be 99.365.)

IEE1151 INSUFFICIENT STORAGE AVAILABLE TO PROCESS SELECTED OPTION

Explanation: Sufficient storage is not available at the moment for the control program to produce the display associated with the selected option.

System Action: The option is discarded and the display is not produced.

Operator Response: Select the desired option again at a later time.

IEE116A TOD CLOCK INVALID- REPLY WITH SET PARAMETERS

Explanation: The value of the time-of-day clock is incorrect because of a power-down or a hardware error. The problem may or may not have been resolved when this message is issued.

System Action: The system waits for the operator to respond.

Operator Response: Enter REPLY xx,'DATE = yy.ddd' where yy is the year (00-99) and ddd is the day (001-366). Any other valid SET parameters may also be specified in the REPLY command.

Problem Determination: Table I, item 30.

IEE117A INTERVENTION REQUIRED ON TOD CLOCK ENABLE SWITCH

Explanation: During initial program load, the time-of-day clock enable switch was not depressed at the right time for the command setting the clock to be registered.

System Action: This message is issued fifteen seconds after the command setting the time-of-day clock was entered, if the enable switch was not depressed properly. If the switch still has not been depressed after one minute, the system issues this message again. If after another minute the switch has not been depressed, the system will terminate the initialization procedure and issue message IEE119I.

Operator Response: Depress the enable switch. The system issues message IEE118I to indicate that the command setting the clock has been accepted.

Problem Determination: If message IEE118I does not appear, see Table I, items 2, 17a, 29.

IEE1181 SET PARAMETER(S) ACCEPTED.

Explanation: The time-of-day clock has been updated and any other valid SET command parameters have been processed successfully.

System Action: Processing continues.

Operator Response: None.

IEE1191 SET PARAMETER(S) NOT ACCEPTED - ENABLE SWITCH NOT DEPRESSED.

Explanation: The time-of-day clock enable switch was not depressed within two minutes and fifteen seconds after the command setting the clock was entered. The parameters specified in the command are not accepted, and the original value of the clock is retained.

System Action: If this message appears during initial program load, the system issues message IEE116A and then reissues message IEE114A, and the SET command parameters must be reentered.

If this message appears after the system has been started, processing continues as if the SET command parameters has not been entered.

Operator Response: If this message is issued during initial program load respond as indicated to message IEE116A.

Otherwise, enter the command with the SET parameters again, specifying the correct time. Be sure to depress the enable switch. Message IEE114A is issued.

Problem Determination: If message IEE114A does not appear and the correct procedures have been followed, see Table I, items 2, 29.

IEE1201 Q SEARCH I/O ERROR

Explanation: An uncorrectable input/output error occurred while the queue manager was reading or writing in the SYS1.SYSJOBQE data set.

System Action: The read or write operation was not performed. Processing continues.

Operator Response: Report the message to the programmer responsible for the system.

Problem Determination: If unable to continue, see Table I, items 2, 8a, 11, 29.

IEE121I JOB QUEUE I/O ERR DURING COMMAND EXEC

Explanation: During processing of a START or MOUNT command, an uncorrectable input/output error occurred in reading or writing the input work queue entry in the SYS1.SYSJOBQE data set.

System Action: The system did not execute the command.

Operator Response: Enter the command again.

Problem Determination: Table I, items 2, 8a (b if known), 11, 29.

IEE122I START COMMAND JCL ERROR

Explanation: Either a START RDR or START WTR command was specified incorrectly, or the cataloged reader procedure or cataloged writer procedure invoked by the command contains incorrect job control statements.

System Action: The system did not execute the command.

Operator Response: Probable user error. Look in the SYSOUT data set for messages associated with this command; these messages will describe any errors found in the reader or writer procedure or in the overriding job control statements generated from the START RDR or START WTR command.

After making corrections, enter the command again.

Problem Determination: Table I, items 2, 4, 7ab, 26d, 29.

IEE124I MOUNT COMMAND JCL ERR

Explanation: The procedure invoked by a MOUNT command contains invalid job control statements.

System Action: The system did not execute the command.

Operator Response: Probable user error. Look in the SYSOUT data set for messages beginning with IEF and associated with this command; these messages will describe any errors found in the procedure. If possible, correct the job control statements in the procedure; otherwise, report this message to the programmer responsible for the system at the installation.

Problem Determination: Table I, items 2, 4, 7ab, 26d, 29.

IEE130I TIMEOUT - TERMINAL RESET

Explanation: The 2740 console, upon which this message appears, timed out because the operator did not terminate his input message with EOB (end-of-block) within 28 seconds of requesting entry to the console or entering the last character of data.

System Action: The system reset the terminal to stand by state and ignored the operator's incomplete input message.

Operator Response: Reenter the input message and terminate with EOB.

IEE132I START COMMAND DEV ALLOC ERR

Explanation: During processing of a START RDR or START WTR command, an error was detected during allocation of the device specified in the command.

System Action: The system did not execute the command.

Operator Response: Probable user error. Make corrections indicated by other messages on the console or in the SYSOUT data set. Then enter the command again.

Problem Determination: Table I, items 2, 4, 7ab, 26d, 29.

IEE134I MOUNT COMMAND DEV ALLOC ERR

Explanation: During processing of a MOUNT command, an error was detected during allocation of the device specified in the command.

System Action: The system did not execute the command.

Operator Response: Probable user error. Make corrections indicated by other messages on the console or in the SYSOUT data set. Then enter the command again.

Problem Determination: Table I, items 2, 4, 7ab, 26d, 29.

IEE135I ERR - REQUESTED DEVICE RESERVED

Explanation: A MOUNT command specified a device that is either reserved or permanently resident.

System Action: The system did not execute the command.

Operator Response: Probable user error. Change the MOUNT command to specify a different device, or enter an UNLOAD command and wait for the device that was specified to be released.

Problem Determination: Table I, items 2, 4, 7ab, 29.

IEE136I TIME = hh.mm.ss DATE = yy.ddd

Explanation: In response to a DISPLAY T command, this message indicates the time of day and the date.

In the message text, hh specifies the hour (00-23), mm specifies the minute (00-59), ss specifies the second (00-59), yy specifies the year, and ddd specifies the day (001-366).

Operator Response: None.

IEE138I cm ALREADY IN SYSTEM

Explanation: Command cm was issued. However, the command is currently being processed in the system.

System Action: The system did not execute the command.

Operator Response: None.

IEE139I INITIALIZATION FAILED CODE = n

Explanation: During system initialization, the master scheduler failed to recatalog the SYS1.PROCLIB data set. The code supplied in the message text (n) is the return code from the catalog routines:

Code	Meaning
04	The SYSCATLG data set could not be found.
08	The existing catalog structure is inconsistent with the operation performed.
20	The SYSCATLG data set is full.
28	A permanent I/O error occurred while the catalog was being read.

System Action: The system will reissue the automatic start commands and the 'READY' message to allow the operator to retry initialization.

Operator Response: In all cases, retry initialization by setting the date again. If the error recurs, initialize an alternate system and list the catalog data set of the original system using the IEHLIST utility program. Give the catalog list to the system programmer or installation manager.

Programmer Response: SYS1.PROCLIB must be found and cataloged before initialization can continue. The most common return code from catalog is 20, in which case some entries in the catalog should be deleted or the size of the catalog expanded. If the return code is 4, insure that the catalog has not been lost. If the code is 28, move the volume containing the catalog to another drive. Retry initialization.

Problem Determination: Table I, items 2, 13, 18, 25d, 29.

IEE140I	{ console/alt } { SYSLOG }	H	auth1 nn routcd	x,a-b
IEE140I	console/alt	{ M } { A } { N }	auth2 nn routcd	x,a-b

Explanation: After the consoles have been initialized, this message provides a display of the system console configuration. The first format of the message appears if a hard copy device is indicated; the second format appears for each other console.

In the message text, the fields are:

console
ddd
device address of the primary console, which is either an output device or an input/output device.
ddd,ddd
device addresses of the composite primary console.

SYSLOG
the SYSLOG is the hard copy device.
alt
ddd
device address of the alternate console.
ddd,ddd
device addresses of the composite alternate console.

H
hard copy device.

M
master console.

A
active console.

N
non-active console.

auth1
CMDS
Operator and system commands and all responses are to be written on the hard copy log.
STCMDS
Operator and system commands and status displays are to be written on the hard copy log.
INCMDS
Operator and system commands and inline responses are to be written on the hardcopy log.
NOCMDS
Operator and system commands and responses are not to be written on the hardcopy log.

auth2
SYS
Commands authorized for console are CANCEL, HALT, HOLD, MODE, MODIFY, RELEASE, RESET, SET, START, STOP, and WRITELOG.
IO
commands authorized for console are MOUNT, UNLOAD, VARY, and SWAP.
CONS
command authorized for console is VARY, plus use of the routing location operand.

INFO
commands authorized for console are DISPLAY, LOG, and CONTROL, MONITOR, MSGRT, STOPMN, REPLY and SEND.

ALL
commands authorized for console are all the commands listed above under SYS, IO, CONS, and INFO.

NONE
no command authority, which occurs with an output only device.

ID nn
the system identification number for the console (used with the routing location operand).

x,a-b specifies the range of display area identifiers for this console, where x is the identifier of the message area, a is the bottom display area, and b is the top display area. This field appears only for status display consoles.

routcd
x,x,...
the routing codes assigned to the console or hard copy device; if a composite console, the routing codes assigned to the output device.
ALL
all of the routing codes.
NONE
none of the routing codes.

Operator Response: Examine the console configuration for errors, omissions and consoles that should be in a different status. Enter a VARY command for each console that requires modification.

Note: This message also exists as a single line of data pertaining to each console in the system. Each single line of data from the larger display is routed separately to the console that it describes.

IEE141A MASTER AND ALL ALTERNATES UNAVAILABLE - ISSUE VARY MSTCONS

Explanation: An attempt to switch from a master console to an alternate console has failed because no alternate consoles are active. The attempt to switch consoles was either initiated automatically by the device support processor because of an uncorrectable input/output error, or by the operator pressing the external interrupt key.

System Action: The system continues processing.

Operator Response: Any operator receiving this message can enter a VARY MSTCONS command declaring his console or another active secondary console as the master console. The VARY MSTCONS command will be accepted from the first console to issue the command. The console identified as the master console in the command will assume the functions of the master console and will receive message IEE143I. (Since the system continues to queue messages to the master console while it is waiting for the VARY MSTCONS command to be entered, the command should be entered as soon as possible.)

If the console switch was caused by the pressing of the interrupt key, no additional response is required.

Problem Determination: If the console switch occurred as a result of an uncorrectable input/output error, see Table I, items 2, 30.

IEE142I ddd NOW RECEIVING HARDCOPY

Explanation: The hard copy log function has been assumed by console ddd for one of the following reasons:

- The system log data sets are unavailable.
- The system was erroneously asked to switch the hardcopy log to a graphic console, during a console switch.

System Action: The hard copy log is switched to console ddd.

Operator Response: If ddd is an acceptable hard copy log, no response is necessary. Otherwise, a VARY HARDCOPY command must be issued from the master console to switch the log to an acceptable console.

IEE143I OLD = console NEW = console VALDCMD = auth
IEE143I ROUTCDE = routcd T = a H = b

Explanation: This message provides a display of the console's attributes after a console switch has occurred. The switch occurred for one of the following reasons:

- The system detected an uncorrectable input/output error on a console.
- A VARY MSTCONS command was entered.
- The INTERRUPT key was pressed on the operator's control panel.

In the message text, the fields are:

console

ddd

device address of the console.

ddd,ddd

device addresses of the composite console.

auth

SYS

commands authorized for console are CANCEL, HALT, HOLD, MODE, MODIFY, RELEASE, RESET, SET, START, STOP, and WRITELOG.

IO

commands authorized for console are MOUNT, UNLOAD, VARY and SWAP.

CONS

command authorized for console is VARY.

INFO

commands authorized for console are BRDCST, DISPLAY, CONTROL, MSGRT, STOPMN, MONITOR, LOG, REPLY and SEND.

ALL

commands authorized for console are all the commands listed above under SYS, IO, CONS, and INFO.

NONE

no command authority, which occurs with an output only device.

routcd

x,x,...

the routing codes assigned to the console or hard copy device; if a composite console, the routing codes assigned to the output device.

ALL

all of the routing codes.

NONE

none of the routing codes.

a

M

master console.

S

secondary console.

b

Y

yes; hard copy log.

N

no; not a hard copy log.

System Action: The system continues processing.

Operator Response: If the console switch was caused by a VARY MSTCONS command or by the pressing of the INTERRUPT key, no response is required.

Note: The failing console is left online, and unallocated.

Problem Determination: If the console switch occurred as a result of an uncorrectable input/output error, see Table I, items 2, 30.

IEE147I 'text'

Explanation: If the log is being supported, both log data sets (SYS1.SYSVLOGX and SYS1.SYSVLOGY) are currently being written or waiting to be written on system output devices. If the log is not being supported, a WTL macro instruction was issued by a problem program.

System Action: The system sends each incoming log record as the text of this message.

Operator Response: If the log is being supported, none, unless a system output device needs to be started.

If the log is not being supported, report the message to the system programmer at the installation.

IEE150I CHANGE OPTIONS IF DESIRED

Explanation: The operator at a CRT console issued a Reference-type CONTROL command, requesting a display of some current CONTROL conditions. The display, in CONTROL command format, appears in the entry area where the operator may choose to change it.

System Action: None.

Operator Response: If no changes are desired, perform the CANCEL action. If desired, change the command and ENTER it. The new values become effective immediately.

IEE151I DELETE REQUEST
INCONSISTENT -

{ NO DELETABLE MESSAGES
INVALID RANGE
SEG = 0
INVALID OPERAND
NO DISPLAY ON SCREEN
NO DISPLAY IN AREA
USE STOPMN TO DELETE }

Explanation: The operator entered a request to delete messages from a display console screen, and one of the following error conditions occurred:

NO DELETABLE MESSAGE

CONTROL E,F CONTROL E,SEG or CONTROL E,nn [,nn] was issued, but there were no messages that could be erased by this request.

INVALID RANGE

CONTROL E,nn [,nn] was issued, but one or more of the message numbers specified was not displayed in the visible message area.

CONTROL E,nn [,nn] was issued, but the specified message numbers were invalid.

CONTROL E,nn [,nn] was issued, but the specified message numbers included blank lines.

SEG = 0

CONTROL E,SEG was issued, but SEG was specified with a value of zero.

INVALID OPERAND

CONTROL EX - comma does not follow E.

NO DISPLAY ON SCREEN

CONTROL E,N was issued, but the message line numbers were already removed.

CONTROL E,D was issued, but no status display is on the screen.

NO DISPLAY IN AREA

CONTROL E,D,L = cca was issued, but no status display is in the area specified by cca.

USE STOPMN TO DELETE

CONTROL E,D[,id] was issued to erase a dynamic display. The STOPMN command must be used to tell the system the dynamic display is no longer required. This results in an automatic erase of the display currently on the screen.

System Action: The command is not executed.

Operator Response: Correct the command and reissue it.

D C,K may be entered to obtain a display which explains the CONTROL command.

IEE152I *ENTER* *CANCEL* *D C,K*

Explanation: This message appears in the instruction line of display consoles that have light pens attached. The operator can then use the light pen to activate ENTER and CANCEL, and to request a display of the CONTROL command. The message appears whenever the instruction line is not required for another message.

System Action: None.

Operator Response: If desired, position the light pen on D C,K for an explanation of the CONTROL command (displayed in the

status display area.) If an ENTER or CANCEL action is desired, position the light pen on the word that represents the desired action.

IEE153E ERROR - ENTRY GREATER THAN 126 CHARACTERS

Explanation: The 127th position in the entry area contains a character other than a blank (or EOM symbol on the 2260.) The cursor appears under the 127th character to aid the operator in correcting the command.

System Action: Until the 127th position contains a blank (or EOM symbol), the system ignores all commands.

Operator Response: Correct the command that appears in the entry area and make sure that a blank is typed in the 127th position. Then perform an ENTER action.

If it is desired to clear the entry area before making the correction, perform the CANCEL action. Then enter the command correctly and perform an ENTER action.

IEE154I ILLEGAL CURSOR OPERATION - CURSOR REPOSITIONED

Explanation: The operator performed an enter action while the cursor was positioned in an invalid area. These are the only valid areas:

- Any position on a no-action message line.
- The asterisk on an action message line.
- ENTER, CANCEL, or D C,K in the instruction line.
- Any position in the entry area.
- Any of the detectable options in the control line of a status display.

If the cursor is positioned at any other place, it is an error.

System Action: The cursor is repositioned to the left of the entry area.

Operator Response: Position the cursor properly to perform the desired operation.

IEE155E NO HARD COPY-CON = Y, DEL = N

Explanation: This message appears in the *instruction line* if the operator specifies CON = N and either DEL = Y, DEL = R or DEL = RD but there is no device available to provide hard copy.

This message appears in the *warning line* at all times if there is no hard copy device. The message is removed when the hard copy device is fixed.

System Action: The system does not accept the requests to change the option; it remains in conversational mode (CON = Y) without automatic message deletion (DEL = N).

Operator Response: When the message appears in the *instruction line* and conversational mode is not desired, or if roll mode or automatic message deletion is desired, allocate a device to provide hard copy. If the operand was not the only or last operand specified in the command, was not E, S, D, M, N, or A, reenter the command, specifying the other operands. Any valid operands specified before the invalid operand are accepted by the system.

When the message appears in the *warning line* have the hard copy device fixed. Meanwhile, verify all messages that are to be deleted.

IEE156I cm INVALID OPERAND - XXXXXX

Explanation: In the CONTROL command, one of these error conditions occurred:

- The specification (S) operand was invalid.
- The first character after CONTROL (or K) was not E, S, D, M, N, A, or V.
- The operand following CONTROL D (of K D) was not N; N, HOLD; F; H; or U.

- The operand S, DL = nn was used to define a display area. The DL operand has been replaced by the command CONTROL A,nn (or K A,nn).
- RNUM or RTME specified a value of zero.
- The K N,PFK command contains an error. The type of error is indicated by the location of the cursor:
 - a. If the cursor is positioned under the first letter of a keyword (CMD, KEY, PFK, or CON), that keyword or its trailing equal sign is incorrect.
 - b. If the cursor points to the number of the key being defined, that key is either not a numeric character, not a key that was defined during system generation, or is a key being defined as a list of keys that is already contained within another list of keys.
 - c. If the cursor points to a key number after the KEY = parameter, that key is either not a numeric character, the number of the key that is being defined, a key which has been defined as a list of keys, or a key that was not defined during system generation.
 - d. If the cursor points to some other location, a syntax error exists at the position indicated by the cursor.

In the message text, XXXXXX represents the first six characters of the invalid operand.

System Action: The command was not executed.

Operator Response: Correct the command by positioning the cursor under the characters to be changed and typing the correct information. Then perform the ENTER action.

If the DL operand was being used to define display areas, the command should be changed to the correct form of K A command and the ENTER action performed.

If desired, the command may be cancelled.

IEE157E DELETION REQUESTED

Explanation: The operator issued a deletion request in conversational mode. The deletion request appears in command form in the entry area, and the messages selected for deletion are indicated by vertical lines displayed in position 3 of the message line.

System Action: No messages are deleted until the operator has responded to this message.

Operator Response: Respond in one of the following ways:

- To remove the indicated messages, perform an ENTER action, or position the light pen on the same message.
- To change the deletion request, position the cursor under the proper characters and type the desired information. (Also, the light pen may be positioned on message line.) Then perform an ENTER action. All messages that are to be deleted will be marked with vertical lines. Verify that the messages so marked are correct and perform an ENTER action.
- To retain the messages, perform a CANCEL action. This restores the screen, blanks the entry area, and repositions the cursor at the left side of the entry area.

IEE158E REQUEST INCONSISTENT -

STATUS ALREADY EXISTS
NO DISPLAY ON SCREEN
NO DISPLAY IN AREA
LAST FRAME DISPLAYED
FRAME NOT COMPLETE
DISPLAY IS NOT DYNAMIC

Explanation: One of the following error conditions occurred when the CONTROL (K) command was issued.

STATUS ALREADY EXISTS

A CONTROL option was requested which is already in effect. For example K S,DEL = R is entered when the console is in roll mode.

NO DISPLAY ON SCREEN

A CONTROL option for a display, such as framing or erasing, was requested and there is no display on the screen.

NO DISPLAY IN AREA

A CONTROL option, such as framing or erasing, was requested for a display in a particular area and there is no display in that area.

LAST FRAME DISPLAYED

K D,F or K D,F,id was issued but the last frame of the display is already on the screen.

FRAME NOT COMPLETE

A framing request was issued, but the frame of the display currently on the screen is not complete yet. The request must be reissued when the current frame is complete.

DISPLAY IS NOT DYNAMIC

'Hold' or 'update' of a display was requested, but the display is not dynamic. These options apply only to a dynamic display, which is initiated by use of the MONITOR command.

System Action: The command is not executed.

Operator Response: In the first case, change the command and re-enter, or CANCEL the command since the condition already exists.

In the second case, CANCEL the command since the conditions required by the command do not exist.

In the third case, change the command to specify the correct area and re-enter, or CANCEL the command.

In the fourth case, CANCEL the command since no more frames can be displayed.

In the fifth case, enter the request again after the entire frame has been displayed.

In the sixth case, change the command to specify the correct display and re-enter, or CANCEL the command.

IEE159E MESSAGE WAITING

Explanation: All message lines are filled, but another message is waiting to be displayed. This message appears if automatic message deletion was not in effect (DEL = N) if automatic message deletion was in effect (DEL = Y) but no messages in the message area contained vertical lines in position 3. This message also appears if the screen is full of Intervention Required (INT REQ) messages, or WTORs.

System Action: No new messages are displayed until some messages are deleted either by the operator, by a system task, or by a problem program. (Messages are deleted by a problem program or system task only if automatic message deletion is in effect.)

Operator Response: Delete the messages by using either the CONTROL command, a light pen, or the cursor. (In conversational mode, it will be necessary to perform an ENTER action a second time without making any changes to signal verification of the deletion request.) If enough messages are removed so that all waiting messages are displayed, this message is removed.

If the screen is full of Intervention Required (INT REQ) messages, perform the actions where possible; then, if automatic message deletion is not in effect, delete those messages from the screen.

If the screen is full of WTORs, start replying to them; then, delete those messages from the screen.

IEE160I UNVIEWABLE MESSAGE

Explanation: A status display is temporarily replacing one or more messages.

System Action: If a system task or a problem program has issued a DOM macro instruction, and if DEL = Y is in effect, automatic message deletion occurs. Otherwise, the system continues queueing the new messages until the operator either removes the status display or removes some messages above the status display. (Message IEE159E replaces this message if there are more messages waiting than are currently being displaced by the status display.)

Operator Response: Respond in one of the following ways:

- Enter a CONTROL E,D command or position the light pen on *E* in the title line to remove the display, thereby freeing the bottom portion of the message area for displaying messages.
- Request message deletion by using the cursor or light pen or by entering a CONTROL command, thereby removing one or more messages above the display so that more messages can be displayed.

IEE161I WARNING - CON = N,DEL = Y

Explanation: One of the following occurred:

- Automatic message deletion was in effect (DEL = Y) when the operator entered a CONTROL S,CON = N command, requesting non-conversational mode.
- Conversational mode was not in effect (CON = N) when the operator entered a CONTROL S,DEL = Y command, requesting automatic message deletion.
- The operator entered a CONTROL S,CON = N,DEL = Y command, requesting non-conversational mode and automatic message deletion.

This message is a warning that, in response to an erase (E) request, some messages other than the requested messages may be lost.

System Action: None.

Operator Response: If automatic message deletion is in effect, it is strongly recommended that conversational mode be used so that messages can be verified before they are deleted. If conversational mode is not desired, delete the messages manually before the message area is filled.

IEE162I hh.mm.ss K COMMAND [id]

Explanation: This is the control line of the Status Display initiated by the DISPLAY C,K command.

[id]

A three-digit decimal identification number. It is used in conjunction with the CONTROL C,D command for canceling status displays being written on typewriter or printer consoles or being displayed in-line (not in a display area) on a display (CRT) console. This identification number does not appear when the display is presented in a display area on a display console.

Operator Response: None.

IEE163I MODE = { R } { RD }

Explanation: The operator entered a CONTROL S,DEL = R or CONTROL S,DEL = RD command, as indicated in the message text, requesting that roll mode be in effect. When the message area is filled, the number of messages specified by the RNUM parameter (of the CONTROL command) is removed at the interval specified by the RTME parameter (of the CONTROL command) or as long as there are messages waiting to be displayed.

System Action: None.

Operator Response: None.

IEE164I ILLEGAL LIGHT PEN - CURSOR DETECT

Explanation: An error occurred because the light pen or the cursor was not positioned in a valid location. The only valid locations for positioning the light pen or the cursor are:

- In any position on a nonaction message line.
- On the asterisk on an action message line.
- On a detectable CONTROL command option (such as *F or *E) in the control line of a status display.
- On *ENTER*, *CANCEL*, or *D C,K* in the instruction line.

System Action: The system does not act upon the invalid request; the screen remains the same.

Operator Response: Position the light pen or cursor properly to perform the desired operation.

IEE167E OUTPUT IN HOLD MODE

Explanation: No new messages will be written on the screen until the operator takes some action, such as confirming a command or canceling a request. This message appears only on 2260 console devices.

System Action: The display console is in hold mode. No more messages will be displayed until the operator has responded to this message.

Operator Response: Enter data or perform a CANCEL action by repositioning the cursor next to the START MI symbol and pressing the ENTER key.

IEE170E RETRYABLE ERROR. RECENT ACTION MAY NEED TO BE REPEATED.

IEE170E PRESS THE CANCEL KEY TO RESTORE THE SCREEN.

Explanation: A hardware error occurred that was not caused by operator action. If the same error occurs again, the device is considered unusable and the error is logged. In addition, multiple console support will transfer the routing codes and the command input capability of this console to an active alternate console, and will issue message IEE143I. (Anything in the entry area at the time of the error will be lost.)

System Action: If the operator does not perform a CANCEL action, the system automatically rewrites the screen after approximately 30 seconds have elapsed (this results in the same effect as a CANCEL action). If the operator requests that the consoles be switched, the system writes all succeeding messages on the new console device.

Operator Response: Probable hardware error. To continue, perform a CANCEL action. The messages are rewritten on the screen. However, any status displays are lost. The request must be reentered.

Note: The 2260 display console does not have a CANCEL key; the system will automatically restore the screen in about 30 seconds.

Problem Determination: Table I, items 2, 30.

IEE171E CONDITIONAL ERROR. RECENT ACTION MAY NEED TO BE REPEATED.

IEE171E PRESS CANCEL TO CONTINUE, OR SWITCH CONSOLES.

Explanation: A hardware error occurred. However, the device may still be usable.

System Action: If the operator does not perform a CANCEL action, the system automatically rewrites the screen after approximately 30 seconds have elapsed (this results in the same effect as a CANCEL action). If the operator requests that the consoles be switched, the system writes all succeeding messages on the new console device.

Operator Response: Probable hardware error. If the device is still usable, perform a CANCEL action to continue operating.

However, keyboard, cursor, or light pen actions may need to be repeated.

Note: The 2260 display console does not have a CANCEL key; the system will automatically restore the screen in about 30 seconds.

If it is desired not to continue, use the multiple console support option to remove this device as a console.

Problem Determination: Table I, items 2, 30.

IEE191I REQUIRED DD ENTRY MISSING FROM PROCEDURE

Explanation: The cataloged reader procedure invoked by a START RDR or START RDRA command does not contain a required DD statement. The name fields of the required DD statements are IEFRDER, IEFPDSI, and IEFDATA.

System Action: The system did not execute the command.

Operator Response: Probable user error. Supply the missing DD statement, if possible, and enter the command again.

Otherwise, report this message to the programmer responsible for the system at the installation.

Problem Determination: Table I, items 2, 4, 7ab, 26d, 29.

IEE192I INVALID PROCEDURE PARM FIELD FORMAT

Explanation: The reader procedure invoked by a START RDR or START RDRA command or the writer procedure invoked by a START WTR command contains an EXEC statement with an invalid PARM parameter.

System Action: The system did not execute the command.

Operator Response: Report this message to the system programmer at the installation.

```

IEE250I hh.mm.ss CONSOLES [id]
        CONSOLE/ALT COND AUTH ID AREA  ROUTCD
        Console/alt  H   auth1 nn x,a,-a2 routcd
        SYSLOG
        console/alt  { M } auth2
                    { A[,P] }
                    { N[,P] }

```

Explanation: In response to a DISPLAY CONSOLES command, this message provides a display of the system console configuration. The first format of the message always appears; the second format appears if a hard copy device is available; the third format appears for each console specified at system generation.

In the message text, the fields are:

[id]

A three-digit decimal identification number. It is used in conjunction with the CONTROL C,D command for canceling status displays being written on typewriter or printer consoles or being displayed in-line (not in a display area) on a display (CRT) console. This identification number does not appear when the display is presented in a display area on a display console.

CONSOLE

console

ddd

device address of the primary console, which is either an output device or an input/output device.

ddd,ddd

device addresses of the composite primary console.

SYSLOG

the SYSLOG is the hard copy device.

ALT

alt

ddd

device address of the alternate console.



ddd,ddd
device addresses of the composite alternate console.

COND
H hard copy device.
M master console.
A active console.
A,P in the process of becoming an active console.
N non-active console.
N,P in the process of becoming a non-active console.

AUTH
auth1
CMDS
operator and system commands and responses are to be written on the hard copy log.
STCMDS
Operator and system commands and status displays are to be written on the hard copy log.
INCMDS
Operator and system commands and inline responses are to be written on the hardcopy log.
NOCMDS
operator and system commands and responses are not to be written on the hard copy log.

auth2
SYS
commands authorized for console are CANCEL, HALT, HOLD, MODE, MODIFY, RELEASE, RESET, SET, START, STOP, SWITCH, and WRITELOG.
IO
commands authorized for console are MOUNT, SWAP, UNLOAD, and VARY.
CONS
command authorized for console is VARY.
INFO
commands authorized for console are BRDCST, DISPLAY, LOG, MSG, and SHOW, CONTROL, MONITOR, MSGRT, STOPMN, REPLY.
ALL
commands authorized for console are all the commands listed above under SYS, IO, CONS, and INFO.
NONE
no command authority, which occurs with an output only device.
ID nn
the system identification number for this console.
AREA
x, a₁ - a₂ the range of area designators defined for this console, where x is the id of the message area, a₁ is the bottom area and a₂ is the top area.

ROUTCD
roucd
x,x,...
the routing codes assigned to the console or hard copy device; if a composite console, the routing codes assigned to the output device.
ALL
all of the routing codes.
NONE
none of the routing codes.

Operator Response: None.

Note: In an MCS system which has no CRT consoles sysgened, the AREA column will not be displayed.

IEE298I cm INVALID CHARACTER

Explanation: In the cm command, an invalid character (not enclosed in apostrophes) was found in the operation, operand, or comment field.

System Action: The command was not executed.

Operator Response: Probable user error. Enter the command again, correctly. (If the command was originally entered through the input stream, the command may be reissued through the console in response to this message.)

Problem Determination: Table I, items 2, 7b, 29. If unable to continue system operation see Table I, item 11.

**IEE299I {SYSLOG}REQ'D FOR HARDCOPY
{ddd }**

Explanation: The operator entered the VARY HARDCOPY, OFF command without first reassigning the hardcopy function to either the system log, a stand-alone console, or an operator's console. If more than one console is active, or if a single graphics console is active, the hardcopy function is required.

System Action: The command is not executed.

Operator Response: Enter the VARY HARDCOPY command specifying a new hardcopy device, or the system log. Then re-enter the previous command.

IEE300I ddd/aaa INVALID ALTCON

Explanation: In a VARY ddd,CONSOLE command, parameter ALTCON specified an invalid alternate console aaa:

- ddd and aaa are the same device.
- ddd has input/output capabilities and aaa has only output capabilities.

System Action: In the first case, the command is not processed for device ddd. In the second case, if device ddd was previously a console, the previous alternate console is maintained; otherwise, device ddd is made a console, and the alternate console specified at system generation is maintained.

Operator Response: In the first case, choose another alternate console and reenter the command. In the second case, choose an alternate console with input/output capabilities and reenter the command.

IEE301I jjj CANCEL COMMAND ACCEPTED

Explanation: Job jjj was canceled in response to a CANCEL command, by the remote job entry (RJE) procedure or the conversational remote job entry (CRJE) procedure, or by the system. If the job was canceled by the system, messages will follow explaining the reason for the cancellation.

System Action: All reference to the job are deleted from the system.

Operator Response: None.

IEE302I dddy ONLINE

Explanation: One of the following occurred:

- In response to a VARY device online command, the system has placed device ddd online.
- In response to a VARY PATH online command, the path to device ddd has been placed online.

Operator Response: None.

IEE303I dddy OFFLINE

Explanation: One of the following occurred:

- In response to a VARY device offline command, the system has placed device ddd offline.

- In response to a VARY PATH offline command, the path to device ddd has been placed offline.

Operator Response: None.

IEE304I jji JOB RESET

Explanation: In response to a RESET command, the system has changed the priority class and/or output class, of the job named jji.

Operator Response: None.

IEE305I { cm (blanks) CSCB USE MODE } COMMAND INVALID

Explanation: The command cm is invalid for one of the following reasons:

- The command is misspelled or punctuated incorrectly.
- A command valid only at Initial Program Load (IPL) was used after IPL.
- A command was issued without a prerequisite command. If blanks appear, the operand of the central command was too long, or a framing quote was not found within 62 bytes. CSCB USE indicates that the maximum number of central commands had been enqueued when another central command was submitted. MODE indicates that ECC was requested in record mode while HIR was in quiet mode.

System Action: The system did not execute the command.

Operator Response: Probable user error. When CSCB USE is printed, resubmit the command at a later time. If the condition persists, have the remote job entry program reassembled with a greater number of central command queuing buffers. If blanks or cm appear, enter the command again correctly. For MODE, if desired, enter the command to place HIR into record mode before resubmitting the command to place ECC into record mode.

Problem Determination: Table I, items 2, 29.

IEE306I cm INVALID NUMERIC

Explanation: In the cm command, a parameter value that is supposed to be numeric either contains one or more characters that are not numbers or has too large a value.

Example: D U,DASD,,,27B - where the last operand is supposed to be a decimal number between 0 and 999.

System Action: The system did not execute the command.

Operator Response: Probable user error. Enter the command again correctly.

Problem Determination: Table I, items 2, 29.

IEE307I cm DELIMITER ERROR

Explanation: In the cm command, either the punctuation for a parameter is incorrect, or the operand field is not followed by a blank.

Example: D Q = (A,B - where the list of queue classes should be delimited by a right parenthesis.

System Action: The system did not execute the command.

Operator Response: Probable user error. Issue the command again correctly.

Problem Determination: Table I, items 2, 29

IEE308I cm TERM LENGTH ERROR

Explanation: In the cm command, a parameter is too long or short. Either the parameter is not spelled correctly or a comma is not in the correct location.

Example: D Q = (A,B,C,D,E) - where the list cannot consist of more than four members.

System Action: The system did not execute the command.

Operator Response: Probable user error. Enter the command again correctly.

Problem Determination: Table I, items 2, 29.

IEE309I cm UNIDENTIFIABLE KEYWORD

Explanation: In the cm command, a keyword is misspelled.

System Action: The system did not execute the command.

Operator Response: Probable user error. Issue the command again correctly.

Problem Determination: Table I, items 2, 29.

IEE310I cm KEYWORD MISSING

Explanation: In the cm command, a required keyword parameter is missing.

System Action: The system did not execute the command.

Operator Response: Probable user error. Enter the command again correctly.

Problem Determination: Table I, items 2, 7ab, 29.

IEE311I cm PARAMETER MISSING

Explanation: In the cm command, a required parameter is missing.

System Action: The system did not execute the command.

Operator Response: Probable user error. Enter the command again correctly.

Problem Determination: Table I, items 2, 29.

IEE312I cm PARAMETERS CONFLICT

Explanation: In the command indicated by cm in the message text, a keyword parameter either appears more than once or conflicts with another parameter. If cm is a MOUNT command for a tape, USE = STORAGE may have been specified. USE = STORAGE is invalid for tapes.

System Action: The system did not execute the cm command.

Operator Response: Probable user error. Enter the correct command again. If the command was MOUNT, for a tape, indicate USE = PRIVATE or USE = PUBLIC.

Problem Determination: Table I, items 2, 29.

IEE313I { utn HARDCOPY } UNIT REF INVALID

Explanation: In a command, the unit name utn is invalid or indicates a device type that cannot be used for the purpose intended by the command. In systems with Multiple Console Support, if a V, HARDCPY, OFF command is entered, and there is no currently recording hardcopy log, HARDCOPY will replace utn in the message text. In the case of an invalid composite specification, both the I-unit and the O-unit device addresses will appear.

If V utn,OFFLINE was issued for a reserved device, and no UNLOAD command had been previously issued to that device, the VARY OFFLINE command will not be processed.

Example: D U,,,3EQ - where Q is not a valid hexadecimal number.

System Action: The system did not execute the command.

Operator Response: Probable user error. Enter the command again, correcting the unit name.

Problem Determination: Table I, items 2, 7ab, 29.

IEE314I cm UNIT NOT AVAILABLE

Explanation: In the cm command, one or more units specified are unavailable; that is, they are already in use. If an UNLOAD command was entered, cm specifies the unit name.

System Action: The system did not execute the command.

Operator Response: Probable user error. Enter the command again correctly.

Problem Determination: Table I, items 2, 7b, 29.

IEE3151 cm UNIT NOT SUPPORTED

Explanation: In the cm command, one or more units specified are invalid; that is, they cannot be used for the purpose intended by the command.

System Action: The system did not execute the command.

Operator Response: Probable user error Enter the command again correctly.

Problem Determination: Table I, items 2, 7ab, 29.

IEE3161 jji JOB NOT FOUND

Explanation: A CANCEL, DISPLAY, HOLD, RELEASE, or RESET command specified job jji; however, the job cannot be found. Possibly the job name in the command was misspelled.

- If the job was specified in the RESET command, this message is issued if an output queue entry for the job existed, but the job had been selected by a writer or the queue search had been limited to a specific queue.
- If the job was specified in the CANCEL command and no system output class was indicated, the job may be on an output queue.
- If the job was specified in the CANCEL command and a specific system input or system output class was indicated, the job is not on the indicated queue but may be on another queue.
- If jji is a system task, either the task is starting or it is too late to cancel the task.
- If the job was specified in the DISPLAY command it is possible for the job to have been removed from the job queue and to be in initialization. A subsequent DISPLAY ACTIVE command should show the jobname as an active task.

System Action: The system did not execute the command.

Operator Response: Enter the command again correctly. If the job was specified in the CANCEL command, enter the command again specifying a system output class or specifying a different system input or system output class, as necessary. If jji is a system task, enter a DISPLAY A command to see if the task is starting. If the task is starting, enter a CANCEL STARTING command; otherwise, enter a STOP command.

Problem Determination: Table I, items 2, 7ab, 29. If unable to continue system operation, see Table I, items 8a, 11.

IEE3171 jji JOB SELECTED

Explanation: A DISPLAY, HOLD, RELEASE, or RESET command specified job jji; the system found the job, but it is too late to execute the command.

If the job was specified on the CANCEL command, system input or system output classes were specified and the job is still running.

System Action: The system did not execute the command.

Operator Response: If the job was specified on the CANCEL command and it is desired to cancel the system output, reenter the command upon completion of the job. If it is desired to cancel the job while it is still running, enter the CANCEL jji command.

IEE3181 QUEUE EMPTY

Explanation: In response to a DISPLAY N or DISPLAY Q command, a search of the SYS1.SYSJOBQE data set indicated that there were no jobs on the queue.

System Action: No display was created.

Operator Response: None.

IEE3191 INVALID LOG COMMAND - TEXT LENGTH EXCEEDS MAXIMUM

Explanation: The text portion of the LOG command was too long to be written into the system log. The maximum length for the text is 128 characters.

System Action: The command was not executed.

Operator Response: Reenter the LOG command; do not exceed 128 characters.

IEE3201 jji ALL SYSOUT CANCELLED

Explanation: In response to a CANCEL command, all system output for job jji has been canceled.

Operator Response: None.

IEE3211 jji SYSOUT CLASS x CANCELLED

Explanation: In response to a CANCEL command, all system output for class x of job jji has been cancelled.

Operator Response: None.

IEE3221 jji JOB CANCELLED

Explanation: Job jji was cancelled in response to a CANCEL command entered by the operator.

System Action: All references to the job are deleted from the system.

Operator Response: None.

IEE3231 cm CLASSNAME ERROR

Explanation: In the cm command, a classname subparameter in the CLASS parameter contains a nonalphameric character.

System Action: The system did not execute the command.

Operator Response: Reenter the command correctly.

Problem Determination: Table I, items 2, 29.

IEE3241 xxxx NOT LOGGED ON

Explanation: The operator has entered a CANCEL U = xxxx, but the specified user, xxxx, is currently not running in the system.

System Action: The command was not executed.

Operator Response: None.

IEE3251 xxxx REJECTED - TSO NOT ACTIVE

Explanation: The operator has entered a command that references the foreground (i.e., MN SESS, P SESS, or C U = jji), but the Time Sharing Option is not active in the system. xxxx is the command verb entered (i.e., CANCEL, C, STOP, P, etc.)

System Action: The command was not executed.

Operator Response: None.

IEE3271 USERS = nnnn id(regno) id(regno)

Explanation: As a result of the DISPLAY USER command the number of active users and the user identification of each will be given as shown above where:

nnnn

is the number of active users on the system.

id

is the identification of each active user on the system.

regno

is the region number of each active user.

When USER = NMBR is specified, only the number of active users will be displayed.

Operator Response: None.

IEE328I cm COMMAND ABORTED

Explanation: Due to an insufficient amount of storage in the system queue space, the system was unable to schedule a command for execution.

System Action: The system did not execute the command.

Operator Response: Reenter the command at a later time.

IEE329I unitaddr UNDER TEST BY OLTEP

Explanation: The user issued a V unitaddr, ONLINE command or, in systems with Multiple Console Support, a V unitaddr, CONSOLE command. The Specified device is presently under test by OLTEP and cannot be made available to OS until completion of the online test.

System Action: The system does not process the request.

Operator Response: Re-issue the command when OLTEP has completed.

IEE330I jjj JOB HELD

Explanation: In response to a HOLD command, the system is temporarily preventing the job named jjj from being selected for processing. The job is in the hold queue in the SYS1.SYSJOBQE data set.

In response to a RELEASE command the job named jjj was found on the hold queue, but it has failed with a JCL error and will remain there until a CANCEL command is issued for it.

Operator Response: None.

IEE331I jjj JOB RELEASED

Explanation: In response to a RELEASE command, the system is again able to select the job named jjj for processing, unless the job is in a queue held by a HOLD Q command.

Operator Response: Check the HOLD command that was entered preceding this RELEASE command. If it was a HOLD command, job jjj has been released; no other action is needed. But, if it was a HOLD Q command, job jjj has not been released, despite this message; enter a RELEASE Q command to release the input work queue, including job jjj.

IEE332I QUEUE HELD

Explanation: In response to a HOLD Q command, the system is temporarily preventing all jobs in the input work queue, which is in the SYS1.SYSJOBQE data set, from being selected for processing.

Operator Response: None.

IEE333I QUEUE RELEASED

Explanation: In response to a RELEASE Q command, the system is again able to select all jobs from the input work queue in the SYS1.SYSJOBQE for processing.

Operator Response: None.

IEE334I HALT EOD SUCCESSFUL

Explanation: In response to a HALT EOD command, the system has stored internal input/output device error counts in the SYS1.LOGREC data set.

Operator Response: The power can be turned off.

IEE335I VOL PARAMETER MISSING

Explanation: In a MOUNT command, the VOL parameter is missing.

System Action: The system did not execute the command.

Operator Response: Probable user error. Enter the command again correctly.

Problem Determination: Table I, items 2, 7ab, 29.

IEE338I ddd INACTIVE AS HARDCPY

Explanation: In response to a VARY HARDCPY, OFF command, the hard copy capabilities have been varied out of device ddd. Since hard copy is not required, the command has been accepted by the system.

Operator Response: None.

IEE339I ddd CHANGING STATUS

Explanation: A VARY command was issued for device ddd. However, the device is currently in the process of changing status. In the case of an invalid composite specification, both the I-unit and the O-unit device addresses will appear.

System Action: The system did not execute the command.

Operator Response: Use the DISPLAY CONSOLES command to determine the status of the device. After the device has completed its status change, reenter the command.

IEE341I ttt NOT ACTIVE

Explanation: A command was received which applies to the task named ttt; however, no task with this name is currently active.

System Action: The command was not executed.

Operator Response: Verify that the task has been started by issuing a 'DISPLAY A' command or make sure that the task name was specified correctly in the command.

Problem Determination: Table I, items 2, 7ab, 29. If unable to continue system operation, see Table I, item 11.

Note: After a swap from a started reader or writer, all console communication must be with the old device address until the reader or writer in the swap is closed. Then the new device address can be used.

IEE342I cm REJECTED - TASK BUSY.

Explanation: The command named cm was received; however, either the command applies to a task that has not finished processing a previous command or the command was entered for a job or task that is in a 'must complete' mode.

Example: DA

System Action: The command was not executed.

Operator Response: Reenter the command after the previous commands have completed execution.

IEE343E ser, dsn, NOT MOUNTED

Explanation: In attempting to locate the SYS1.SYSJOBQE or SYS1.PROCLIB data set, indicated by dsn in the message text, the catalog was searched. The catalog indicated that the data set would be found on the volume whose serial number is ser. However, the indicated volume is not mounted.

System Action: The SET command was not executed.

Operator Response: Probable user error. If the volume containing the data set is mounted but is not the volume indicated in the message text, reenter the SET command using the Q = or PROC = parameter to specify the unit on which the data set can be found. If the indicated volume has to be mounted or if the device was offline, ready the volume or device and restart the system.

Problem Determination: Table I, items 2, 7ab, 25d, 29. If unable to continue system operation, see Table I, item 11.

IEE344E dsn, NOT FOUND ON ser, ddd

Explanation: In attempting to locate the SYS1.SYSJOBQE or SYS1.PROCLIB data set, indicated by dsn in the message text, the system considered device ddd on which was mounted the volume whose serial number is ser. This device and volume were considered for one of the following reasons:

- The device was specified in the SET command.

- The catalog indicated that the data set would be found on the volume whose serial number is ser.
- The device was specified at system generation.
- As a default, the IPL volume was considered.

However, the data set was not on the indicated volume.
System Action: The SET command was not executed.
Operator Response: Probable user error. If the volume containing the data set is mounted on a device other than that specified in the message text, reenter the SET command using Q = or PROC = parameter to specify the unit on which the data set can be found. If the indicated volume has to be mounted, mount the volume and restart the system. If the indicated device was offline, ready the device and restart the system.
Problem Determination: Table I, items 2, 7ab, 25bd, 29. If unable to continue system operation, see Table I, item 11.

IEE345I cm AUTHORITY INVALID

Explanation: Command cm was entered in an environment with multiple console support. However, the command was entered from a console without the proper command authority.
Example: K M,UTME = 20 entered from any console other than the master console.
System Action: The system did not execute the command. However, if a VARY command was entered, the command will not be processed only for the device specified in the message text.
Operator Response: Probable user error. Reenter the command from a console with the proper command authority.
Problem Determination: Table I, items 2, 7ab, 17ab, 29. Issue a 'DISPLAY CONSOLES' command.
 If unable to continue system operation, see Table I, item 11.

IEE346I INPUT RDR JOBNAME OVER 8 CHARS

Explanation: In a START RDR or START RDRA command, the jobname parameter value specified a name longer than 8 characters.
System Action: The system did not execute the command.
Operator Response: Probable user error. Enter the command again, making sure that the jobname specified does not consist of more than 8 characters.
Problem Determination: Table I, items 2, 7ab, 29. If unable to continue system operation, see Figure 1, item 11.

IEE348I ddd UNAVAILABLE CONSOLE.

Explanation: Device ddd, specified as the primary or master console at system generation, is not available for system use.
System Action: The system will use the alternate or secondary console. If no alternate or secondary console is available, the system enters a wait.
Operator Response: Continue system communication on the alternate or secondary console.
Problem Determination: Table I, items 2, 7ab, 29.

{ IEE349I HARDCOPY CONSOLE } { IEE349I CONSOLES }	CONSOLE/ALT	COND	AUTH	ID	AREA	ROUTCD
	{ console/alt }	H	auth1	nn	x,a,-a ₂	rou ₁ cd
{ SYSLOG }						rou ₂ cd
console/alt		{ M }	auth2			
		{ A,[P] }				
		{ N,[P] }				
		{ N,[T] }				

Explanation: In response to a VARY command, this message provides a display of the console configuration. In response to a VARY HARDCOPY command, the first format of the title line

and the data line appears with the label line. In response to a VARY CONSOLE command, the second format of the data line appears with the title and label lines.
 In the message text, the fields are:

- CONSOLE**
 console
 ddd
 device address of the primary console, which is either an output device or an input/output device.
 ddd,ddd
 device addresses of the composite primary console.
- SYSLOG**
 the SYSLOG is the hard copy device.
- ALT**
 alt
 ddd
 device address of the alternate console.
 ddd,ddd
 device addresses of the composite alternate console.
- COND**
 H
 hard copy device.
 M
 master console.
 A
 active console.
 A,P
 in the process of becoming an active console.
 N
 non-active console.
 N,P
 in the process of becoming a non-active console.
 N,[T]
 cannot be made a console until the Online Test Executive Program (OLTEP) completes its online test program.
- AUTH**
 auth1
 CMDS
 Operator and system commands and all responses are to be written on the hard copy log.
- STCMDS**
 Operator and system commands and status displays are to be written on the hard copy log.
- INCMDS**
 Operator and system commands and inline responses are to be written on the hardcopy log.
- NOCMDS**
 Operator and system commands and responses are not to be written on the hardcopy log.
- auth2
 SYS
 Commands authorized for the console are CANCEL, HALT, HOLD, MODE, MODIFY, RELEASE, RESET, SET, START, STOP, SWITCH, and WRITELOG.
- IO
 Commands authorized for the console are MOUNT, UNLOAD, and VARY.
- CONS
 Command authorized for the console is VARY, plus use of the routing location operand.
- INFO
 commands authorized for console are DISPLAY, LOG, and CONTROL, MONITOR, MSGRT, STOPMN, REPLY.
- ALL
 commands authorized for console are all the commands listed above under SYS, IO, CONS, and INFO.

NONE

no command authority, which occurs with an output only device.

ID nn

the system identification number for this console.

AREA

x, a₁ - a₂, the range of area designators defined for this console, where x is the id of the message area, a₁ is the bottom area and a₂ is the top area.

ROUTCD

routing codes

x,x,...

the routing codes assigned to the console or hard copy device; if a composite console, the routing codes assigned to the output device.

ALL

all of the routing codes.

NONE

none of the routing codes.

Operator Response: None.

Note: If the console specified is not a CRT console, the AREA column will not be displayed.

IEE351I SMF SYS1.MAN RECORDING NOT BEING USED

Explanation: During SMF initialization, one of the following occurred:

- Space was not allocated for the SYS1.MAN data set or SYS1.MAN data set could not be opened. In this case, message IEE358I, or IEE363I precedes this message, indicating the cause of the error.
- MAN = NONE was specified, indicating that no data records were to be written in the SMF data set.

System Action: System operation continues, but no records are written in the SYS1.MAN data set.

Operator Response: In the first case, inform the system programmer to properly define the SMFDEFLT member, as indicated in the response to the preceding message. In the second case, none.

IEE352A SMF MEMBER MISSING - REPLY WITH SMF VALUES

Explanation: During SMF initialization, the SMFDEFLT member was not found in the SYS1.PARMLIB data set.

System Action: SMF initialization will not continue until the operator has responded to this message.

Operator Response: Probable user error. Enter REPLY xx,'keyword = value, keyword = value', listing all the required SMFDEFLT parameters as defined by the programmer responsible for the system at your installation. Inform the programmer responsible for the system to define the SMFDEFLT member in the SYS1.PARMLIB data set, thereby eliminating the need to redefine the SMFDEFLT parameters from the keyboard at every SMF initialization.

Problem Determination: Table I, items 2, 7ab, 29. Execute the IEHLIST utility program to list members of SYS1.PARMLIB and save the output.

IEE353A I/O ERROR ON SMFDEFLT READ - REPLY WITH SMF VALUES OR RE-IPL

Explanation: During SMF initialization, an uncorrectable input/output error occurred while reading or searching for the SMFDEFLT member in the SYS1.PARMLIB data set.

System Action: SMF initialization will not continue until the operator has responded to this message.

Operator Response: Restart the system. If the error persists, enter REPLY xx,'keyword = value,keyword = value', listing all the required SMFDEFLT parameters as defined by the system programmer at your installation.

Problem Determination: Table I, items 2,7ab, 29.

IEE354I SMF PARAMETERS

Explanation: This message is issued if OPI = YES was specified in the SMFDEFLT member. All the parameters of the SMFDEFLT member are listed, one parameter to a line, following this message; each parameter is listed in the format keyword = value. Message IEE357A follows, permitting changes to be made.

System Action: None.

Operator Response: None.

IEE355I SMF PARAMETER ERRORS

IEE355I { xxxx UNRECOGNIZABLE KEYWORD/FORMAT
keyword = value INVALID VALUE SPECIFIED
keyword - KEYWORD NOT SPECIFIED }

Explanation: During SMF initialization, a parameter was specified incorrectly either in the SMFDEFLT member or in a reply from the console. The specific error is listed in the second line of the message:

xxxx UNRECOGNIZABLE KEYWORD/FORMAT

An unrecognizable keyword was detected; xxxx specifies up to 25 characters of the keyword in error.

keyword = value INVALID VALUE SPECIFIED

The keyword specified is valid, but the value specified is invalid.

keyword - KEYWORD NOT SPECIFIED

The keyword specified is required, but was not found in the SMFDEFLT member.

Message IEE356A follows, permitting changes to be made.

System Action: None.

Operator Response: None.

IEE356A REPLY WITH SMF VALUES

Explanation: This message follows message IEE355I, and permits corrections to be made to the parameters in error.

System Action: SMF initialization will not continue until the operator has responded to this message.

Operator Response: Enter REPLY

xx,'keyword = value,keyword = value', correcting the parameters in error indicated in message IEE355I (as defined by the system programmer at your installation). Inform the system programmer to correct the errors in the specification of the SMFDEFLT member.

IEE357A REPLY WITH SMF VALUES OR U

Explanation: This message follows message IEE354I, and permits changes to be made to the parameters listed.

System Action: SMF initialization will not continue until the operator has responded to this message.

Operator Response: If any parameters are to be changed, enter REPLY xx,'keyword = value,keyword = value', specifying the changes desired (as defined by the programmer responsible for the system at your installation). If parameters are not to be changed, enter REPLY xx,'U'.

Problem Determination: Table I, items 2, 7ab, 29. Execute the IEBTPCH utility program to list the member SMFDEFLT from SYS1.PARMLIB, and save the output.

IEE358I SMF SYS1.MAN { X } NOT FOUND ON utn

Explanation: The SYS1.MANX or SYS1.MANY data set, as indicated in the message text, was specified for the device whose unit address is utn. However, no space was allocated for the data set on that device.

System Action: System operation continues, but no records are written in the SYS1.MAN data set.

Operator Response: Probable user error. Inform the programmer responsible for the system either to allocate space for the data set on the indicated device or to redefine the set in the SMFDEFLT data member.

Problem Determination: Table I, items 2, 7ab, 25bd, 29.

**IEE359I INCOMPATIBLE SMF VALUES FOR OPT AND DSV.
OPT = 2 SUBSTITUTED.**

Explanation: The value OPT = 1 is not compatible with the value DSV = 2 or DSV = 3 for the recording of STEP and/or VOLUME information for SMF. The value OPT = 2 is required to create preliminary records needed for the above SMF information.

System Action: The value OPT = 2 is substituted. Processing continues and SMF information is recorded.

Programmer Response: Probable user error. If STEP and/or VOLUME information is not desired, re-initialize the system and specify SMF parameter value DSV = 0 or DSV = 1.

Problem Determination: List SYS1.PARMLIB member SMFDEFLT to verify the parameter defaults specified. The user may change these defaults in SYS1.PARMLIB, or override them through the console at system initialization, to conform to his current SMF requirements.

**IEE360I SMF NOW RECORDING ON SYS1.MAN { X } ON utn
TIME = hh.mm.ss { Y }**

Explanation: Records are being written in the SYS1.MANX or SYS1.MANY data set, as indicated in the message text, on the device whose unit address is utn. The message also indicates the time of day, where hh specifies the hour (00-23), mm specifies the minute (00-59), and ss specifies the second (00-59).

Note: These records are initially placed in a buffer; when the buffer is full, the data in the buffer is written in the indicated data set. If the system fails before the buffer is full, the records are lost.

System Action: None.

Operator Response: None.

**IEE361I SMF DATA LOST -- SYS1.MANX/Y NOT AVAILABLE
TIME = hh.mm.ss**

Explanation: The SYS1.MANX and SYS1.MANY data sets are both full. Therefore, no more records can be written. The message also indicates the time of day, where hh specifies the hour (00-23), mm specifies the minute (00-59), and ss specifies the second (00-59).

System Action: System operation continues, but no records are written in the SYS1.MAN data sets. Until a data set becomes available, a record is kept of the number of records lost and of the starting and ending times of the period during which no records were written. When a data set becomes available, an SMF data lost record (type 7) is written.

Operator Response: Initiate execution of the IFASMFDP program. If a dump program is currently executing, ensure that it completes as soon as possible.

**IEE362A SMF ENTER DUMP FOR SYS1.MAN { X } ON utn
{ Y }**

Explanation: The SYS1.MANX or SYS1.MANY data set, as indicated in the message text, is full or end-of-day was specified. The data set is on the device whose unit address is utn.

System Action: None.

Operator Response: Initiate execution of the IFASMFDP program for the indicated data set.

**IEE363I SMF { ser } { utn } { DEVICE CAPACITY TOO SMALL FOR
BUFFER
DEVICE NOT IN SYSTEM
INCORRECT DEVICE TYPE
NOT DIRECT ACCESS
OFFLINE
PRIVATE
IS BUSY }**

Explanation: Space for the SYS1.MAN data set defined in the SMFDEFLT member cannot be allocated for one of the following reasons:

DEVICE CAPACITY TOO SMALL FOR BUFFER

The specified device cannot contain the largest possible SYS1.MAN record.

DEVICE NOT IN SYSTEM

No unit control block exists for the specified device.

INCORRECT DEVICE TYPE

The wrong device type was specified for the SYS1.MAN data set.

NOT DIRECT ACCESS

A device other than a direct access device was specified for the SYS1.MAN data set.

OFFLINE

The unit control block for the device is marked offline.

PRIVATE

The volume is private and the volume serial was not specified for the SYS1.MAN data set in the PRM and/or the ALT parameter.

IS BUSY

A tape device specified for the SYS1.MAN data set was already allocated to another data set.

In the message text, ser is the serial number of the volume and utn is the unit address of the device containing the SYS1.MAN data set.

System Action: System operation continues, but no records are written in the SYS1.MAN data set.

Operator Response: Probable user error. Inform the programmer responsible for the system to properly define the device in the SMFDEFLT member or to make the specified device available.

Problem Determination: Table I, items 2, 7ab, 29. Execute the IEBTPCH utility program to list the member SMFDEFLT from SYS1.PARMLIB, and save output. If unable to continue system operation, see Table I, item 11.

IEE364I SMF I/O ERROR ON utn

Explanation: A permanent input/output error occurred while writing in the SYS1.MAN data set on the device whose unit address is utn.

System Action: For direct access: if an alternate data set is available, records will be written on that data set; if no alternate data set is available, no records will be written. For tape: the data control block for the data set is closed; however, the system will request another tape volume to be mounted, and the data control block will be subsequently reopened.

Operator Response: Inform the programmer responsible for the system to define a different data set in the SMFDEFLT member.

Problem Determination: Table I, items 2, 7ab, 29.

IEE371I D M COMMAND IGNORED

Explanation: The operator issued an invalid DISPLAY MATRIX command. This command is only valid in a Model 65 multiprocessing system.

System Action: The command was ignored and the system continues processing.

Operator Response: Probable user error.

Problem Determination: Table I, items 2, 29.

IEE376I PATHddd LAST PATH TO DEVICE

Explanation: A VARY PATH command requested that the last path to device ddd be varied offline.

System Action: The command is not executed. The system continues operation.

Operator Response: Probable user error. If ddd does not indicate the desired path, enter the command again correctly. The last path to a device cannot be varied offline.

Problem Determination: Table I, items 11, 29.

IEE377I PATHddd TP - CANNOT BE VARIED

Explanation: A VARY PATH command requested that the path to telecommunications device ddd be varied. However, alternate path retry does not support teleprocessing. In the message text, central processing unit y appears only for multiprocessing systems.

System Action: The command is not executed. The system continues operation.

Operator Response: If ddd does not indicate the desired path, enter the command again correctly.

Problem Determination: Table I, items 11, 29.

IEE378I PATHddd DOES NOT EXIST

Explanation: A VARY PATH command requested that a non-existent path to device ddd be varied online or offline. However, the path does not exist in the system.

In the message text, central processing unit y appears only for multiprocessing systems.

System Action: The command is not executed. The system continues operation.

Operator Response: Probable user error. If ddd does not indicate the desired path, enter the command again correctly.

Problem Determination: If ddd does indicate the desired path, or if the problem recurs, see Table I, items 11, 29.

IEE379I PATHddd NOT AVAILABLE

Explanation: A VARY PATH command requested that the path to shared direct access storage device ddd be varied offline. However, the path is temporarily reserved and cannot be varied.

In the message text, central processing unit y appears only for multiprocessing systems.

System Action: The command is not executed. The system continues operation.

Operator Response: Probable user error. If desired, enter the VARY PATH command again after the shared device has been released.

Problem Determination: Table I, items 11, 29.

IEE380I ddd DEVICE TYPE INVALID

Explanation: The device (ddd) specified in reply to message IGF500D for SWAP xxx,yyy is one of the following:

- not of the same device type as xxx
- an invalid address
- not operational
- not a supported device:
 - Teleprocessing devices and graphics devices

Integrated Emulator Second generation tapes
 Unit record devices in ready status
 Shared DASD request not to same address
 Tape swaps where yyy is allocated
 DASD volumes marked permanently resident (including
 SYSRES and paging data set volumes)

System Action: The command is not executed. The system continues operation.

Operator Responses: Probable user error. If a swap is still desired, enter the command again correctly.

The following unit record swaps are supported for swapping. The system will not initiate a swap on these devices, but the operator may request a swap during intervention required conditions.

- 1403/1404 to 1403/1404
- 1442 to 1442
- 2501 to 2501
- 2520 to 2520
- 3505 to 3505
- 3211 to 2311
- 3525 to 3525
- 2540 to 2540
- 3211 to 3211

The following tape swaps are supported:

- 7-track to 7-track
- 9-track 800 bpi to 9-track 800 bpi
- 9-track dual density 800 bpi to 9-track 800 bpi
- 9-track dual density 800 bpi to 9-track dual density 800 bpi
- 9-track 1600 bpi to 9-track 1600 bpi
- 9-track dual density 1600 bpi to 9-track 1600 bpi
- 9-track dual density 1600 bpi to 9-track dual density 1600 bpi

Note: May go from 2400 to 3400 but not from 3400 to 2400.

Problem Determination: Table I, items 11, 29.

IEE381I ddd DEVICE UNALLOCATED

Explanation: A SWAP command was entered for device ddd that has not been allocated to a job. Therefore, a swap cannot be performed.

System Action: The command is not executed. The system continues operation.

Operator Response: Probable user error. If movement of the volume on device ddd is not desired, none.

If movement of the volume on device ddd is desired, issue a VARY DEVICE offline command for the device and move the volume. If the VARY DEVICE command is not executed successfully, then the device has since been allocated and the SWAP command can be reentered.

Problem Determination: Table I, items 11, 29.

IEE382I DDR CURRENTLY ACTIVE

Explanation: A SWAP command was entered; however, a dynamic device reconfiguration request is outstanding.

System Action: The command was not executed.

Operator Response: Wait for the outstanding dynamic device reconfiguration request to complete. Then, if desired, reenter the SWAP command.

NOTE: Canceling the affected job will purge the outstanding request.

CAUTION: If you decide to cancel the job that was running when DDR got control or if that job ABENDS, you must reply to any outstanding DDR messages that require replies.

Problem Determination: Table I, items 11, 29.

IEE390I NO ALTERNATE CONSOLE

Explanation: No device has been designated as an alternate console.

System Action: The system continues processing.
Operator Response: If an alternate console is desired, ready the device and restart the system. Otherwise, ignore the message.

IEE3911 ALTERNATE CONSOLE IS adr

Explanation: A device has been designated as an alternate console. In the message text, adr is either the address of the console device (adr) or in the case of a composite console, the addresses of both devices (adr,adr).

System Action: The system continues processing.
Operator Response: None.

IEE395W MASTER SCHEDULER INITIALIZATION FAILED - RE-IPL

Explanation: During master scheduler initialization, abnormal termination occurred.

System Action: The master scheduler task goes into a permanent wait state.

Operator Response: Restart the system.

Problem Determination: Table I, items 2, 7ab, 11, 29.

IEE400I THESE MESSAGES CANCELLED- xx,xx,xx

Explanation: The program that issued the messages whose message identifiers, xx, are listed above has abnormally terminated. Therefore, the replies previously asked for by these messages are no longer needed.

System Action: The system continues processing.
Operator Response: None.

IEE403I cm COMMAND ABORTED

Explanation: The cm command was unable to complete its execution because of a system failure. Message IEE404I, which usually precedes this message, indicates the probable cause of the failure.

System Action: The system did not execute the command.
Operator Response: Enter the command again.

Problem Determination: Have both the console sheet containing this message and the master console sheet available. Provide the storage dump if message IEE404I indicates that one has been taken.

IEE404I {M}dd [rr] xx yy z
{S}

Explanation: While the Master Scheduler (indicated by M in the message text) or the Command Scheduler (indicated by S) was processing a command, a system task abnormally terminated with the system completion code yyy. The system entered processing recovery routines to perform corrective action as indicated by xx. In the message text, dd is the dump identification used to correlate this message with a system produced storage dump, rr is the return code for the SVC Dump routine, and z represents the program status word at the time of the failure.

If z consists of zeroes, insufficient core was available to the ABEND/STAE routines at the time of failure to save the PSW at the time of the failure.

System Action: The system takes one of the following corrective actions, as indicated by xx in the message text:
00 - All control block chains were found to be valid and no corrective action was taken.

02 - A LOGON Communication Element (LCE) chain pointer was not within System Queue Space (SQS). The invalid pointer was zeroed, truncating the LCE chain.

03 - An LCE pointer was not on a doubleword boundary. The invalid pointer was zeroed, truncating the LCE chain.

- 04 - A Command Scheduler Control Block (CSCB) chain pointer was not on a doubleword boundary. The invalid pointer was zeroed, truncating the CSCB.
- 06 - A CSCB chain pointer was not within SQS. The invalid pointer was zeroed, truncating the chain.
- 08 - An abnormal termination occurred when this task was enqueued on the Group Control Block (GCB) chain. A DEQ macro instruction was issued to free the GCB resource.
- 10 - A GCB chain pointer was not on a doubleword boundary. The invalid pointer was zeroed, truncating the GCB chain.
- 12 - A GCB chain pointer was not within SQS. The invalid pointer was zeroed, truncating the GCB chain.
- 14 - A Command Input Buffer (CIB) chain pointer was not on a doubleword boundary. This CIB chain was pointed to by a CSCB. The invalid pointer was zeroed, truncating the CIB chain.
- 16 - A CIB chain pointer was not within SQS. This CIB chain was pointed to by a CSCB. The invalid pointer was zeroed, truncating this CIB chain.
- 18 - A CIB chain pointer was not on a doubleword boundary. This CIB chain was pointed to by a GCB. The invalid pointer was zeroed, truncating th CIB chain.
- 20 - A CIB chain is not within SQS. This CIB chain was pointed to by a GCB. The invalid pointer was zeroed, truncating the CIB chain.
- 22 - The Master Scheduler task or Display Active task terminated abnormally. The system freed storage that had been obtained by these tasks.
- 24 - A Reply Element chain pointer was not on a doubleword boundary. The invalid pointer was zeroed, truncating the Reply Queue Element chain.
- 25 - A Reply Queue Element chain pointer was not within SQS. The invalid pointer was zeroed, truncating the Reply Queue Element chain.
- 29 - The Display Active task terminated abnormally. The Master Region Busy (also known as the Display Active) bit in the Master Resident Area was turned off (set to 0).
- 30 - A dump of all storage was attempted to help isolate the problem. These are possible values of the rr field and their meanings:
 - 00 Successful completion of dump to SYS1.DUMP data set
 - 04 DCB invalid, or not opened
 - 08 Caller not in supervisor state
 - 12 Dump service device not supported
 - 16 Recursion to dump routine occurred
 - 20 Dump data set full
 - 24 Invalid parameter list given
 - 28 Permanent I/O error - no dump taken
 - 32 Permanent I/O error - partial dump taken
 - 36 End-of-file on tapeNote: The rr field will only be present when a code of 30 is given.
- 31 - The Master Scheduler task or Display Active task terminated abnormally. Some storage obtained by these tasks was not freed.

After these corrective actions have been taken, the system will continue processing, but at a reduced capability. Performance may be affected in the following ways:

- If xx is 04 or 06, some MODIFY, STOP, CANCEL, and DISPLAY commands may result in other error messages.
- If xx is 10, 12, 14, 16, 18, or 20, some previously entered MODIFY or STOP commands will not be executed.
- If xx is 24 or 25, some outstanding replies may not be valid.
- If xx is 31 and message IEE403 indicates that the Display Active task was aborted, future Display Active tasks may not execute.

Operator Response: Respond as follows:

- If xx is 00, 02, 03, 08, 10, 12, 14, 16, 18, 20, 22, or 29, no action is required.
- If xx is 04 or 06, quiesce and restart the system.
- If xx is 24 or 25, determine which outstanding replies are required by entering a DISPLAY R command. Because the Reply Queue Element chain has been truncated, the system may no longer be aware of tasks waiting for outstanding replies. Therefore, some problem programs may terminate abnormally and some system tasks may wait indefinitely. If system tasks appear to be waiting for this reason, quiesce and restart the system.
- If xx is 30, use the AMDPRDMP Service Aid program to print the dump data set.
- If xx is 31 and message IEE403I indicates that the Display Active task was aborted, quiesce and restart the system.

Problem Determination: Table I, items 2, 29. If the xx field in the message text is 30, indicating that a storage dump was taken, have the dump available. If rr is 04,08,12,16,or 24, see Table I, items 2, 30.

IEE415I INVALID PROCEDURE ON START cm

Explanation: The procedure specified in a START command contained more than one step, at least one of which was a system task.

System Action: The command was not executed.

Operator Response: Probable user error. Report the message to the programmer responsible for the system at the installation.

Problem Determination: Table I, items 2, 7ab, 26d, 29.

IEE450I hh.mm.ss UNIT STATUS [id]

Explanation: In response to a DISPLAY U command, this message provides a display of the requested information. The message may appear in either of two formats:

- If OFFLINE is not specified in the DISPLAY U command, the following headings will appear on the second line of this message -- UNIT, TYPE, STATUS, VOLSER, and VOLSTATE. If two or more units are being described, the headings will appear twice on the second line. The third line, and each succeeding line, will contain information as described by the headings.
- If OFFLINE is specified in the DISPLAY U command, the following headings appear on the second line -- UNIT and TYPE. Up to seven units may be described on the third line and each succeeding line of the display.

[id]

A three-digit decimal identification number. It is used in conjunction with the CONTROL C,D command for canceling status displays being written on typewriter or printer consoles or being displayed in-line (not in a display area) on a display (CRT) console. This identification number does not appear when the display is presented in a display area on a display console.

System Action: None.

Operator Response: None.

IEE452I UNIT STATUS NUMBER OF UNITS REQUESTED EXCEEDS NUMBER AVAILABLE

Explanation: In the DISPLAY U command, the number of devices specified for which information was to be supplied exceeded the number of devices in the system with the requested attributes. This message appears as the last line of the display.

System Action: The command was executed.

Operator Response: None.

IEE453I UNIT STATUS, INVALID OPERAND. RE-ENTER

Explanation: In the DISPLAY U command, invalid parameters were specified.

System Action: No display was created.

Operator Response: Enter the command correctly, specifying valid parameters.

IEE454I UNIT STATUS, DEVICE DOES NOT EXIST

Explanation: In the DISPLAY U command, the single device specified did not correspond to any device in the system.

System Action: No display was created.

Operator Response: Enter the command correctly, specifying a valid device description.

IEE455I UNIT STATUS, NO DEVICES WITH REQUESTED ATTRIBUTES

Explanation: In the DISPLAY U command, attributes were specified that did not correspond to any devices in the system.

System Action: No display was created.

Operator Response: Enter the command correctly, specifying valid device descriptions.

IEE475I TASK jjj sss ABENDED. COMPLETION CODE hhh

Explanation: A system task being performed for the step named sss of the job named jjj abnormally terminated with a completion code of hhh, in hexadecimal.

System Action: The task was terminated.

Operator Response: Examine the conditions causing completion code hhh to be produced and, if possible, correct the error and start the task again. At some convenient time, either start or restart the system, whichever is necessary, to ensure against a possible loss of system resources.

Problem Determination: Table I, items 2, 7ab, 29. If unable to continue system operation, see Table I, item 11. If hhh is associated with the job queue see Table I, item 8a.

IEE479W taskname { [ABEND xxx,] } [DUMPED,]REIPL
 { [FAILED,] }

Explanation: The named task failed. If ABEND xxx appears in the message text, xxx is the system completion code. If FAILED appears, the task failed during initialization. The optional field DUMPED indicates that a complete dump has been taken to the SYS1.DUMP data set. If DUMPED is omitted, there is no usable dump.

System Action: The system enters a permanent wait state.

Operator Response: Restart the system.

Programmer Response: If xxx appears in the message text, take the action indicated for that system completion code.

Problem Determination: Table I, items 2 and 29. Print the SYS1.DUMP data set if DUMPED appeared in the message. Otherwise, take a stand-alone dump.

IEE480I taskname { [ABEND xxx,] } [DUMPED,]TERMINATED
 { [FAILED,] }

Explanation: The named task failed. If ABEND xxx appears in the message text, xxx is the system completion code. If FAILED appears, the task failed during initialization. The optional field DUMPED indicates that a complete dump has been taken to the SYS1.DUMP data set. If DUMPED is omitted, there is no usable dump.

System Action: Other system processing continues.

Operator Response: None.

Programmer Response: If ABEND xxx appears in the message text, take the action indicated for that system completion code.

Problem Determination: Table I, items 2 and 29. Print the SYS1.DUMP data set if DUMPED appeared in the message. Otherwise, take stand-alone dump.

IEE481I MASTER SCHEDULER ABEND xxx,[DUMPED,] RESTARTING

Explanation: The named task failed. The xxx in the message text is the system completion code. The optional field DUMPED indicates that a complete dump has been taken to the SYS1.DUMP data set. If DUMPED is omitted, there is no usable dump.

System Action: The task will automatically restart.

Operator Response: None.

Programmer Response: Take the action indicated for the system completion code.

Problem Determination: Table I, items 2 and 29. Print the SYS1.DUMP data set if DUMPED appeared in the message. Otherwise, take a stand-alone dump.

IEE482E MASTER SCHEDULER RESTART FAILED-ABEND RECURSION-REIPL

Explanation: An attempt to restart the master scheduler failed. This message will always be preceded by this message, IEE481I MASTER SCHEDULER ABEND xxx,[DUMPED,]RESTARTING.

System Action: The system will continue to process without the master scheduler.

Operator Response: After current system processing has stopped, restart the system to restart the master scheduler.

Programmer Response: Respond as indicated to message IEE481I.

IEE483W VIRTUAL STORAGE UNAVAILABLE FOR JOBQUE INITIALIZATION

Explanation: Virtual storage was not available for initializing the SYS1.SYSJOBQE data set. A request for real storage for the format routines had already failed and was indicated by message IEE501I.

System Action: The system enters a wait state.

Operator Response: Restart the system.

Problem Determination: Table I, items 2, 7abc, 11, and 29.

IEE498I UNABLE TO FREE LSQA FOR taskname, DUMPED

Explanation: The DETACH of a master scheduler subtask failed because all of the virtual storage resources assigned to the subtask had not been freed.

System Action: The master scheduler will free the resource and processing will continue. A dump was taken to the SYS1.DUMP data set which will indicate the cause of the failure.

Operator Response: None.

Programmer Response: Print the SYS1.DUMP data set and interpret to find the cause of the failure.

Problem Determination: Table I, items 2, and 29. Print the SYS1.DUMP data set.

IEE499W LSQA UNAVAILABLE FOR JOBQUE INITIALIZATION

Explanation: Not enough local system queue space (LSQA) was available for the SYS1.SYSJOBQE initialization.

System Action: A dump is taken to the SYS1.DUMP data set and the system enters a permanent wait state.

Operator Response: Probable user error; restart the system.

Problem Determination: Table I, items 2 and 29. Print the SYS1.DUMP data set.

IEE501I REAL STORAGE UNAVAILABLE FOR JOBQUE FORMATTING

Explanation: Contiguous VIRTUAL = REAL address space (16K for JOBQUE) was not available for formatting the data set with BSAM chained scheduler option. Either the resident control program and its address space occupied too much VIRTUAL = REAL storage or some 4K blocks of real storage experienced machine checks and were inaccessible.

System Action: The data set is formatted. Space for the formatting routines is obtained from virtual storage and the records were written without the active chained scheduling option. Formatting occurs at a slower rate than if chained scheduling was used.

Operator Response: If the slow formatting is undesirable, press the SYSTEM RESET button and restart the system with more real storage available. Have the system programmer analyze the amount of real storage set aside for the system. At the next IPL, increase the amount of real storage.

Note: Real storage can be made available by reconfiguring the resident control program or having repairs made on the inaccessible blocks of storage. Have the system programmer analyze the amount of real storage set aside for the system. At the next IPL, increase the amount of real storage.

Programmer Response: None.

Problem Determination: Table I, items 7b, 7c, 18, and 30.

IEE513I COMMAND PROCESSING LIMITED

Explanation: The Command Scheduling Control Block (CSCB) chain was invalid and was truncated at the last valid block.

This message will always be preceded by the message IEE481I taskname ABEND xxx,[DUMPED,]RESTARTING.

System Action: The system will continue processing but the capability to MODIFY, STOP, CANCEL and DISPLAY certain tasks may be lost and attempts to use them may result in error messages.

Operator Response: None.

Programmer Response: Respond as indicated to message IEE481I.

IEE514I taskname ABENDING COMPLETION CODE xxx

Explanation: The system task control failed with a completion code of xxx while processing a START or MOUNT command for the indicated task, or terminating the indicated task.

System Action: Processing for the indicated task terminates, and all resources of that task are returned to the system.

Operator Response: Inform the system programmer that this message has been issued.

Programmer Response: Examine the conditions causing the termination of the indicated task, and if possible, correct the error. Then request that the operator restart the task.

Problem Determination: Table I, items 2, 7ab, 29.

IEE528I COMMAND PROCESSING ABEND xxx HAS OCCURRED

Explanation: An abnormal termination occurred during execution of a queue manipulation command. The system completion code is indicated by xxx.

System Action: Processing of the queue command terminates, and the subpools and the region allocated to the queue-alter routine are freed.

Operator Response: Inform the system programmer or installation manager that this message has been issued.

Programmer Response: Examine the conditions causing the system completion code xxx. If possible, correct the error and re-enter the command.

Problem Determination: Table I, items 2, 7ab, 29.

IEE5301 DATE/CLOCK VALUES DO NOT FALL BETWEEN 00.001 AND 99.366

Explanation: This message was caused by one of the following conditions:

- The response to message IEE116A did not include the GMT (Greenwich Mean Time) parameter.
- GMT was either below 00.001 or above 99.366.
- The TOD clock was set with a value in which the local clock was not in the range of 00.001 to 99.366.

Note: By subtracting the time-zone constant (always present) from the local time, the system will calculate the GMT. Similarly, given the TOD, the system will calculate the local time by adding it to the time-zone constant. Should any of the calculations result in a value less than 00.001 or greater than 99.366, the SET parameters are unacceptable.

System Action: The SET parameters are not accepted; this message will be followed by either IEE116A or IEE114A.

Operator Response: Check the date-time specified previously.

When responding to message IEE116A:

1. If the date-time was low (00.001, CLOCK = 23.59.59), reply with a later date-time. This will be followed by message IEE114A to which the original date-time should be responded. The system will then calculate the proper relative dates and times. If this message is repeated, reply with a later date-time.
2. If the original date-time was high (99.366, CLOCK = 00.00.00 or greater) respond with a lower date-time.

When responding to message IEE114A:

Reply with a lower TOD date-time. Then set the local clock at the date-time desired. If this message is repeated, set the TOD clock with a lower date-time.

Programmer Response: None.

IEE6001 REPLY TO xx IS; text

Explanation: This message notifies all console operators that received a message request with identification xx that a reply has been accepted to the message. The first thirty characters of the accepted reply appear as 'text'. The text may or may not be enclosed in quotes depending on whether or not the reply was enclosed in quotes.

System Action: The system continues processing.

Operator Response: None.

IEE6991 REPLY xx IGNORED; NON-DECIMAL ID

Explanation: A REPLY xx command was entered specifying a non-decimal id. The reply id must be entered as decimal digits with or without a leading zero in ids 01 through 09.

System Action: The REPLY xx command is ignored. The system continues processing.

Operator Response: Probable user error. Enter the REPLY command again correctly.

Problem Determination: Table I, items 2, 29.

IEE7001 REPLY xx IGNORED; REPLY TOO LONG FOR REQUESTOR

Explanation: A REPLY xx command was entered and the reply text was too long for the user's buffer.

System Action: The REPLY xx command is ignored. The system continues processing.

Operator Response: Probable user error. Enter the REPLY command again correctly.

Problem Determination: Table I, items 2, 29.

IEE7011 REPLY xx IGNORED; NO REPLIES OUTSTANDING

Explanation: REPLY xx was entered when a reply was not being requested.

System Action: The unexpected REPLY xx was ignored. The system continues processing.

Operator Response: None.

IEE7021 REPLY xx IGNORED; IMPROPER USE OF DELIMITERS

Explanation: REPLY xx was invalid for one of the following reasons:

- A closing apostrophe did not follow the text when the text was preceded by an apostrophe.
- An invalid character (a character other than a comma, space, or EOB) followed the id.

System Action: The REPLY xx was ignored. The system continues processing.

Operator Response: Probable user error. Enter the REPLY command again correctly.

Problem Determination: Table I, items 2, 29.

IEE7031 REPLY xx NOT REQUESTED FROM THIS CONSOLE

Explanation: A REPLY xx command was entered by a secondary console in response to a message that the console did not receive.

System Action: The REPLY xx command is ignored. The system continues processing.

Operator Response: Probable user error. Enter the command again from the master console or from a console that received the message.

Problem Determination: Table I, items 2, 29.

IEE7041 REPLY xx NOT OUTSTANDING

Explanation: A REPLY xx command was entered; however, there is no outstanding reply request with the identification xx. Either the message request has already been answered or the message reply identification xx is incorrect.

System Action: The REPLY xx command is ignored. The system continues processing.

Operator Response: Probable user error. If the reply identification was incorrect, enter the command again correctly.

Problem Determination: Table I, items 2, 29.

**IEE7061 {SWITCH}NOT SUCCESSFUL
{HALT }**

Explanation: One of the following occurred:

- The SWITCH SMF command was entered in a system not supporting SMF.
- The SWITCH SMF or the HALT EOD command was entered while the SMF recording data sets were being switched or while there was no SMF data set available.

System Action: The command was not executed.

Operator Response: Reenter the command as soon as the data set switch has completed.

Problem Determination: Table I, items 2, 7ab, 29.

IEE7071 cm yyy NOT EXECUTED

Explanation: The command indicated by cm in the message text could not be performed by the system for one of the following reasons:

- The subsystem resources are in use.
- The subsystem buffers are filled.

In the message text, yyy is the parameter field. (cm+yyy will not exceed 8 characters.)

System Action: The system did not execute the command (cm).

Operator Response: Enter the command (cm) again when the previously entered subsystem commands have completed execution.

Problem Determination: Table I, items 2, 29.

IEE720I NO PFK ALLOCATION

Explanation: The operator has entered the CONTROL command with either the N,PFK; D,PFK; or E,PFK operand when PFK support has not been included in the system.

System Action: The command is not executed.

Operator Response: Check with the system analyst or the system programmer to make sure that PFK support has been included in the system during system generation.

Problem Determination: Execute the AMASPZAP service aid program to dump load module IEEPFKEY from SYS1.DCMLIB and save the output. Table I, item 29.

IEE721I PFK nn NOT SUPPORTED

Explanation: The operator pressed PFK nn (or selected displayed number nn from the PFK display line with the light pen) for which support had not been requested at system generation.

System Action: None.

Operator Response: Retry the operation. Check the PFK specification for correctness. If the problem recurs, do the following before calling for IBM support:

- Issue D PFK command from the console.
- Have the hardcopy printout available.

IEE722I PFK nn NOT DEFINED

Explanation: This message indicates that the operator has pressed PFK key nn or positioned the light pen over PFK key number nn, and either of the following conditions occurred:

- The selected key has no commands defined for it.
- A zero length command is contained within the key definition.

System Action: None.

Operator Response: Use the DISPLAY PFK command to request a display of the commands associated with the PFK keys. If the selected key is undefined, select another key or use the CONTROL N,PFK command to define commands for the key. If the selected key is defined, check the command syntax. A semi-colon incorrectly located immediately behind the first quote or immediately in front of the last quote, or two semi-colons together within the command, can cause a zero length indication.

Problem Determination: Table I, items 2, 29.

IEE723I PFK IN PROCESS. LAST INTERRUPT IGNORED

Explanation: The operator pressed a nonconversational PFK (or selected a nonconversational PFK number with the light pen) and then pressed a second PFK (or selected a second PFK number) before processing of the first request was complete.

System Action: The system does not recognize the second request. This message is displayed in the instruction line until processing of the first request is complete; then it is removed.

Operator Response: Wait until the message is removed from the instruction line, then reenter the second request.

Problem Determination: Table I, items 2, 29.

**IEE724I hh.mm.ss PFK DEFINITIONS [id]
KEY# CON DEFINITIONS
nn ccc tttt...**

Explanation: This message is displayed on a CRT console in response to a DISPLAY PFK command. It provides a display of the operator commands associated with each PFK key.

In the label line KEY # refers to the number of the PFK key (or displayed PFK key number), CON refers to conversational mode, and DEFINITION refers to the current definition of the key.

In the message text the fields are:

hh.mm.ss

The time of day, where hh specifies the hour (00-24), mm specifies the minute (00-59), and ss specifies the second (00-59).

[id]

A three-digit decimal identification number. It is used in conjunction with the CONTROL C,D command for canceling status displays being written on typewriter or printer consoles or being displayed in-line on a display (CRT) console.

nn

The number of the key whose definition is displayed on this line.

ccc

The status of the conversational mode: YES, if conversational mode is in effect; NO, if conversational mode is not in effect; and blank, if the key is not defined.

tttt...

The current definition for the key. This field can contain up to 108 characters or 52 key numbers separated by commas; this field will be continued on a second line, if necessary. If the key is not defined, this field contains NOT DEFINED.

Operator Response: None.

IEE813I cm yyy - FAILED

Explanation: The START or MOUNT command indicated by cm in the message text could not be executed because sufficient LSQA was not available. (yyy represents the command parameters.)

System Action: The system will not execute the command.

Operator Response: Reenter the command at a later time or stop a currently running task to free allocated storage.

Problem Determination: Table I, items 2, 29.

**IEE824A yyy COMMUNICATION TASK ABEND, tt DUMP
TAKEN**

Explanation: The communications task abnormally terminated and is attempting a STAR retry. All I/O processing for operator consoles has been halted and only the master console is active. The fields in the message text are:

- yyy - the ABEND completion code.
- tt - NO if no dump was taken; blank if a successful dump was taken.

System Action: All pending messages and outstanding WTORs are discarded. Users of communication task functions (WTO, WTOR, DOM) can expect unpredictable results. All user tasks and TSO tasks in real storage are abnormally terminated if they have unanswered WTORs or are waiting for an ORE; under these conditions, swapped out TSO tasks are permanently non-dispatchable. A dump is attempted using the SVC Dump facility.

Operator Response: If the message indicates that a successful dump was taken, use the AMDPRDMP program to print it. A re-IPL of the system may be necessary. If you choose not to re-IPL, use the VARY command to reactivate other consoles.

Problem Determination: Table I, items 2, 16, 29.

**IEE867I PARMTZ VALUE IN PARMLIB INVALID. SYSGEN
VALUE BEING USED**

Explanation: The time zone value specified in the Parmtz PARMLIB member was unacceptable for one of these reasons:

- The value was not between 00.00.00 and 23.59.59.

- The value was not in the proper syntax. The proper syntax is:

```
{E } , hh.[mm.ss]
{W }
```

 where E and W indicate the time zone is East or West of the GMT zone.

System Action: The time zone value specified in the Parmtz PARMLIB member will not be used. The system will use the time zone value specified at system generation.

Operator Response: None.

Programmer Response: Make sure that the time zone value specified in Parmtz PARMLIB is between 00.00.00 and 23.59.59 and is in the proper syntax.

IEE868I PARMLIB COULD NOT BE OPENED FOR PARMTZ. SYSGEN VALUE BEING USED

Explanation: An error occurred while attempting to open SYS1.PARMLIB.

System Action: The time zone value specified in the Parmtz PARMLIB member will not be used. The system will use the time zone value specified at system generation.

Operator Response: None.

Programmer Response: If the Parmtz member exists, or if it is wanted, execute the IEBUPDTE Utility to create or recreate the member. Otherwise, ignore the message.

IEE869I I/O ERROR READING PARMTZ PARMLIB MEMBER. SYSGEN VALUE BEING USED

Explanation: An I/O error occurred while attempting to read a record from the Parmtz PARMLIB member.

System Action: The time zone value specified in the Parmtz PARMLIB member will not be used. The system will use the time zone value specified at system generation.

Operator Response: None.

Programmer Response: Execute the IEBUPDTE Utility to recreate the Parmtz PARMLIB member.

```
IEE870I hh.mm.ss NAME DISPLAY [id]
        QUEUE  JOBNAME STAT      JOBNAME STAT
        xxxx x  xxxxxxxx          xxxxxxxx x-xxx
        JOBNAME STAT  JOBNAME STAT
        xxxxxxx  x-xxx  xxxxxxxx  x-xxx
```

Explanation: This is the control line of the Status Display initiated by the DISPLAY N or DISPLAY N,(list) command. [id]

A three-digit decimal identification number. It is used in conjunction with the CONTROL C,D command for canceling status displays being written on typewriter or printer consoles or being displayed in-line (not in a display area) on a display (CRT) console. This identification number does not appear when the display is presented in a display area on a display console.

The label line describes the fields of data.

JOBNAME

The name of a job placed on one of the system queues.

QUEUE

This field is one of the following:

- JOB x, where x is the class identifier of an input queue.
- HOLD, which contains all jobs assigned to the HOLD queue by the HOLD command, or by the TYPRUN = HOLD parameter of the JOB statement.
- SOUT x, where x is the class identifier of an output queue.

STAT

HELD if queue is held. Originating queue identifier if job is on HOLD queue.

Operator Response: None.

```
IEE907I xxx ABEND- {SEND}CMD ABORTED
                   {D }
```

Explanation: The system has encountered an error while processing the SEND or DISPLAY USER command, as indicated in the message text; the command processing routine has terminated abnormally. In the message text, xxx is the system completion code for the failing task.

System Action: The task is terminated. System processing continues.

Operator Response: Reenter the command. For an explanation of system completion code xxx, refer to the System Completion Codes publication.

IEE908I cm CMD LENGTH EXCEEDS MAX

Explanation: In the cm command, the length of the operand field exceeds the maximum number of characters.

System Action: The system did not execute the command. **Operand Response:** Probable user error. Enter the command again with a shorter operand field.

Problem Determination: Have available the master console sheet or the listing from a terminal in operator mode.

IEE920I NO MN A UPDATE AT hh.mm.ss

Explanation: A time interval has elapsed at hh.mm.ss signaling that an Active Task display be created on behalf of the MONITOR command. However, sufficient virtual storage was not available within the master scheduler region to execute the command.

System Action: No Active Task display will be created. A new time interval will be established and another attempt will be made to create an active display when the new interval expires.

Operator Response: None. However, if this condition occurs frequently, the time interval should be increased by entering K M,UTME = nn from the master console.

```
IEE921I cm op REJECTED { NO TIMER
                        { DISPLAY ALREADY EXISTS
                        { DISPLAY AREA BUSY
                        { NO MONITOR TO STOP
                        { NEEDS DISPLAY AREA
                        { DEVICE NOT SUPPORTED }
```

Explanation: A MN A, PM A, K V or K M command was entered and one of the following error conditions occurred:

- NO TIMER** - A MN A; K V, USE = MS; or K M,REF or K M,UTME = nna command was entered into a system which has no internal timer, or one in which the interval timer was not operational at IPL.
- DISPLAY ALREADY EXISTS** - A MN A command requested a dynamically updated status display at a console already displaying a dynamic display, or to an area which contained a MN A display in HOLD Mode (a KD,H had been issued).
- DISPLAY AREA BUSY** - A MN A command was entered without specifying an area. A display can not go in the message stream.
- NO MONITOR TO STOP** - A PM A command was entered 1) with no area specified, 2) with an area specified that did not contain a MN A display, or 3) to a console which did not contain a MN A display.
- DEVICE NOT SUPPORTED** -
 - A MN A command was entered 1) to a non-CRT device, or 2) with area+'z' (MN A cannot appear inline.)
 - An K V,USE = MS was entered in a system which has no paper consoles online.
 - An K V command was entered against a 2250.



Operator Response:

- **NO TIMER** - Turn on the interval timer, if one is available, before the next IPL. The interval timer must be in operation before the system is IPLed if the MONITOR A, STOP MONITOR or K M and K V, USE = command is to be used.
- **DISPLAY ALREADY EXISTS** - If the MN A display is in HOLD mode as a result of a K D,H command, a K D,U command will result in the MN a display being reactivated.
- **DISPLAY AREA BUSY** - The CONTROL (K) command may be used to define a display area on a CRT console and then enter the MN A command. The L = cca operand should be specified on the MN A command or the MSGRT (MR) command should be used to establish a default L = cca value.
- **NO MONITOR TO STOP** - If MN A is active, supply the L = cca operand on the PM command.
- **DEVICE NOT SUPPORTED** -
 - If the receiving console is a non-CRT console, the DISPLAY A command may be used to request a static display of the active jobs.
 - Vary a paper console online, repeat the K V,USE = MS command.
 - The K V command is not valid for the Master Console or a 2250.

Problem Determination: Table I, items 2, 29.

IEE922I K M,UTME = nnn

Explanation: This message is issued in response to a K M,REF command issued on a non-CRT console. The value specified by nnn is the number of seconds in the time interval for updating of dynamic displays. It represents the CONTROL (K) command that set the time interval.

System Action: None.

Operator Response: Change the time interval, if desired.

IEE924I INVALID AREA DEFINITION
{
SCREEN SIZE EXCEEDED
DISPLAY IN OR ABOVE AREA
AREA TOO SMALL
}

Explanation: The operator entered a CONTROL A (or K A) command in which one of these errors was detected:
SCREEN SIZE EXCEEDED

The sum of the lengths of the areas defined exceeded the size of the message area on the console for which the definition was requested.

DISPLAY IN OR ABOVE AREA

Redefinition was requested which affects an area with a display in or above it. Any area definition requested while a display is on the screen may differ from the previous definition only in regard to display areas above the area in use.

AREA TOO SMALL

An attempt was made to define a display area of less than four lines.

System Action: The command is not executed.

Operator Response: Correct the command and reissue it if desired. If the problem recurs, have the hardcopy log available before calling IBM for support.

IEE925I K COMMAND OPERAND xxxxxx FOR
{
CRT } CONSOLES ONLY
{
NON CRT }

Explanation: K command operand xxxxxx applies only to CRT consoles. If entered from a non-CRT, it must be routed to a CRT console.

System Action: The command is not executed.

Operator Response: Correct the command and reissue it if desired. D C,K may be entered for an explanation of the CONTROL command.

Problem Determination: Table I, items 2, 29.

IEE926I L = cca OPERAND INVALID
{
cca NOT AN AREA
cc NOT A CONSOLE
cc FULL CAPABILITY
ON THIS COMMAND
cc OUTPUT ONLY
DYNAMIC DISPLAY AREA
}

Explanation: One of the following error conditions occurred as a result of the location operand, L = cca (cca in the message text will be replaced with the invalid operands).

- **cca NOT AN AREA** - The area specified by the L = cca operand 1) does not exist, 2) was other than 'Z' for a non-CRT console, or 3) was 'Z' for a status display console.
- **cc NOT A CONSOLE** - The console ID specified by the L = cca operand is not an existing or active console.
- **cc FULL CAPABILITY** - The console ID specified is not the requestor's own console, a message stream console, or status display console. No routine is allowed from one full capacity console to another.
- **ON THIS COMMAND** - The L = operand was specified on one of the following commands:

K A	K D
K S	K D,N
K E,N	K D,N,HOLD
K E	K D,PFK
K E,SEG	K N,PFK
K E,PFK	

- **cc OUTPUT ONLY** - A attempt was made to make a console full capability via the K V,USE = FC command which was an output only device.
- **DYNAMIC DISPLAY AREA** - The area specified by the L = cca operand contains a dynamic display.

System Action: The command is not executed.

Operator Response:

- **cca NOT AN AREA** - Change the area specification and re-enter the command. If the problem recurs, a console switch may have taken place. If one has, re-enter the command specifying the valid area for the alternate console.
- **cc NOT A CONSOLE** - Change the console id specification and re-enter the command. If the problem recurs, a console switch may have taken place. If one has, re-enter the command specifying the alternate console's id.
- **cc FULL CAPABILITY** - Specify your own console or a message stream or status display console and re-ente rthe command.
- **DYNAMIC DISPLAYAREA** - Specify another area and re-enter the command.
- **IN THE COMMAND** - Reenter the command without the L = cca command.
- **cc OUTPUT ONLY** - Unless the system is re-sysgened, this device will not be able to serve as a Full Capacity console.

Problem Determination: Table I, items 2, 29.

IEE927I CONTROL REQUEST AMBIGUOUS
{
SPECIFY DISPLAY ID
SPECIFY L OPERAND
}

Explanation: The Control (K) command cannot be executed without further information.

- SPECIFY DISPLAY ID - A CONTROL C,D (or K C,D) command was entered without the id operand. To cancel a display (K C,D, id), the id of the display to be terminated must always be specified.
- SPECIFY L OPERAND - A CONTROL command for an out of line display, such as a frame or erase command, was issued without the routing location parameter (L = cca), and more than one display exists on the screen. The area id of the display area to be controlled must be specified by using the L operand.

System Action: The command is not executed.
Operator Response: Reissue the command specifying the missing operand.
Problem Determination: Table I, items 2, 11, 29.

IEE928I DISPLAY AREA ID's FOR CONSOLE cc ARE id, id,...

Explanation: This message is issued in response to the operator defining areas for console cc. The display area identifiers are listed in the order in which the areas were defined, from the bottom of the screen to the top.
System Action: None.
Operator Response: The operator may route displays to the areas defined by using the display area id.

**IEE929I K A, { NONE
length,... ,L = cc }**

Explanation: This message is issued, on non-CRT consoles only, in response to the operator issuing a K A,REF command. It represents the CONTROL (K) command which defined the display areas for the console whose address is specified.
System Action: None.
Operator Response: Change the display area definition, if desired.

**IEE930I MR[[D = [(display operand[,display operand])],...,
L = {^acc }][,(MN = A,L = {^acc })][,(K,L = {^acc })]]**

Explanation: This message is issued, on non-CRT consoles only, in response to the operator issuing a MR REF command. It represents the MSGRT (MR) command which specified the routing defaults currently in effect. If the operand portion of the message is blank, no routing defaults have been established.
System Action: Processing continues.
Operator Response: If desired, change the routing defaults with the MR command.

IEE931I INSUFFICIENT STORAGE FOR cm op

Explanation: While attempting to fulfill the request specified by the cm, op command, a GETMAIN was issued requesting storage from system queue space to build a control block and/or work area. The requested storage was not available. This condition may occur during definition of display areas or when routing to a console other than the requesting console.
System Action: The command cm op was not executed.
Operator Response: Re-enter the command at a later time.
Problem Determination: Table I, items 2, 29.

IEE932I nnn

Explanation: A multiple line WTO macro instruction was issued with descriptor code 9 and no control line text was supplied. The number, nnn is used with the CONTROL (K) command to cancel the display.
System Action: SVC 35 has supplied this message as a control line. The number, nnn, is the display identification number.
Operator Response: None.

IEE933I DCMLIB OPEN FAILED

Explanation: When attempting to open the display control module library (SYS1.DCMLIB) in secondary storage, the system was either unable to locate the library, unable to open the library, or the volume containing the library was off-line during IPL.
System Action: The PFK command entry facility will be inoperative because the system was unable to read the command definitions into virtual storage.
Operator Response: All commands that are normally entered by means of the PFK or the light pen must be entered from the typewriter keyboard. Report the problem to the programmer responsible for the system.

IEE934I PFK UPDATE ERROR

Explanation: An I/O error occurred: (1) when the system attempted to read the permanent PFK definition from secondary storage during IPL, or (2) when the system attempted to write a new PFK definition in secondary storage after the operator issued a CONTROL N,PFK command.
System Action: If an error occurs on a read during IPL, the permanent PFK definitions will be unavailable for the system operation following the current IPL. If an error occurs for a PFK update, the permanent copies of the PFK definitions will not be altered, and the PFK updates will not carry over to subsequent IPLs.
Operator Response: If an error occurs on a read during IPL, the operator will have to define each PFK key for the current IPL. If an error occurs during a PFK update, the new definition will be effective only for the current IPL. Report this problem to the programmer responsible for the system.



Job Scheduler Messages (IEF)

Component Name	IEF
Program Producing Message	Job scheduler.
Audience and Where Produced	For Programmer: listing of job control statements in SYSOUT data set. For operator: console.
Message Format	IEFnnnl text (in SYSPRINT) xx IEFnnns text (on console) nnn Message serial number. text Message text. xx Message reply identification (absent, if operator reply not required). s Type code: A Action; operator must perform a specific action. D Decision; operator must choose an alternative. E Eventual action; operator must perform action when he has time. I Information; no operator action is required. W Wait; processing stopped until action is determined and performed.
Comments	None.
Problem Determination	Refer to fold-out Tables I and II at the back of this publication for problem determination instructions.

IEF

Job Scheduler Messages (IEF)

IEF085I REAL STORAGE UNAVAILABLE FOR jjj.sss.ppp

Explanation: A VIRTUAL = REAL request for problem program or checkpoint restart execution could not be satisfied for one of these reasons:

- The REGION parameter in a JOB or EXEC statement specified a value larger than the real storage area.
- Fixed LSQA or SQA pages decreased the available real area; the request could not be honored.

System Action: The job is terminated.

Operator Response: If the is critical, allow the completion of all other currently running jobs; then run the job again.

Programmer Response: One of these actions should be taken:

- Reorganize the job into steps that will reduce the requirement for VIRTUAL = REAL storage.
- Request that the system programmer analyze the amount of real storage set aside for the system. At the next IPL, the system programmer may increase the real storage for VIRTUAL = REAL to meet the installation's workload. The system programmer may also reduce the quickcell area that reserves real storage for the system.

After corrections are made, execute the job again.

Problem Determination: Table I, items 1, 2, 4, and 29.

IEF088I UNKNOWN DEVICE TYPE, BALANCING CONSTANT ASSUMED

Explanation: The unit specified has no system-associated I/O load-balancing constant. Each direct access device supported by this system should have a corresponding constant that will balance allocation of data sets.

System Action: A default I/O load-balancing constant will be selected by the system and allocation will continue. An imbalance of nonspecific data sets in the system may result.

Operator Response: None.

Programmer Response: None.

Problem Determination: Table I, items 2 and 29. Execute the AMASPZAP service aid program to obtain a dump of IEFAB402.

IEF090E PROTECT KEY UNAVAILABLE. jjj PLACED ON HOLD Q

Explanation: Job jjj requested ADDRSPC = REAL for at least one step; all protection keys, 2 through 15, were currently assigned to other jobs that require unique protection keys. (The jobs that require unique protection keys are TCAM and those that specify ADDRSPC = REAL for one or more steps.)

System Action: The job will be placed on the HOLD Q.

Operator Response: Either release the job from the HOLD Q at a time when a protection key is available or cancel the job. Enter a DISPLAY A command to determine if there are fewer than 14 jobs reserving a protection key. If there are fewer than 14 jobs, consult Problem Determination below.

Problem Determination: Table I, items 2, 7a, and 29.

IEF091I PROTECT KEY UNAVAILABLE. START ppp REJECTED

Explanation: The program indicated in procedure ppp is a program that requires a unique protection key; all the protection keys, 2 through 15, were currently assigned to other jobs. (The jobs that require unique protection keys are TCAM and those that specify ADDRSPC = REAL for one or more steps.)

System Action: The task will not be started.

Operator Response: If the task is required, reenter the START command at a time when a protection key is available. Enter a DISPLAY A command to determine if there are fewer than 14 jobs reserving a protection key. If there are fewer than 14 jobs, consult Problem Determination below.

Problem Determination: Table I, items 2, 7a, and 29.

IEF092I jjj sss ppp WAITING FOR A REGION

Explanation: During initiation of procedure ppp, step sss of job jjj, it was not possible to immediately obtain a region for one of the following reasons:

- A sufficient amount of contiguous virtual space is not available.
- A sufficient amount of auxiliary space is not available.
- The system is performing too many paging operations.
- Sufficient real pages are not immediately available (for a V = R region request only).

System Action: The initiator will wait until the request can be satisfied.

Operator Response: None required. However, the job may be terminated by entering a CANCEL command. If this message occurs frequently, report it to the system programmer.

IEF099I JOB jjj WAITING FOR DATA SETS

Explanation: Job jjj requires data sets that are not available. These data sets are named in message IEF863I. When the data sets become available, the system will reserve them for the job and processing will continue.

System Action: Processing of the job will be suspended until the data sets become available.

Operator Response: None required. However, if you want to terminate processing of the job, a CANCEL command may be issued.

IEF100I JOB jjj CANCELED BY SYSTEM

Explanation: One or more of the data sets listed in message IEF863I were permanently unavailable.

System Action: Processing of job jjj will be terminated.

Operator Response: Restart the system, and run the job again. If the rerun fails or is not feasible, report the message and circumstances to the system programmer.

IEF110I Q MGR I/O ERR FOR jjj RETURN CODE X

Explanation: An unusual condition occurred while the system was trying to access the SYS1.SYSJOBQE data set. The Queue Manager returned the return code indicated by x. The return codes are as follows:

- 4 - No job queue space was available in the SYS1.SYSJOBQE data set.
- 12 - An uncorrectable input/output error or unusual condition occurred. (Message IEF440I will normally have also been issued.)

System Action: The access of the SYS1.SYSJOBQE data set was not performed. System completion code 030 is issued following the message for the task which received the return code.

Operator Response: Report the message to the programmer or the installation manager. The message indicates a potential problem with the SYS1.SYSJOBQE data set. If the message is repeated, reformat the SYS1.SYSJOBQE data set at the first convenient opportunity.

Problem Determination: Table I, items 1, 2, 4, 7ab, 29.

IEF122I LSQA UNAVAILABLE. LOAD BALANCING INOPERATIVE FOR STEP stepname

Explanation: The allocation of nonspecific direct access data sets was handled by the load-balancing function. This function

requires a variable amount of LSQA (not exceeding 3K) for its tables and work areas. There was not sufficient LSQA to fulfill this request for the step indicated in the message text.

System Action: The load-balancing function will become inoperative. The job step will be allowed to execute. System performance may be adversely affected.

Operator Response: None.

Programmer Response: Increase the size of LSQA for the initiator class specified on the JOB statement (or default in the reader procedure).

IEF125I jjj LOGGED ON [TIME = hh.mm.ss]

Explanation: In response to a DISPLAY or MONITOR command with JOBNAMES or SESS in its operand, this message indicates that a user has logged on to the system under time sharing and his session name is jjj.

If T is also specified in the operand of the command, then the time of day appears, where hh specifies the hour (00-23), mm specifies the minute (00-59), and ss specifies the second (00-59).

System Response: Session jjj is entering allocation.

Operator Response: No response required. However, if the user should not be logged on at this time, issue CANCEL U = jjj command and the session will be terminated.

IEF126I jjj LOGGED OFF [TIME = hh.mm.ss]

Explanation: In response to a DISPLAY or MONITOR command with JOBNAMES or SESS in its operand, this message indicates that the session jjj has terminated (been logged off of the system). This message is not issued if session jjj has terminated abnormally.

If T is also specified in the operand of the command, then the time of day appears, where hh specifies the hour (00-23), mm specifies the minute (00-59), and sss specifies the second (00-59).

System Response: Session jjj has completed termination.

Operator Response: None.

IEF127I NO SPACE PARAMETER GIVEN FOR A NEW DATA SET OR ZERO SPACE REQUEST AT ABSTR ZERO

Explanation: No SPACE parameter appears in a DD statement defining a new data set on a direct access device or an absolute track request was made for no space (zero space) beginning at absolute track zero.

System Action: The job is terminated.

Programmer Response: Probable user error. If the data set is not new, correct the DISP parameter by specifying OLD, SHR, or MOD. If the data set is new, make sure that a SPACE parameter appears. Then rerun the job.

Problem Determination: Table I, items 2, 7a, 25a, 29.

IEF128I INVALID REQUEST FOR ISAM INDEX

Explanation: For one of the following reasons, the control program is unable to allocate space for the index of a new indexed sequential data set:

- An embedded index was requested for the index or overflow area by a DD statement specifying the index quantity subparameter in its SPACE request.
- An embedded index was requested for multivolume prime area. The request was made by a DD statement specifying an index quantity in the SPACE parameter, DSNAME = name(PRIME), and a device number greater than 1 in the UNIT parameter.

System Action: The job is terminated.

Programmer Response: Probable user error. Correct the faulty DD statement, and rerun the job. In the first case, delete the index quantity subparameter. In the second case, delete the

index quantity subparameter or change the device number subparameter to 1.

Problem Determination: Table I, items 2, 7a, 29.

IEF129I MULTIVOLUME INDEX NOT ALLOWED

Explanation: The control program is unable to allocate a multivolume index for a new indexed sequential data set. The request was made by a device number greater than 1 in the UNIT parameter of a DD statement specifying DSNAME = name(INDEX).

System Action: The job is terminated.

Programmer Response: Delete the device number subparameter, or reduce it to 1. Then rerun the job.

Problem Determination: Table I, items 2, 7a, 29.

IEF130I DSNAMES ELEMENT WRONG - MUST BE INDEX, OVFLOW, OR PRIME

Explanation: In one of the DD statements defining an indexed sequential data set, the element part of the DSNAMES parameter is other than PRIME, INDEX, or OVFLOW.

System Action: The job is terminated.

Programmer Response: Probable user error. Correct the element subparameter. List the volume table of contents (VTOC) of each volume that will contain the data set using the IEHLIST utility program. If the name of this data set appears in any VTOC, remove it using the IEHPROGM utility. Then rerun the job.

Problem Determination: Table I, items 1, 2, 3, 7a, 14, 29.

IEF131I MULTIVOLUME OVFLOW REQUEST NOT ALLOWED

Explanation: A DD statement is requesting a multivolume overflow area for a new indexed sequential data set by specifying a device number greater than 1 in the UNIT parameter and DSNAME = name(OVFLOW). This is not allowed.

System Action: The job is terminated.

Programmer Response: Probable user error. Change the device number subparameter to 1. List the volume table of contents (VTOC) of each volume that will contain the data set using the IEHLIST utility program. If the name of the data set appears in any VTOC, remove it using the IEHPROGM utility. Rerun the job.

Problem Determination: Table I, items 1, 2, 4, 7a, 29.

IEF132I SPACE PARAMETER WRONG - ABSTR AND CYL CONFLICT

Explanation: The SPACE parameter in one of the DD statements defining an indexed sequential data set is incorrect. One of the DD statements defining this data set specified ABSTR and specified CYL. Space for one area of an indexed sequential data set cannot be allocated using the CYL subparameter while the space for another area is allocated using the ABSTR subparameter.

System Action: The job is terminated.

Programmer Response: Probable user error. Correct the SPACE parameter. List the volume table of contents (VTOC) of each volume that will contain the data set using the IEHLIST utility program. If the name of this data set appears in any VTOC, remove it using the IEHPROGM utility. Then rerun the job.

Problem Determination: Table I, items 2, 7a, 14, 29.

IEF133I SPACE PARAMETER WRONG - CYL AND CONTIG CONFLICT

Explanation: The SPACE parameter in one of the DD statements defining an indexed sequential data set is incorrect. The CONTIG subparameter appears for a CYL request in one of the DD statements, while not in another. Space for one area

of an indexed sequential data set cannot be allocated contiguously if space for another area is not.

System Action: The job is terminated.

Programmer Response: Probable user error. Correct the SPACE parameter. List the volume table of contents (VTOC) of each volume that will contain the data set using the IEHLIST utility program. If the data set name appears in any VTOC, remove it using the IEHPROGM utility. Rerun the job.

Problem Determination: Table I, items 2, 7a, 14, 29.

IEF134I SUBPARAMETER WRONG IN SPACE PARAMETER - MUST BE CYL OR ABSTR

Explanation: The SPACE parameter in a DD statement defining a new indexed sequential data set is incorrect. A subparameter other than CYL or ABSTR is present in the statement.

System Action: The job is terminated.

Programmer Response: Probable user error. Correct the invalid subparameter. List the volume table of contents (VTOC) of each volume that will contain the data set using the IEHLIST utility program. If the name of the data set appears in any VTOC, remove it using the IEHPROGM utility. Then rerun the job.

Problem Determination: Table I, items 2, 7a, 14, 29.

IEF135I PRIMARY SPACE REQUEST CANNOT BE ZERO

Explanation: In a DD statement defining an indexed sequential data set, the primary space subparameter is zero. This is not a valid space request.

System Action: The job is terminated.

Programmer Response: Probable user error. Change the primary space request to a non-zero positive value, and rerun the job.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF136I DUPLICATION IN ALLOCATION - INDEX AREA REQUESTED TWICE

Explanation: Two DD statements defining the same indexed sequential data set are requesting space for the index area. Following the allocation of an index area requested by a DD statement containing DSNAME = name(INDEX), either a DD statement containing DSNAME = name(PRIME) requested an embedded index through an index quantity in its SPACE parameter, or another DD statement was found specifying DSNAME = name(INDEX).

System Action: The job is terminated.

Programmer Response: Probable user error. Either eliminate the DD statement that specifies DSNAME = name(INDEX) or eliminate the index quantity subparameter in the DD statement specifying DSNAME = name(PRIME). List the volume table of contents (VTOC) of each volume that will contain the data set using the IEHLIST utility program. If the name of the data set appears in any VTOC, remove it using the IEHPROGM utility. Rerun the job.

Problem Determination: Table I, items 2, 7a, 14, 29.

IEF137I SUBALLOC DATA SET NOT FOUND

Explanation: In a DD statement, space allocation is requested by a SUBALLOC parameter. The control program can not find the data set referred to by the SUBALLOC parameter on the specified volume.

System Action: The job is terminated.

Programmer Response: Probable user error. Replace the SUBALLOC parameter with a SPACE parameter, or recreate the data set allowing for suballocation. Then rerun the job.

Problem Determination: Table I, items 2, 7a, 29.

IEF138I SUBALLOC DATA SET HAS MORE THAN 1 EXTENT - NOT ALLOWED

Explanation: In a DD statement, space allocation is requested by a SUBALLOC parameter. The data set specified in the SUBALLOC parameter has more than one extent.

System Action: The job is terminated.

Programmer Response: Probable user error. Replace the SUBALLOC parameter with a SPACE parameter or define another data set from which to suballocate. Then rerun the job, specifying the CONTIG subparameter.

Problem Determination: Table I, items 2, 7a, 29.

IEF139I SUBALLOC DATA SET IS PASSWORD PROTECTED

Explanation: In a DD statement, space allocation was requested by a SUBALLOC parameter. The data set specified in the SUBALLOC parameter had security protection.

System Action: The job is terminated.

Programmer Response: Probable user error. Replace the SUBALLOC parameter with a SPACE parameter or define another data set from which to suballocate. Rerun the job.

Problem Determination: Table I, items 2, 7a, 29.

IEF140I DIRECTORY SPACE REQUEST IS LARGER THAN THE AMOUNT AVAILABLE ON THIS VOLUME

Explanation: The directory for a new partitioned data set was not allocated because the space requested for the directory by the SPACE parameter of the associated DD statement exceeded the space available on the specified volume.

System Action: The job is terminated.

Programmer Response: Probable user error. Reduce the directory quantity subparameter or request a different volume. Then rerun the job.

Problem Determination: Table I, items 2, 7a, 25a, 29.

IEF141I INDEX REQUEST MUST PRECEDE PRIME FOR ISAM DATA SET

Explanation: In the DD statement defining an indexed sequential data set, a statement containing DSNAME = name(PRIME) was found to precede a statement containing DSNAME = name(INDEX).

System Action: The job is terminated.

Programmer Response: Reorder the DD statements for the data set, making sure that INDEX is placed before PRIME. List the volume table of contents (VTOC) of each volume that will contain the data set using the IEHLIST utility program. If the name of the data set appears in any VTOC, remove it using the IEHPROGM utility. Then rerun the job.

Problem Determination: Table I, items 1, 4, 7a, 14, 29.

IEF142I STEP WAS EXECUTED - COND CODE xxxx

Explanation: The step for which this message appears was executed, and the condition code for the step is xxxx.

Note: This condition code originates from the contents of general purpose register 15 at the end of the step. If the last task of the step did not set a completion code in register 15, the xxxx field of the message is meaningless.

System Action: The system will continue to process further steps of the associated job if so allowed by the COND = parameter of subsequent EXEC statements.

Programmer Response: None.

IEF143I LAST CONCATENATED DD CARD UNNECESSARY OR INVALID FOR THIS DATA SET

Explanation: In processing the DD statement defining an indexed sequential data set, two or three DD cards were processed successfully and INDEX, PRIME, and OVFLOW areas

were allocated. It was then found that at least one more concatenated DD statement was present for the data set. Since all three areas had already been requested, the DD card is unnecessary.

System Action: The job is terminated, and the extra DD statements were not processed.

Programmer Response: Remove the extra DD statements. List the volume table of contents (VTOC) of each volume that will contain the data set using the IEHLIST utility program. If the name of the data set appears in any VTOC, remove it using the IEHPROGM utility. Then rerun the job.

Problem Determination: Table I, items 1, 4, 7a, 14, 29.

IEF144I CANNOT SUBALLOCATE FROM A SPLIT CYLINDER DATA SET

Explanation: In a DD statement, suballocation is requested by the SUBALLOC parameter, and the data set from which the space is to be allocated is a split cylinder data set. Suballocation from a split cylinder data set is not allowed.

System Action: The job is terminated.

Programmer Response: Probable user error. Either replace the SUBALLOC parameter with a SPACE parameter or define another data set from which to suballocate. To insure that the error does not recur, use the SPACE parameter when defining a data set from which suballocation is desired. Then rerun the job.

Problem Determination: Table I, items 1, 4, 7a, 25a, 29.

IEF145I SPACE REQUEST MUST BE ABSTR FOR DOS VOLUME

Explanation: In a DD statement defining an indexed sequential data set with multivolume prime area, the space for one of the prime volumes (except the first one) was requested on a volume where the DOS bit (bit 0 of the DS4VTOCI field) is set in the format 4 DSCB; however the SPACE parameter for the DD statements that define the data set specified CYL.

System Action: The job is terminated.

Programmer Response: Probable user error. Request space by coding ABSTR for the SPACE parameter or request a different volume. Execute the IEHLIST utility to list the volume table of contents (VTOC) of each volume that will contain the data set. If the name of the data set appears in any VTOC, remove it using the IEHPROGM utility. Then run the job again.

Problem Determination: Table I, items 1, 3, 7a, 25a, 29.

IEF146I DUPLICATE DATA SET NAMES WITHIN SPLIT CYLINDER REQUEST

Explanation: The data sets of a split cylinder request have the same name. Data sets on the same volume cannot have the same name.

System Action: The job is terminated.

Programmer Response: Specify unique names for the data sets involved. List the volume table of contents (VTOC) of the associated volume to insure that the names selected do not already exist on that volume. If either of the selected names already exists on the volume, either remove the existing data set from the volume using the SCRATCH function of IEHPROGM or select an alternate name for the new data set whose name is a duplicate.

Problem Determination: Table I, items 1, 3, 4, 7a, 14, 29.

IEF161I ddd - READER CLOSED

Explanation: The SYSIN reader closed its input data set on device ddd and stopped itself for one of the following reasons:

- End of file occurred on ddd.
 - A STOP RDR or STOP RDRA command was entered.
- Operator Response: Unload device ddd.

IEF163I I/O ERROR TERMINATED DISPOSITION PROCESSING

Explanation: An uncorrectable I/O error was encountered while attempting to read a step input/output table (SIOT) from the SYS1.SYSJOBQE data set.

System Action: The job is terminated. No disposition processing is performed on data sets for which no disposition messages appear in the SYSOUT listing.

Programmer Response: If a disposition of KEEP,PASS or RETAIN was specified, no action is required.

If a disposition of DELETE,CATLG or UNCATLG was specified, do the following:

1. Compare the disposition messages with the allocation messages and the job control statements to determine which data sets received incomplete disposition processing. The position of this message in the SYSOUT listing corresponds to the position of the allocation messages and the job control statements.
2. From the previous examination determine the data set names, unit types and volume serial numbers wanted.
3. Execute the IEHLIST utility program to list any temporary data set names.
4. Execute the IEHPRGM utility program to give the disposition of DELETE, CATLG or UNCATLG.

Problem Determination: Table I, items 2, 3, 4, 29.

IEF165I cm

Explanation: Command cm was entered through the input stream. If the operator is requested to authorize execution of commands entered through the input stream, message IEF166D follows to permit the operator to respond.

Operator Response: None.

IEF166D REPLY Y/N TO EXECUTE/SUPPRESS COMMAND COMMAND

Explanation: This message permits the operator to authorize execution of the command displayed in message IEF165I, which precedes this message.

Operator Response: If the command displayed in preceding message IEF165I is to be executed, enter REPLY xx,'Y'.

If the command displayed in preceding message IEF165I is not to be executed, enter REPLY xx,'N'.

IEF190I COMD REJECTED FOR INITIATOR 'ident' - LIMIT MORE THAN 15

Explanation: In a START or MODIFY command for an initiator, the limit value associated with the initiator was greater than 15.

In the message text, 'ident' specifies the identifier assigned to the task when it was started.

Operator Response: Probable user error. Issue the START or MODIFY command again, specifying a limit value of 15 or less.

Problem Determination: Table I, items 1, 2, 4, 7a, 29.

IEF191I COMD REJECTED FOR INITIATOR 'ident' - FORCE MORE THAN 15

Explanation: In a START or MODIFY command for an initiator, a force value associated with a class was greater than 15.

In the message text, 'ident' specifies the identifier assigned to the task when it was started.

Operator Response: Probable user error. Enter the START or MODIFY command again, specifying a force value of 15 or less.

Problem Determination: Table I, items 1, 2, 4, 7a, 29.

IEF198I xxx VOLUME HAS LABEL OR VOLUME SERIAL

Explanation: The tape volume on drive xxx was not the volume requested by the MOUNT command. The tape mounted contained either the wrong label type of the wrong volume serial. This message will be followed by message IEF234E and IEF199A.

System Action: The volume was not mounted by the system, but processing continues.

Operator Response: None.

IEF199A REISSUE MOUNT COMMAND ddd, labtyp, xxxxxx

Explanation: The tape specified in the MOUNT command was not the tape mounted by the operator. In the message text, ddd is the unit address of the drive requiring a mount, labtyp is the label type, and xxxxxx is the volume serial of the tape specified in the MOUNT command. This message will be preceded by message IEF198I and IEF234E.

System Action: The volume is not mounted; the tape is rewound and unloaded.

Operator Response: Reenter the MOUNT command and mount the correct volume.

IEF200I ddn - ONE OR MORE GENERATIONS BYPASSED DURING GDG RETRIEVAL

Explanation: In a DD statement, the data set name in the DSNAME field specified a generation data group (GDG) name and indicated all of the data sets in the group. Some of these data set names were cataloged, but represented nonexisting data sets (the volume serial number in the catalog was FF40404040). In the message text, ddn is the name of the DD statement that specified the GDG.

System Action: No allocation or disposition processing will be performed for the by-passed data sets. All other data sets will be processed normally. Example: If the GDG ALL DD statement specified a disposition of DELETE, at step termination, all retrieved data sets will be deleted and uncataloged. However, any by-passed data sets (because of a FF40404040 volume serial number) will remain cataloged.

Programmer Response: None required. The IEHLIST utility program may be used to list the catalog to determine which generation levels remain; the IEHPRGM may be used to delete those entries.

IEF201I JOB TERMINATED BECAUSE OF CONDITION CODES

Explanation: A problem program terminated either normally or abnormally by issuing a RETURN or ABEND macro instruction that specified a completion code. This completion code satisfied a condition test specified by a code and operator subparameter in the COND parameter of the JOB statement. (Note: This message does not appear if the condition code from the last step of the job satisfied a condition test).

System Action: The job was terminated, so the remaining steps in the job were not executed.

Programmer Response: If termination was intentional, no action is needed.

If termination was not intentional, do the following:

- Correct the error that caused the completion code to be issued by the problem program.
- Change the condition test specified in the COND parameter of the JOB statement, if the problem program contained no errors.
- Submit for execution the remainder of the job, including the problem program if it contained an error.

Problem Determination: Table I, items 1, 2, 4, 7a, 29.



IEF2021 STEP - 'sss,' WAS NOT RUN BECAUSE OF xxx

Explanation: If xxx is CONDITION CODES, a problem program terminated by issuing a RETURN macro instruction that specified a completion code. This completion code satisfied a condition test (specified by a code, operator, and job step name subparameter) in the COND parameter of an EXEC statement.

If xxx is COND = ONLY, the COND parameter of an EXEC statement specified ONLY, but no previous job steps had abnormally terminated.

In the message text, sss is the job step name of the EXEC statement containing the COND parameter.

System Action: The job step specified by the succeeding EXEC statement was not executed. The remainder of the job was or was not executed, depending on the condition tests specified in the EXEC statement for each step.

Programmer Response: If termination was intentional, no action is needed.

If termination was not intentional, do the following:

- Correct the error that caused the completion code to be issued by the problem program.
- Change the condition test specified in the COND parameter of the succeeding EXEC statement, if the problem program contained no errors. Then execute the problem program, if it contained an error, and the job step that was not executed.

Problem Determination: Table I, items 1, 2, 4, 7a, 29.

IEF2031 COMD REJECTED FOR INITIATOR 'ident' - TOO MANY OPERANDS

Explanation: In a START or MODIFY command, parameters were specified which do not pertain to classes.

In the message text, 'ident' specifies the identifier assigned to the task when it was started.

Operator Response: Probable user error. Enter the command again correctly, specifying only those parameters which pertain to classes.

Problem Determination: Table I, items 1, 2, 4, 7a, 29.

IEF2041 COMD REJECTED FOR INITIATOR 'ident' - TOO MANY CLASSES

Explanation: More than 15 job classes were specified in a START command, (or 8 in a MODIFY command). However, a maximum of 15 classes (8 for MODIFY) is permitted.

In the message text, 'ident' specifies the identifier assigned to the task when it was started.

Operator Response: Probable user error. Enter the START or MODIFY command again correctly, specifying no more than 15 (or 8) job classes.

Problem Determination: Table I, items 1, 2, 4, 7a, 29.

IEF2051 COMD REJECTED FOR INITIATOR 'ident' - INVALID OPERAND

Explanation: An error occurred for one of the following reasons:

- An invalid class was specified in a START or MODIFY command.
- The CLASS keyword of a MODIFY command was not specified correctly.

In the message text, 'ident' specifies the identifier assigned to the task when it was started.

Operator Response: Probable user error. Enter the command again correctly.

Problem Determination: Table I, items 1, 2, 4, 7a, 29.

IEF2061 COMD REJECTED FOR INITIATOR 'ident' - NO CLASSES SPECIFIED

Explanation: An error occurred for one of the following reasons:

- No job classes were specified either in the START command or in the cataloged procedure.
 - No job classes were specified in the MODIFY command.
- In the message text, 'ident' specifies the identifier assigned to the task when it was started.

Operator Response: Probable user error. Enter the command again correctly, specifying the proper job classes.

Problem Determination: Table I, items 1, 2, 4, 7a, 29.

IEF2071 START xxxxxxxx REJECTED. ID NOT AVAILABLE

Explanation: When a START INIT command was entered, 63 initiators were already operating. More initiators could not be started.

System Action: The initiator will not be started.

Operator Response: Enter a DISPLAY A command to determine if there are fewer than 63 active initiators. If there are fewer than 63, see Problem Determination below.

Problem Determination: Table I, items 2, 7a, and 29.

IEF2081 INVALID REGION PARAMETER

Explanation: In a JOB or EXEC statement, the REGION parameter specified a value greater than one of the following:

- The system's dynamic virtual address space.
- The amount of auxiliary storage space reserved for the background.

System Action: The job was terminated.

Programmer Response: Do one of the following:

- Reduce the region size.
- Have the installation increase the amount of auxiliary storage available to background jobs.

Problem Determination: Table I, items 1, 2, 4, 7a, 29.

IEF2091 VIRTUAL STORAGE UNAVAILABLE FOR jjj.sss.ppp

Explanation: During execution of a checkpoint restart for procedure step ppp of step sss of job jjj, all or part of the virtual storage for the restart job was not available for one of the following reasons:

- A deferred restart was being performed but the virtual storage area requested was larger than the area used originally. Since the original area was adjacent to the link pack area, the virtual storage area could not be increased.
- A deferred restart was being attempted on a different system, or the same system, with different IPL parameters such that the system queue area occupied part or all of the required region area.
- A deferred restart was being performed, but after IPL the link pack area had expanded into the required virtual storage area.

System Action: Restart for job jjj is terminated.

Operator Response: Restart the system and run the job again.

During system initialization, specify the same options as those used when the checkpoint was taken. If such a rerun fails or is not feasible, report the message and circumstances to the system programmer.

Programmer Response: Probable user error. Request the use of a system known to be adequate for restart.

Problem Determination: Table I, items 1, 2, 7a, 29.

**IEF210I ddn - UNIT FIELD SPECIFIES INCORRECT DEVICE
NAME**

Explanation: In a DD statement, the unit name subparameter in the UNIT parameter was invalid:

- The unit was not defined when the system was generated.

- If a cataloged data set was being referenced, the unit field in the catalog entry is incorrect.

IEF

In the message text, ddn is the data definition name in the name field of the DD statement.

System Action: The job was terminated.

Programmer Response: Probable user error. Correct the unit name subparameter, and submit the job again.

Problem Determination: Table I, items 1, 2, 4, 7a, 29.

IEF211I ddn - REQUIRED CONTROL VOLUME NOT MOUNTED

Explanation: A required control volume for a cataloged data set was not mounted for one of the following reasons:

- No device type information for the control volume was contained in the SYSCTLG data set.
- No SYSCTLG data set was contained on the required volume.

Therefore, it was impossible to locate the cataloged data set. In the message text, ddn is the data definition name in the name field of the DD statement that specified the cataloged data set.

System Action: The job was terminated.

Programmer Response: Probable user error. In the first case, make sure the device type information for the control volume is included in the SYSCTLG data set. (This can be done by using the IEHPROGM utility program to first release and then reconnect the control volume.)

In the second case, make sure the SYSCTLG data set exists on the volume.

Problem Determination: Table I, items 1, 2, 4, 7a, 25d, 29.

IEF212I ddn - DATA SET NOT FOUND

Explanation: In processing a DD statement, the job scheduler found one of the following:

- The data set name in the DSNAMES parameter did not contain all the levels of qualification, making it impossible to locate the cataloged data set.
- The data set had been deleted from the volume table of contents (VTOC) of the volume on which it had been placed when cataloged.
- The DCB parameter or the REF subparameter of the VOLUME parameter contained invalid information.
- The data set was not cataloged.
- A level of index was either missing or incorrect in a generation data group.
- In a step, an attempt was made to receive a passed data set. However, a data set with the same name was previously received in this step.

In the message text, ddn is the data definition name in the name field of the DD statement.

System Action: The job was terminated.

Programmer Response: Probable user error. If the data set name was specified incorrectly, correct it. If the DCB or VOLUME parameters were incorrect, correct them. If the data set was not cataloged, either catalog it or, on the DD statement, specify the volume serial number of the volume on which the data set resides. But, if the DD statement was correct, recatalog the data set. Then submit the job again.

Problem Determination: Table I, items 1, 2, 4, 7a, 25d, 29.

IEF213I ddn - DSNAMES FIELD SPECIFIES INDEX BLOCK, NOT DATA SET

Explanation: In a DD statement, the data set name in the DSNAMES parameter did not contain the lowest level of qualification, making it impossible to locate the cataloged data set. The lowest level specified in the data set name was an index block, instead of a data set. In the message text, ddn is the data definition name in the name field of the DD statement.

System Action: The job was terminated.

Programmer Response: Probable user error. Correct the data set name, and submit the job again.

Problem Determination: Table I, items 1, 2, 4, 7a, 25d, 29.

IEF214I ddn - DSNAMES FIELD SPECIFIES DATA SET PRIOR TO LOWEST LEVEL

Explanation: In a DD statement, the data set name in the DSNAMES parameter contained the name of a cataloged data set in other than the lowest level of qualification.

Either the data set name was incorrect or a level of the index had been destroyed.

In the message text, ddn is the data definition name in the name field of the DD statement.

System Action: The job was terminated.

Programmer Response: Probable user error. Correct the data set name or the indexes. Then submit the job again.

Problem Determination: Table I, items 1, 2, 4, 7a, 25d, 29.

IEF215I ddn - DSNAMES FIELD CONTAINS SYNTAX ERROR

Explanation: In a DD statement, the data set name in the DSNAMES parameter contained a syntax error, making it impossible to locate the cataloged data set. Examples of syntax errors are a data set name qualifier of 9 characters (8 characters is the maximum length permitted) or a double delimiter.

In the message text, ddn is the data definition name in the name field of the DD statement.

System Action: The job was terminated.

Programmer Response: Probable user error. Correct the data set name, and submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF216I ddn - DATA SET MUST BE RECREATED IN THE CATALOG

Explanation: The control program could not retrieve a cataloged data set specified by the data set name in the DSNAMES parameter of a DD statement. One of the following caused this failure:

- An index had been modified, so that it contained an incorrect pointer.
- An uncorrectable input/output error occurred in reading part of the index.

In the message text, ddn is the data definition name in the name field of the DD statement.

System Action: The job was terminated.

Programmer Response: Check the catalog. If it is in error, use a utility program to recatalog the data set or to recreate the entire catalog or those parts that were destroyed. If the catalog does not contain errors, an uncorrectable input/output error occurred. Rerun the job.

Problem Determination: Table I, items 1, 4, 7a, 25d, 29 or 30.

IEF217I ddn - VOLUME CONTAINING PATTERN DSCB NOT MOUNTED

Explanation: In a DD statement, the data set name in the DCB parameter specified a data set on a volume that was not mounted when the job was to be executed.

In the message text, ddn is the data definition name in the name field of the DD statement.

System Action: The job was terminated.

Programmer Response: Probable user error. Submit the job again, making sure that the volume containing the data set is mounted before the job step is to be executed.

Problem Determination: Table I, items 1, 4, 7a, 25b, 29.

IEF218I ddn - PATTERN DSCB RECORD NOT FOUND IN VTOC

Explanation: In a DD statement, the data set name in the DCB parameter specified a data set that did not exist in the volumes specified.

In the message text, ddn is the data definition name in the name field of the DD statement.

System Action: The job was terminated.

Programmer Response: Probable user error. Check the data set name in the DCB parameter for an error. On the volume pointed to by the catalog, check the volume table of contents (VTOC) for the data set control block (DSCB) specified in the DCB parameter. Correct the error, and rerun the job.

Problem Determination: Table I, items 1, 4, 7a, 25b, 29.

IEF219I ddn - GDG GROUP NAME EXCEEDS 35 CHARACTERS

Explanation: In a DD statement, the data set name in the DSNAMES parameter was a generation data group (GDG) name longer than the maximum length of 35 characters. The extra length made it impossible to obtain the data set name's final qualifications from the catalog.

In the message text, ddn is the data definition name in the name field of the DD statement.

System Action: The job was terminated.

Programmer Response: Probable user error. Change the generation data group name so that it does not exceed 35 characters, and rerun the job.

Problem Determination: Table I, items 1, 4, 7a, 25b, 29.

IEF220I ddn - GDG ALL CAUSES TOTAL DD STATEMENTS TO EXCEED 255

Explanation: In a DD statement, the data set name in the DSNAMES parameter was a generation data group (GDG) name that specified all of the data sets in the group. All the data sets in the generation data group plus all the other data sets specified in other DD statements for the job step totaled more than 254, which is the maximum number of data sets allowed per job step, including the DD statements for the job library. In the message text, ddn is the data definition name in the name field of the DD statement that specified the generation data group.

System Action: The job was terminated.

Programmer Response: Probable user error. Reduce the total number of data sets specified for the job step, so as not to exceed the limit, and rerun the job.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF221I PGM = *.DD - BACKWARD REFERENCED STEP WAS NOT EXECUTED CAUSES JOB TO BE CANCELED

Explanation: In an EXEC statement, the name of the program to be executed was specified by a reference to the data definition name of a DD statement in a previous step of the job. However, the previous step, which contained the DD statement, was not executed because a condition test specified in the COND parameter of the step's EXEC statement was satisfied.

System Action: The job was terminated.

Programmer Response: Probable user error. In the EXEC statement that refers to the DD statement in the previous step, include the condition tests specified in the previous step's EXEC statement. Then rerun the job.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF222I COMD REJECTED FOR INITIATOR 'ident' - UNIQUE IDENT REQUIRED

Explanation: A START command was entered; however, 'ident', the identifier assigned to the task when it was started, has already been used with another procedure name.

Operator Response: Probable user error. Enter the command again correctly, specifying another identifier.

Problem Determination: Table I, items 1, 2, 4, 7a, 29.

IEF225D SHOULD jjj.sss.ppp [checkid] RESTART

Explanation: Automatic restart was requested by procedure step ppp of step sss of job jjj and one of the following occurred:

- The step was abnormally terminated with a completion code that makes the step eligible to be restarted.
- The system failed.

If the checkpoint identification, checkid, is omitted in the message text, step restart was requested; if the checkpoint identification is present, checkpoint restart was requested.

Operator Response: If the checkpoint identification is the same as in a previous request for a restart by the same job, and if the job was previously terminated with the same completion code, it may be desirable to prevent another restart at the same checkpoint. Enter one of the following replies:

- REPLY xx,'YES' if automatic restart is to be authorized.
- REPLY xx,'NO' if automatic restart is to be denied, thus causing the system to dispose of data sets as if restart had not been requested.

IEF228I jjj RESTART CANCELLED - I/O ERROR SCHEDULER WORK AREA

Explanation: An uncorrectable input/output error occurred while the queue manager was reading the SYS1.SYSJOBQE data set for processing of an automatic step restart for job jjj.

System Action: Restart for job jjj was terminated.

Operator Response: Either reenter job jjj through the input stream or perform a deferred restart.

Problem Determination: Table I, items 1, 2, 4, 7a, 8a, 29 or 30.

IEF229I LRECL EXCEEDS 32K

Explanation: The variable record extension (VRE) input or output logical record length exceeds 32,760 bytes. The output data set records were defined as variable spanned with machine code control characters, but the input records did not contain machine code control characters.

System Action: The SYSOUT writer closes its SYSOUT data set and ceases processing.

Programmer Response: If it is necessary to process records with a length of greater than 32K bytes, do not request control characters for the SYSOUT writer's output data set unless control characters have been included in the input records.

Problem Determination: Table I, items 1, 2, 3, 13, 15, 29.

IEF230I TOO MANY SEPARATIONS AGAINST ddn

Explanation: A data set was specified in the SEP subparameter of the UNIT parameter and/or in the SEP parameter of more than 8 DD statements.

In the message text, ddn is the data definition name in the name field of the DD statement that contained the ninth separation specification for the data set.

System Action: The control program attempted to assign the data set so that the first 8 separation specifications were met. The other separation specifications were not necessarily honored.

Programmer Response: Probable user error. If the job step is to be executed again, correct the DD statements so that only 8 separations are specified.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF231I jji - QUEUE MGR I/O DEVICE ERROR DURING ALLOCATION

Explanation: An uncorrectable input/output error occurred while reading or writing in the SYS1.SYSJOBQE data set; the error occurred during allocation for job jji.

System Action: Job jji was removed from the input work queue and was terminated.

Programmer Response: Submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 8a, 29.

IEF232I jji - NO SPACE ON JOB QUEUE FOR ALLOCATION

Explanation: No space remained in the SYS1.SYSJOBQE data set for allocation for job jji.

System Action: Job jji was removed from the input work queue and was terminated.

Programmer Response: Submit the job again.

IEF233A M ddd,ser,[labtyp],

}	iji
	iji,sss
	iji,sss,dsn
	iji,dsn

IEF233A ddd,dsn

Explanation: M indicates that a volume is to be mounted on device ddd. The volume is required by job jji or, if applicable, step sss of job jji. (If this message is issued for a system task, sss will appear as a system task identifier.)

If a DISPLAY DSNNAME command is active, the first nontemporary data set name, dsn, is also specified in the message text. The data set name will not be specified for data sets being deleted. If the data set name causes the message to exceed 72 characters, the data set name will appear on the second line of the message text.

- If ser is a 6-digit serial number, the volume with that serial number is to be mounted on device ddd.
- If ser is SCRTCH, a scratch volume is to be mounted. The scratch tape volume must have the type of label specified by labtyp: SL for standard label or standard user label, NSL for non-standard label, or NL for no label or by-pass label.
- If ser is PRIVAT, a scratch volume is to be mounted. It will be marked PRIVATE and demounted at the end of job jji.
- If ser begins with L, the volume to be mounted is unlabeled; the number after the L is an internal serial number assigned by the system to an unlabeled volume and is of the form xxxyy, where xxx is the data set number and yy is the volume sequence number for the data set.

System Action: The task waits for the volume to be mounted. No jobs may be allocated or terminated until the operator responds to this message.

Operator Response: For tape, if ser is SCRTCH, make sure that the file protect ring has been inserted in the volume. If device ddd is direct access, this mount request should be honored first if it appears in conjunction with an IEF533A mount message.

Mount volume ser on the device; then ready device ddd. If a mount is requested for a device with non-removable volumes, ready the device in order to indicate that the volume is mounted. If the volume cannot be mounted, enter a CANCEL command to terminate job jji. Separate commands are necessary to cancel all jobs requiring volume ser.

IEF234A D ddd,ser,labtyp
IEF234E {R} ddd,ser [,SPACE = prm]
 {D}

Explanation: R indicates that the volume on device ddd is to be demounted and retained near the computer for use in the near future; D indicates that the volume is to be demounted and used subsequently as a scratch volume; D in conjunction with device address, volume serial and label type (labtyp) indicates that the volume was mounted in response to a MOUNT command and was not the volume specified in the command:

- If ser is a 6-digit number, it is the serial number of the volume, which contains labels.
- If ser begins with L, the volume to be demounted is unlabeled; the number after the L is an internal serial number assigned by the system to an unlabeled volume and is of the form xxxyy, where xxx is the data set number and yy is the volume sequence number for the data set.
- If ser is absent from the message text, the volume is unlabeled and is not being passed between job steps.
- If ser appears in conjunction with label type (labtyp), the label type is that of the volume actually mounted by the operator in response to the MOUNT command on device ddd.

If a DISPLAY SPACE command is active, the field SPACE = cccc,tttt,aaaa/yyyy,zzzz is specified where:

cccc is the total number of free cylinders on the volume.

tttt is the total number of tracks in addition to the free cylinders.

aaaa is the areas or extents dividing the cylinders and tracks.

yyyy is the maximum number of contiguous free cylinders of the largest extent within the total remaining space.

zzzz is the number of tracks in addition to the free cylinders of the largest extent within the total remaining space.

If an error occurred during the listing of the parameters in the SPACE field, one of the following messages is specified:

- LSPACE-PERMANENT I/O ERROR
- LSPACE-NON-STANDARD OS VOLUME
- LSPACE-NOT A DIRECT ACCESS VOL
- LSPACE-INVALID PARAMETER
- LSPACE-UCB NOT READY

This message can occur if the volume does not have enough available space to meet an allocation request or if a data set already on the volume has the same name as the data set for which space is to be allocated.

Operator Response: Demount the volume.

If D appeared in the message text, use the volume later when a scratch volume is requested. If labtyp also appears, the volume was mounted in error and may not necessarily be a scratch volume.

If R appeared, retain the volume near the computer. If it is not externally marked with its serial number, mark the 6-digit or internally assigned number on the volume. (The internally assigned number should appear externally on the volume in case a subsequent step needs the volume; for the subsequent mounting, the system will specify the volume by the internally assigned number.) Also, mark the jobname on the volume. If the job ends without requesting a remount of the volume, the volume need no longer be retained.

Problem Determination: If an error occurs again during the listing of the parameters in the SPACE field, see Table I, items 2, 7a, 29.



IEF235I jji.sss.ddn WAITING FOR VOLUMES

Explanation: The system was unable to satisfy the volume requests for a data set in step sss of job jji.

In the message text, ddn is the data definition name in the name field of the DD statement that specified the data set. *System Action:* The initiator for step sss will enter a wait state until the requested volumes have been unallocated by terminating tasks and are available for use. Other jobs cannot go through allocation until this wait has terminated and current allocation processing has completed.

Operator Response: If desired, enter a CANCEL command to terminate job jji.

IEF236I ALLOC. FOR jji sss [ppp]

Explanation: This message identifies the job step and, if applicable, the cataloged procedure for which devices were being allocated. The IEF237I messages, which follow this message, describe the device allocations.

The devices were allocated for step sss of job jji or for cataloged procedure ppp, which was executed by step sss of job jji.

In response to a DISPLAY JOBNAMES command, this message will appear on the console *only* for the unit record devices being allocated.

This message appears twice for a step or procedure if the step or procedure was being executed or terminated when system restart was allocated to a data set, except for data required. The second IEF236I message is followed by duplicate allocation messages (IEF237I) for the SYSIN and SYSOUT data sets specified by the step or procedure. The first series of allocation messages reflect the actual device assignments. The second series should be ignored; they are produced when the system is completing the output queue entries for step sss.

Programmer Response: None.

Operator Response: None.

IEF237I ddd ALLOCATED TO ddn

Explanation: Device ddd is allocated to the data set defined in the DD statement whose name field contains ddn. This message is written for each device sets defined in DD statements containing the SYSOUT parameter. However, if message IEF242I precedes this message, all data sets will be listed for the step which caused message IEF242I to be issued. In response to a DISPLAY JOBNAMES command, this message will appear on the console *only* for the unit record devices allocated to data sets, except for data sets defined in DD * or DD DATA statements or in DD statements containing the SYSOUT parameter.

Programmer Response: None.

Operator Response: Check the unit record device to make sure it is ready and has the proper input decks, cards, or forms.

IEF238A REPLY [DEVICE NAME] [, 'WAIT'] [, 'NOSEP'] OR 'CANCEL'

Explanation: The system cannot allocate either the device or space requested by a DD statement for one of the following reasons:

- The DD statement requested more devices than were currently available.
- The DD statement specified channel or unit separation.
- The DD statement was named in another DD statement's separation request.

This message permits the operator to respond to preceding message IEF239I, IEF247I, or IEF248I.

Operator Response: If message IEF239I precedes this message refer to the installation procedures and enter one of the following:

- REPLY xx, 'NOSEP'. The job step needing the space must be executed immediately and the separation requests can be ignored. The system will ignore the step's separation requests and will attempt allocation again.
- REPLY xx, 'WAIT'. The job step needing the space should be executed with its separation request, if possible. The job will wait. When direct access space is freed on appropriate devices, the system will attempt allocation again. Other jobs cannot go through allocation until this wait has terminated and current allocation processing has completed.
- REPLY xx, 'CANCEL'. The job will be terminated.
- REPLY xx, 'ddd'. If device ddd fulfills the requirements of the DD statement, allocation will be attempted again; however, device ddd may be allocated to a different DD statement than the one specified in message IEF239I.

If message IEF247I precedes this message enter one of the following after checking with installation procedures:

- REPLY xx, 'ddd' where ddd appeared in an OFFLINE line of the message. The system places the device online and attempts allocation again; however, device ddd may be allocated to a different DD statement than the one specified in message IEF247I.
- REPLY xx, 'WAIT' if the OFFLINE devices in the message cannot be changed for allocation recovery, and either the job step did not request channel or unit separation or the step's separation requests cannot be ignored. The job waits until enough devices are released to satisfy its device requirements and separation requests, if any. Other jobs and system tasks can neither start or go through allocation until this wait has terminated and current allocation processing is complete.
- REPLY xx, 'NOSEP' if the OFFLINE devices in the message cannot be changed for allocation recovery, the job step requested channel and/or unit separation, and the separation requests can be ignored. The system ignores the step's separation requests and attempts allocation again.
- REPLY xx, 'CANCEL' if the needed devices are always used, perhaps for a background job step. The system terminates the job.

Note: One of the replies to message IEF238A must be entered before the initiator will process the job. Although a CANCEL command may be entered, the command will not take effect until a valid reply has been entered to this message. (All replies must be specified in upper-case letters.)

If message IEF248I precedes this message:

If one of the reserved volumes can be demounted, enter REPLY xx, 'ddd'. The system will issue message IEF234A to demount the volume and then message IEF233A to request mounting of a scratch volume to be allocated to the data set named on DD statement ddn.

If none of the reserved volumes can be demounted, enter REPLY xx, 'CANCEL'. The system will terminate the job.

IEF239I jji sss ddn WAITING FOR ALLOCATION

Explanation: The DD statement whose name field is ddn has requested direct access space that cannot be allocated.

System Action: The system placed step sss of job jji in a wait state. No other job steps or system tasks will be allowed to allocate or start until space becomes available. When direct access space is freed on the appropriate devices, the system will attempt allocation again. However, if message IEF238A immediately follows on the console, the operator can take the job out of the wait state. Other jobs cannot go through

allocation until this wait has terminated and current allocation processing has been completed.

Operator Response: If desired, enter a CANCEL command to terminate the job named jji.

IEF240I TOO MANY DD CARDS

Explanation: The job step contained too many DD statements for the main storage available for internal tables in the system being used.

System Action: The job was terminated.

Programmer Response: Probable user error. Reduce the number of data sets, and thus the number of DD statements, for the job step, and submit the job again.

Submit the job again, instructing the operator to start the system again and, during nucleus initialization, to increase the size of the MIN parameter by a specified amount, if this option was chosen at system generation.

Problem Determination: Table I, items 1, 2, 3, 4, 7a, 29.

IEF241I REQUEST FOR PENDING OFFLINE RESERVED DEVICE

Explanation: In a DD statement, the UNIT parameter specifies a device which is reserved and pending offline. The device was reserved by PRESRES or by a MOUNT command.

System Action: If the volume on the device contains SYSIN data sets, recovery is attempted by issuing message IEF238I, allowing the operator to bring the device back online. If the volume does not contain SYSIN, the job is terminated.

Programmer Response: If possible, request another device and rerun the job. Otherwise, rerun the job when the required device is back online.

IEF242I ALLOC. FOR jji sss [ppp] AT ABEND

Explanation: In the JOB statement, the allocation MSGLEVEL = 0 was specified. Since the problem program failed during execution, the system has overridden the previous specification and has assumed MSGLEVEL = 1.

Unit allocation messages IEF237I will follow this message.

Programmer Response: None.

IEF244I jji sss ddn UNABLE TO ALLOCATE

Explanation: The system was unable to allocate a device to the data set named on DD statement ddn for step sss of job jji:

- The UNIT parameter in the DD statement specified a device collection. The number specified was greater than the available devices. Either there was not the requested number of devices, too many devices were already assigned or offline, or the attributes of the volumes mounted on the specified devices could not satisfy the request.
- The DD statement requested allocation of devices currently allocated to another task, and the devices could not be shared.

System Action: The system might have terminated the job; in this case, no further termination message is issued for the job. If the job was not terminated, the system issues message IEF247I to attempt allocation recovery.

Operator Response: None.

Programmer Response: Probable user error. If the job was terminated, check the UNIT parameter to make sure that the number of devices needed can be supplied. If allocating SYSOUT, report the problem to the system programmer. If necessary, change the UNIT parameter and run the job again.

Problem Determination: Table I, items 1, 3, 4, 7a, 29.

IEF245I INCONSISTENT UNIT NAME AND VOLUME SERIAL

Explanation: In a DD statement, the UNIT parameter specified a device collection; the SER subparameter of the VOLUME parameter specified the volume serial number of a resident device that did not belong to that device collection. A resident device is a device that does not have mountable volumes.

System Action: The job was terminated.

Programmer Response: Probable user error. Correct the erroneous parameter, and submit the job again.

Problem Determination: Table I, items 1, 3, 4, 7a, 29.

IEF246I INSUFFICIENT SPACE ON STORAGE VOLUMES

Explanation: In a DD statement that requested a storage volume the SPACE parameter requested a greater quantity of tracks than was available on the direct access device.

System Action: The job was terminated.

Programmer Response: Probable user error. Check the track quantity of the SPACE parameter for validity. If it was incorrect, change it. If it was correct, change the request to a different volume. Then submit the job again.

Problem Determination: Table I, items 1, 3, 4, 7a, 25b, 29.

IEF247I { jji ALLOCATION RECOVERY } { jji ddd-list OFFLINE, }

Explanation: The system was unable to allocate a device to a data set, as required for job jji, and is attempting allocation recovery. In the message text, ddd-list is a listing of the devices.

In any system, device *ddd is a device that is pending offline but which is currently online and possibly allocated to another job. If the operator replies to message IEF238A with this device address, the device will be allocated to job jji only if that device is eligible. When the device is not eligible, the message sequence IEF247I and IEF238A will be repeated if there is another device offline or pending offline. Note: A reply of a device that is pending offline (to message IEF238A) counteracts the previously issued vary offline command. In any system, device ddd could be allocated if the operator could vary its status from offline to online.

In the message text, the first line always appears. The second line appears for eligible devices that are currently offline or that are pending offline (that is, devices which a VARY offline command has recognized but has not completely processed, in which case ddd is preceded by an asterisk (*); this line may appear more than once.

System Action: The system action depends on the operator response to message IEF238A, which follows this message.

Programmer Response: If the job was terminated, make any changes indicated by other messages, and submit the job again.

Operator Response: Respond as indicated for message IEF238A, which follows this message.

IEF248I jji sss ddn ERROR ALLOCATING RESERVED VOLUME IEF248I ddd HAS RESERVED VOLUME ser

Explanation: The system was unable to allocate space on a device to the data set named on DD statement ddn for step sss of job jji. Device ddd is eligible for allocation, but the reserved volume with serial number ser is mounted on the device.

The second line in the message text may be written once or several times, depending on the number of eligible reserved volumes available.

Operator Response: Respond as indicated for message IEF238A, which follows this message.

IEF249I FOLLOWING P/R & RSV VOLUMES ARE MOUNTED
ser ON ddd ccc-ccc

Explanation: During system start, this message describes the volumes mounted for PRESRES (permanently resident and reserved), which is a member of the SYS1.PARMLIB data set. ser ON ddd ccc-ccc is written once for each mounted volume. ser is the serial number of a mounted volume, ddd is the device address, and ccc-ccc specifies the characteristics of the volume:

P/R-PUB Permanently resident, public
P/R-PRV Permanently resident, private
P/R-STR Permanently resident, storage
RSV-PUB Reserved, public
RSV-PRV Reserved, private
RSV-STR Reserved, storage
Operator Response: None.

IEF250I FOLLOWING MAY BE MOUNTED
ser ON dddtyp

IEF250D REPLY DEVICE ADDRESSES OR GO

Explanation: If PRESRES (permanently resident and reserved), a member of the SYS1.PARMLIB data set, exists in the system and if all volumes described in entries in the PRESRES data set are not mounted during system start, this message is produced to request mounting of the unmounted PRESRES volumes.

ser ON dddtyp is written once for each unmounted volume. ser is the serial number of a volume to be mounted and dddtyp is the type of device, such as 2314, 2319, or 3330, that the volume is to be mounted on. dddtyp does not specify any special features, such as track overflow, that may be required; it is the user's responsibility to select the device that has any required special features.

Operator Response: If any of the listed volumes is to be mounted, enter REPLY xx,'ddd,ddd,ddd,...' where each ddd is a device address. Any valid direct access devices can be used, including those that already have volumes mounted on them. After replying, mount the required volumes on the devices replied.

If no volumes are to be mounted, enter REPLY xx,'GO'.

IEF251I JOB CANCELED (in SYSOUT)
IEF251I jji JOB CANCELED (on console)

Explanation: In response to a CANCEL command or a CANCEL response to message IEF238A, the system terminated job jji.

Programmer Response: Correct any errors indicated by any other messages, and submit the job again.

Operator Response: None.

IEF252I DIRECT ACCESS - SPACE UNAVAILABLE FOR ASSIGN

Explanation: On the direct access device used to hold the SYS1.SYSJOBQE data set, the space for processing a job was exceeded.

System Action: The job was terminated.

Programmer Response: Probable user error. Create a larger SYS1.SYSJOBQE data set so that it can hold larger jobs. Then submit the job again.

Problem Determination: Table I, items 1, 2, 3, 4, 7a, 29.

IEF253I DIRECT ACCESS - DUPLICATE NAME ON VOLUME

Explanation: In a DD statement that requested space on a direct access device, the data set name in the DSNAME parameter was the same as a data set name already in the volume table of contents (VTOC) for the requested volume.

System Action: The job was terminated.

Programmer Response: Probable user error. If the data set being specified is a new data set, select a unique name for it. If the DD statement intended to specify the data set that is already on the direct access device, specify the OLD subparameter in the DISP parameter. Then submit the job again.

Problem Determination: Table I, items 1, 3, 4, 7a, 25b, 29.

IEF254I DIRECT ACCESS - NO SPACE IN VTOC

Explanation: A DD statement requested space on a direct access volume for a new data set. The volume table of contents (VTOC) for the requested volume did not have the minimum number of format 0 data set control blocks (DSCB) required to allocate the data set.

System Action: The job was terminated.

Programmer Response: Probable user error. Submit the job again, requesting space on a different volume.

Problem Determination: Table I, items 1, 3, 4, 7a, 25b, 29.

IEF255I DIRECT ACCESS - PERMANENT I/O ERROR

Explanation: An uncorrectable input/output error occurred in using a direct access device during program initiation.

System Action: The job was terminated.

Programmer Response: Rerun the job.

Operator Response: None.

Problem Determination: Table I, items 1, 2, 3, 4, 7a, 30.

IEF256I DIRECT ACCESS - ABSOLUTE TRACK NOT AVAILABLE

Explanation: In a DD statement defining a data set on a direct access device, the ABSTR subparameter of the SPACE request is asking that the data set be allocated in absolute tracks. The requested tracks are not available.

System Action: The job is terminated.

Programmer Response: Probable user error. Check the beginning track address and quantity subparameters for validity. If they are correct, request different tracks or a different volume. Then resubmit the job.

Problem Determination: Table I, items 2, 7a, 25a, 29.

IEF257I DIRECT ACCESS - SPACE REQUESTED NOT AVAILABLE

Explanation: In a DD statement, the SPACE parameter requested a greater quantity of tracks than was available on the direct access device. Either the system terminated the job because space would not become available or the operator cancelled the job while it was waiting for space to become available.

System Action: The job was terminated.

Programmer Response: Probable user error. Check the track quantity of the SPACE parameter for validity. If it was incorrect, change it. If it was correct, change the request to a different volume. Then submit the job again.

Problem Determination: Table I, items 1, 3, 4, 7a, 25b, 29.

IEF258I DIRECT ACCESS - INVALID REC LENGTH

Explanation: In a DD statement, the average record length subparameter in the SPACE parameter specified a length greater than the capacity of a track on the requested direct access device.

System Action: The job was terminated.

Programmer Response: Probable user error. Reduce the lengths of the records to make the average length no greater than the track capacity of the device or specify a device with a greater track capacity. Then submit the job again.

Problem Determination: Table I, items 1, 3, 4, 7a, 29.

IEF259I ttt.iii PREVENTS RESTART OF jjj.sss.ppp

Explanation: During execution of a checkpoint restart for procedure step ppp of step sss of job jjj, all or part of the virtual storage required for the restart job was found to be permanently allocated to the started task ttt.iii.

System Action: Restart for job jjj will be terminated.

Operator Response: Stop the started task ttt.iii and run the job again. This problem will occur when LSQA of a started task has been allocated in the specific virtual storage area that is required for the region of the restarting job. Occasionally, the offending LSQA may belong to the initiator that is attempting to restart the job. When this occurs, either another initiator must be used to restart the job, or to force LSQA to be allocated in a different virtual storage area.

IEF260I WRONG DSORG OR DISP FOR ISAM

Explanation: During allocation of an indexed sequential data set, one of these error conditions was detected:

- A DD statement requiring that direct access space be obtained was found concatenated to a DD statement (for the same ISAM data set) that indicated that the data set already existed. Example: A concatenated DD statement specifies DISP = (NEW,KEEP), and a preceding DD statement for an ISAM data set specifies DISP = (OLD,KEEP). Note that secondary dispositions are not checked for consistency.
- A DD statement specifying DSORG = IS or ISU was found concatenated to a DD statement (for the same data set) that specified a DSORG other than IS or ISU. This message will not appear if a DD statement specifies DSORG = IS or ISU and a succeeding concatenated DD statement specifies a DSORG other IS or ISU.

System Action: The job will be terminated.

Programmer Response: Correct the DISP or DSORG parameters that are in error and run the job again.

Problem Determination: Table I, items 2, 7a, 29.

IEF261I NO PRIME AREA REQUEST FOR ISAM DATA SET

Explanation: None of the DD statements defining an indexed sequential data set specify DSNAME = name(PRIME).

System Action: The job is terminated.

Programmer Response: Supply a DD statement that specifies DSNAME = name(PRIME). List the volume table of contents (VTOC) of each volume involved using the IEHLIST utility program. If the name of the data set appears in any VTOC, remove it using the IEHPROGM utility. Then rerun the job.

Problem Determination: Table I, items 1, 4, 7a, 14, 29.

IEF262I PRIME AREA MUST BE REQUESTED BEFORE OVFLOW

Explanation: The control program is unable to allocate the overflow area of a new indexed sequential data set because the overflow area request appears before the prime area request. That is, the control program read the DD statement specifying DSNAME = name(OVFLOW) before the DD statement specifying DSNAME = name(PRIME).

System Action: The job is terminated.

Programmer Response: Probable user error. Insert the DD statement specifying DSNAME = name(PRIME) before the DD statement specifying DSNAME = name(OVFLOW). List the volume table of contents (VTOC) of each volume that will contain the data set using the IEHLIST utility program. If the name of this data set appears in any VTOC, remove it using the IEHPROGM utility. Then rerun the job.

Problem Determination: Table I, items 1, 2, 4, 7a, 14, 29.

IEF263I SPACE REQUEST WRONG - MUST BE ON CYLINDER BOUNDARY

Explanation: The SPACE parameter of a DD statement defining an indexed sequential data set is incorrect. In the absolute track request (ABSTR), the beginning address subparameter does not specify a cylinder boundary, or it does not specify, in tracks, an integral number of cylinders.

System Action: The job is terminated.

Programmer Response: Probable user error. Correct the absolute track subparameter. List the volume table of contents (VTOC) of each volume that will contain the data set, using the IEHLIST utility program. If the name of this data set appears in any VTOC, remove it using the IEHPROGM utility. Then rerun the job.

Problem Determination: Table I, items 2, 7a, 14, 29.

IEF264I DUPLICATION OF THE DSNAME ELEMENT NOT ALLOWED - SAME AREA REQUESTED TWICE

Explanation: Two DD statements defining the same indexed sequential data set are requesting space for the same area. Both DD statements specify the same element in the DSNAME parameter.

System Action: The job is terminated.

Programmer Response: Probable user error. Eliminate one of the duplicating DD statements. List the volume table of contents (VTOC) of each volume that will contain the data set using the IEHLIST utility program. If the name of the data set appears in any VTOC, remove it using the IEHPROGM utility. Then rerun the job.

Problem Determination: Table I, items 2, 7a, 14, 29.

IEF265I INVALID TRACK QUANTITY FOR SPLIT REQUEST

Explanation: In a DD statements, space allocation was requested by a SPLIT parameter. The total number of tracks specified in the first subparameter of the SPLIT parameter was greater than the number of tracks per cylinder on the device being used. If a percentage was specified, the percentage is too small to allocate a track.

System Action: The job is terminated.

Programmer Response: Probable user error. Reduce the number of tracks specified in the first subparameter of the SPLIT parameter until equal to or less than the number of tracks per cylinder on the device being used. If a percentage was specified, increase the percentage until at least one track is allocated to each data set.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF267I INVALID DIRECTORY REQUEST

Explanation: In a DD statement that defined a new partitioned data set, the space requested for the directory was not allocated by the control program for one of the following reasons:

- The directory quantity subparameter of the SPACE or SUBALLOC parameter requested more space than the primary quantity subparameter.
- The space requested by the directory quantity subparameter exceeded the largest space available on the volume.

System Action: The job was terminated.

Programmer Response: Probable user error. Reduce the directory quantity subparameter, or increase the primary quantity subparameter. Then submit the job again.

Problem Determination: Table I, items 1, 3, 4, 7a, 25b, 29.



IEF268I ddd FOR ser ccc-ccc

Explanation: This message verifies that volumes have been mounted on the devices named in the reply to message IEF250I and that the devices are ready. ser is the serial number of the volume mounted on device ddd. ccc-ccc are the characteristics of the volume:

P/R-PUB Permanently resident, public
 P/R-PRV Permanently resident, private
 P/R-STR Permanently resident, storage
 RSV-PUB Reserved, public
 RSV-PRV Reserved, private
 RSV-STR Reserved, storage

NO ATRB No attribute, meaning that an unrequested volume was mounted on a device specified in response to message IEF250I

Operator Response: None.

IEF269A ddd ADDRESS INVALID OR OFFLINE. REPEAT REPLY

Explanation: The reply to message IEF250I is invalid. Possible errors are:

- Device address unknown to system.
- Device unable to satisfy required mounts.
- Device offline.
- Device other than 2311, 2314, 2319, or 2321.
- Device holds system residence data set.
- Duplicate device addresses.
- Comma missing between device addresses.
- Comma present at end of reply.
- 2321 cell number non-numeric or greater than 9.
- Too few volumes needed by PRESRES for type of device specified.

Operator Response: Probable user error. Enter the reply again correctly or enter REPLY xx, 'GO'.

Problem Determination: Table I, items 2, 7a, 29. Make sure that the device is defined to the system correctly.

IEF270D I/O ERROR IN PRESRES READ. REPLY GO OR RE-IPL

Explanation: While reading to determine if PRESRES (permanently resident and reserved), a member of the SYS1.PARMLIB data set, is present, the system detected an uncorrectable input/output error.

Operator Response: If the system can continue without PRESRES, enter REPLY xx, 'GO'. Otherwise, start the system again.

Problem Determination: Table I, items 2, 7a, 11, 30.

IEF271I VOLUME NOT CONSIDERED IN SYSTEM

Explanation: Because an uncorrectable input/output error occurred in using the device identified in the preceding IEA000I message, the job scheduler was unable to read the volume label on the device.

System Action: The job scheduler ignores the volume and continues processing without it.

Operator Response: None.

Problem Determination: Table I, items 2, 7a, 30.

IEF272I - STEP WAS NOT EXECUTED

Explanation: The control program did not execute a job step for one of the following reasons:

- An error appeared in a job control statement.
- A previous step abnormally terminated, but the current step did not specify EVEN or ONLY in the COND parameter of the EXEC statement.
- A job control statement for a preceding or succeeding step contained an error. An error in a job control statement

stops execution of (1) the step containing the error; (2) all preceding steps beginning with the last JOB statement or the step following the last DD * or DD DATA statement; and (3) all succeeding steps until the next JOB statement.

- The step was being executed or terminated when system restart was required. To confirm this reason, look for message IEF236I (ALLOCATION FOR jjj sss [ppp]) in the system output listing following SYSOUT data set information or following duplicate allocation messages for the step. (See message IEF421I for more details.)
- The job step required input/output devices, volumes, or space that could not be allocated.
- The job containing the job step was cancelled by the operator before the job step was initiated. To confirm this, look for message IEF450I on the console listing with a 222 ABEND.
- The job required too much queue space in the SYS1.SYSJOBQE data set for initiation. To confirm this, look for messages IEE301I, IEF425I, and IEF450I (with ABEND S422) on the console listing.

System Action: When a job control statement contained an error or where allocation could not be made, the job was terminated.

Where system restart was required, the remainder of the steps in the job were not executed.

Programmer Response: Probable user error. Correct any errors, and submit the job or job step again.

Problem Determination: Table I, items 1, 3, 4, 7a, 29.

IEF273I INVALID USER LABEL REQUEST

Explanation: In a DD statement, a user label track was requested for a data set. However, the control program was unable to allocate space for the data set for one of the following reasons:

- The DSORG subparameter of the DCB parameter specified PO or IS.
- The SPACE parameter included a directory quantity subparameter.

System Action: The job was terminated.

Programmer Response: Probable user error. In the first case, specify PS or DA in the DSORG subparameter of the DCB parameter. In the second case, delete the directory quantity subparameter of the SPACE parameter. Then resubmit the job.

Problem Determination: Table I, items 1, 3, 4, 7a, 29.

IEF277I jjj. {sss} .ddn ALLOC. FOR CONTROL VOLUME {ppp}

Explanation: A control volume for a cataloged data set was not mounted, making it impossible to locate the data set.

The control volume was required for job jjj and, if applicable, step sss of job jjj or step ppp, which is part of a cataloged procedure called by job jjj. In the message text, ddn is the data definition name in the name field of the DD statement. Note that any allocation messages following this message but preceding the next mount request will apply only to allocation for this control volume.

Programmer Response: None.

Operator Response: None.

IEF278I ddd NOT MOUNTED, I/O ERROR

Explanation: In response to a MOUNT command, the system attempted to verify the label of the volume on device ddd. During verification an uncorrectable input/output error occurred when the system attempted to read the label on the volume. One of the following occurred:

- The device specified in the MOUNT command was not physically on the system.
- The operator mounted an NL tape without specifying VOL = (NL,xxxxxx).

System Action: The system did not execute the command and the volume was unloaded.

Operator Response: Check that the correct volume was mounted on device ddd and that the label on the volume is a standard label. Correct any errors found in this check. Then enter the MOUNT command again.

Problem Determination: Table I, items 2, 7a, 29.

IEF279I ddd NOW MOUNTED { [SL] }
 { [AL] }

Explanation: In response to a MOUNT command the system allocated device ddd and has finished mount processing. For tape devices, SL (standard label) or AL (American National standard label) appears in the message text.

Operator Response: None.

IEF280E K ddd,ser,ijj[,sss][,SPACE = prm][,dsn]
IEF280I ddd,dsn

Explanation: K indicates that the volume on device ddd is to be demounted and returned to the library:

- If ser is a 6-digit number, it is the serial number of the volume, which contains labels.
- If ser begins with a slash or L, the volume to be demounted is unlabeled; the number after the slash or L is an internal serial number assigned by the system to an unlabeled volume. If ser begins with L, the number after the L is of the form xxxyy, where xxx is the data set number and yy is the volume sequence number for the data set.

Job ij (or step sss of job ij) has finished using the volume. (In the message text, omission of the step field -- that is, two consecutive commas -- indicates that no stepname was specified on the EXEC statement.)

If a DISPLAY SPACE command is active, the field SPACE = cccc,tttt,aaaa/yyyy,zzzz is specified:

cccc

Total number of free cylinders on the volume.

tttt

Total number of tracks in addition to the free cylinders.

aaaa

Areas or extents dividing the cylinders and tracks.

yyyy

Maximum number of contiguous free cylinders of the largest extent within the total remaining space.

zzzz

Number of tracks in addition to the free cylinders of the largest extent within the total remaining space.

If an error occurred during the listing of the parameters in the SPACE field, one of the following messages is specified:

- LSPACE-PERMANENT I/O ERROR
- LSPACE-NON-STANDARD OS VOLUME
- LSPACE-NOT A DIRECT ACCESS VOL
- LSPACE-INVALID PARAMETER
- LSPACE-UCB NOT READY

If a MONITOR DSNAM command is active, the first nontemporary data set, dsn, is also specified in the message text. If the data set name causes the message to exceed 72 characters, the data set name will appear as specified on the second line of the message text. Job termination will include the data set name only for non-temporary, tape data sets which are passed but not received.

System Action: The volume is unloaded.

Operator Response: Demount the volume. If it is not externally marked with its serial number, mark the serial number on it. Then return it to the library. If an error message is specified, make sure that the volume is a standard OS direct access volume.

Problem Determination: If an error occurs again during the listing of the parameters in the SPACE field, see Table I, items 2, 7a, 29.

IEF281I ddd NOW OFF-LINE

Explanation: In response to a VARY command, device ddd has been placed offline.

Operator Response: None.

IEF282I ddd NOW UNLOADED [sss,space = prm]

Explanation: In response to an UNLOAD command, the system has unloaded a volume from device ddd.

If a MONITOR SPACE command is active, the field space = cccc,tttt,aaaa/yyyy,zzzz is specified for direct access devices:

cccc

Total number of free cylinders on the volume.

tttt

Total number of tracks in addition to the free cylinders.

aaaa

Areas or extents dividing the cylinders and tracks.

yyyy

Maximum number of contiguous free cylinders of the largest extent within the total remaining space.

zzzz

Number of tracks in addition to the free cylinders of the largest extent within the total remaining space.

If an error occurred during the listing of parameters in the SPACE field, one of the following messages is specified:

- LSPACE-PERMANENT I/O ERROR
- LSPACE-INVALID PARAMETER
- LSPACE-NON-STANDARD OS VOLUME

In addition, if the volume label had not been verified or the VTOC is on cylinder zero, track zero, the following message is specified:

sss,NON OS OR NO VTOC ADDR IN UCB

Where sss is the volume serial number or blanks.

Operator Response: None.

Problem Determination: Table I, items 2, 7a, 29.

IEF283I dsn NOT DELETED x

VOL SER NOS = ser [z],ser [z],ser [z],ser [z],ser [z]

VOL SER NOS = ser [z],ser [z],ser [z].

Explanation: A DD statement specified DELETE as the disposition of data set dsn, but the data set was not deleted from the volumes whose serial numbers, ser, are listed in the message text.

If the data set was not deleted from any of its volumes, the volumes listed are all of the volumes on which the data set resides. If the data set was partially deleted, message IEF285I precedes this message in the SYSOUT data set and lists the volumes from which the data set was deleted.

- If ser is a 6-digit number, it is the serial number of the volume, which contains labels.
- If ser begins with a slash or L, the volume is unlabeled; the number after the slash or L is an internal serial number assigned by the system to an unlabeled volume. If ser begins with L, the number after the L is of the form xxxyy, where xxx is the data set number and yy is the volume sequence number for the data set.

Five volume serial numbers are listed per line until all the volumes involved are listed. The last volume serial number is followed by a period.

The 1-digit code, x, explains why the data set was not deleted.

x Explanation

- 1 The expiration date had not occurred. When the data set was created, the expiration date was specified by the EXPDT or RETPD subparameter in the LABEL parameter of the DD statement.
- 4 No device was available for mounting during deletion.
- 5 Too many volumes were specified for deletion. Deletion can be accomplished in several job steps by specifying some of the volume serial numbers in each step.
- 6 Either no volumes were mounted or the mounted volumes could not be demounted to permit the remaining volumes to be mounted.
- 8 The SCRATCH routine returned a code, z, following each volume serial number explaining why the data set was not deleted from that volume. The values of z and their meanings are as follows:
 - 1 - The data set was not found on the volume.
 - 2 - The data set is security protected and the correct password was not given.
 - 3 - The expiration date had not occurred. When the data set was created, the expiration date was specified by the EXPDT or RETPD subparameter in the LABEL parameter of the DD statement.
 - 4 - An uncorrectable input/output error occurred in deleting the data set from the volume.
 - 5 - The system was unable to have the volume mounted for deletion.
 - 6 - The system requested that the operator mount the volume, but the operator did not mount it.
- 9 A job was cancelled and was deleted from any of the following queues:
 - Input queues
 - Background Reader Queue
 - Hold Queue
 - Automatic SYSIN Batching (ASB) Queue
 - Output Queues

The data set named dsn was deleted from the volumes whose serial number(s), ser, are listed in the message text.

Programmer Response: Corrective action depends on the value of x and z.

- If x is 1 do not attempt to delete the data set.
If x is 4 ensure that the correct volumes can be mounted.
If x is 5 delete the data set in several job steps.
If x is 6 ensure that the correct volumes can be mounted.
- If x is 8 and
z is 1 ensure that the correct volumes can be mounted.
z is 2 supply the correct password.
z is 3 do not attempt to delete the data set.
z is 4 resubmit the job.
z is 5 ensure that the correct volumes can be mounted.
z is 6 ensure that the correct volumes can be mounted.
- If x is 9 execute the IEHPROGM utility to delete the data set.

Operator Response: If x was 9, report this message to the programmer whose job was cancelled. If x was other than 9, no action is necessary.

Problem Determination: Table I, items 1, 3, 4, 7a, 29.

IEF284I NO TIOT ENTRY FOUND FOR ddname

Explanation: The system cannot process the disposition for the data set described by ddname because it could find no entry for ddname in the task input/output table (TIOT). Possibly the user-specified ddname has lost its identity during processing.

System Action: The data set described by ddname is bypassed and disposition processing continues with the next data set, if one exists. This message is issued in place of the normal disposition messages for the data set in the SYSOUT listing.

Programmer Response: If the user specified a disposition of KEEP, PASS, or RETAIN, no action is necessary. If the specified disposition was DELETE, CATLG, or UNCATLG, do the following:

If the ddname that appears in the message text is not meaningful, you can determine which DD statement describes the data set that has received incomplete disposition processing by comparing the disposition message with the allocation messages and the job control statements; the position of this message (IEF284I) within the set of disposition messages corresponds to the position of the ddname in the allocation messages and the job control statements. By examining the relationships of these statements you can determine the data set name, the unit type, and the serial number of the volume on which the data set exists. If the data set has a temporary data set name and you know the volume serial number, execute the IEHLIST utility to list the contents of the volume; from that you can determine the data set name. If you cannot determine the volume serial number, call IBM for programming support.

To give the data set the disposition of DELETE, CATLG, or UNCATLG, execute the IEHPROGM utility to perform these functions.

Problem Determination: If you cannot determine enough information about the data set to permit execution of IEHPROGM, see Table I, items 3, 4, 29.

IEF285I dsn dsp
VOL SER NOS = ser,ser,ser,ser,ser
VOL SER NOS = ser,ser,ser.

Explanation: The disposition, dsp, specified for the data set named dsn was accomplished for the volumes whose serial numbers, ser, are listed in the message text.

- If ser is blank, the volume is an unlabeled magnetic tape whose disposition is PASSED. The dsp is one of the following:
 - PASSED
 - KEPT
 - DELETED
 - CATALOGED
 - UNCATALOGED
 - RECATALOGED
 - SYSOUT
 - SYSIN
- If ser is a 6-digit number, it is the serial number of the volume, which contains labels.
- If ser begins with L, the volume is unlabeled; the number after the L is an internal serial number assigned by the system to an unlabeled volume and is of the form xxxyy, where xxx is the data set number and yy is the volume sequence number for the data set.

Five volume serial numbers are listed per line until all the volumes are listed. The last volume serial number is followed by a period.

Programmer Response: None.

IEF286I ddname - DISP FIELD INCOMPATIBLE WITH DSNAME

Explanation: The disposition specified in the DD statement does not agree with the status of the data set.

In the message text, ddname is the data definition name in the name field of the DD statement.

System Action: The job was terminated.

Programmer Response: Probable user error. Correct the disposition parameter on the DD statement. Rerun the job.
Problem Determination: Table I, items 1, 3, 4, 7a, 29.

IEF287I dsn dsp w
VOL SER NOS = ser,ser,ser,ser,ser
VOL SER NOS = ser,ser,ser.

Explanation: The DISP parameter of a DD statement was CATLG or UNCATLG, but the system could not catalog or uncatalog the data set.
In the message text, dsn is the data set name and dsp is the disposition of the data set. If CATLG was specified in the DD statement, then dsp appears in the message text as NOT CATLGD (not cataloged) or NOT RECTLGD (not recataloged). If UNCATLG was specified in the DD statement, dsp appears in the message text as NOT UNCTLGD (not uncataloged).

- If ser is a 6-digit number, it is the serial number of the volume, which contains labels.
- If ser begins with L, the volume is unlabeled; the number after the L is an internal serial number assigned by the system to an unlabeled volume and is of the form xxxyy, where xxx is the data set number and yy is the volume sequence number for the data set.

Five volume serial numbers are listed per line until all volumes are listed. The last volume serial number is followed by a period.

The w explains why the data set was not cataloged or uncataloged:

w *Explanation*

- 1 A control volume was required and a utility program must be used to catalog the data set.
- 2 The data set to be cataloged had previously been cataloged or the data set to be uncataloged could not be located, or no change was made to the volume serial list of a data set with a disposition of CATLG.
- 3 A specified index did not exist.
- 4 The data set could not be cataloged because space was not available in the catalog data set.
- 5 Too many volumes were specified for the data set; because of this, not enough storage was available to perform the specified cataloging.
- 6 The data set to be cataloged in a generation index is improperly named.
- 7 The data set to be cataloged was not opened and no density information was provided on the DD statement (for dual density tape requests only).
- 9 An uncorrectable input/output error occurred in reading or writing the catalog.

Programmer Response: If w is 9, resubmit the job.

If w is not 9, probable user error.

If w is 1, execute the required utility program, making sure the required control volume is mounted.

If w is 2, 3, or 6, correct the DSNNAME parameter of the DD statement, and submit the job step again.

If w is 4, increase the size of the catalog data set or delete unused catalog entries, and use a utility program to catalog the data set.

If w is 5, reorganize the data set into several smaller data sets and catalog each one. When using these smaller data sets, concatenate them into one large data set. If this procedure is not practical, try to change the format of the data set so that it occupies fewer volumes and then catalog it.

If w is 7, correct any program errors and submit the job step again. If the data set is to be cataloged, make sure the density information is provided in the DCB subparameter of the DD statement.

Problem Determination: Table I, items 1, 3, 4, 7a, 29.

IEF288I UNABLE TO OPEN TAPE UNIT

Explanation: The IEFPR (SPRINTER) program was unable to open the input tape data set. This was probably due to an improper or missing data definition name in the name field of the DD statement describing the tape. The data definition name should be PRINTAP.

System Action: The program was terminated. (The return code is 8.)

Programmer Response: Probable user error. Correct the data definition name, and execute the job step again.

Problem Determination: Table I, items 1, 3, 4, 7a, 29.

IEF289I jjj ACCT/SYSTEM ERROR

Explanation: An invalid parameter was detected while building a system message block for job jjj. For example, the address of the system message block was zero, the message length was zero, or the address of the message exceeded the maximum storage address.

System Action: No message is placed into a system message block. Processing continues.

Operator Response: Report this message to the programmer. If an accounting routine exists in the system, he should check it for errors. Otherwise, he should resubmit the job.

Problem Determination: Table I, items 1, 3, 4, 7a, 29.

IEF296I MAXIMUM NUMBER OF DEVICES FOR DD EXCEEDED

Explanation: The number of units requested for the job step was insufficient to permit all the required volumes to be mounted. The scheduler attempted to increase the unit count but exceeded the maximum of 59 units per DD statement.

System Action: The job was terminated.

Programmer Response: Probable user error. If possible, change the program so that fewer volumes are required to be mounted at the same time.

Problem Determination: Table I, items 1, 3, 4, 7a, 29.

IEF297I LRECL EXCEEDS 32K

Explanation: The IEFPR (SPRINTER) program determined that the DCB parameter of the input data set specified a logical record length (LRECL) of more than 32,756 bytes. The DCB parameter of the data set also specified a record format (RECFM) of VS or VBS.

System Action: The job was terminated.

Programmer Response: Probable user error. Change the LRECL subparameter to specify less than 32,756 bytes. Then execute the job step again.

Problem Determination: Table I, items 1, 3, 4, 7a, 29.

IEF298I jjj SYSOUT = sclass

Explanation: The system is displaying the classnames of the system output classes, other than the message class, which contain data for job jjj. In the message text, sclass is the listing of the classnames.

Note, however, that if the system restart occurs and the job is not scheduled for step restart or checkpoint restart, then the system output classes indicated in the message text may not be relied on to contain data.

Operator Response: Follow installation procedures in obtaining data from the system output classes indicated in the message text.

Note: This message appears as the first line of the system output for the message class of job jjj unless the message class is being written directly to the output device; in that case, this message may appear as the last line of the system output.

IEF3001 ddd WTR CLOSED -- QMGR I/O ERROR

Explanation: An uncorrectable input/output error occurred while the queue manager was using the SYS1.SYSJOBQE data set, either to update an output queue or to read records for a SYSOUT writer. The error makes the contents of the output queue unpredictable. Because the SYSOUT writer receives its data from the output queue, the writer closed its output data set on device ddd and stopped itself.

Operator Response: Enter another START WTR command.

Problem Determination: Table I, items 1, 3, 4, 7a, 8c, 30.

IEF3011 ddd WTR CLOSED

Explanation: In response to a STOP command, the SYSOUT writer closed its output data set on device ddd and stopped itself.

Operator Response: None.

IEF3021 SYSOUT WRITER ddd, FAILED ON JOB jjj CLASS x CONTINUATION FOLLOWS.

Explanation: In response to a START WTR command, the system started the SYSOUT writer for class name x. The writer opened the SYSOUT data set in which this message appears. The data written in this data set was being written in a SYSOUT data set that was closed because of an uncorrectable input/output error associated with its device, ddd. When the former data set was closed, message IEF3031 was written on the console. Some of the data written before the error may be duplicated in this new data set.

In the message text, jjj is the name of the job that produced the SYSOUT data set.

Programmer Response: None.

IEF3031 ddd WTR CLOSED -- OUTPUT ERROR

Explanation: The SYSOUT writer closed its SYSOUT data set on device ddd and stopped itself, because of an uncorrectable input/output error while writing the data set. The data that was being written will be written on the device specified in the next START WTR command that also specifies the data's class name.

Operator Response: Enter another START WTR command, specifying the class name of the data that was being written.

Problem Determination: Table I, items 2, 13, 30.

IEF3041 jjj, DSNNAME = dsn,

IEF3041 DDNAME = ddn, VOLUME = SER = ser

Explanation: One or more of the specified volumes on which the data set named dsn resides was not available when an attempt was made to write the data set.

In the message text, jjj is the name of the job being executed, ddn is the name of the DD statement specifying the data set, and ser is the serial number(s) of the volume(s) on which the data set resides.

Programmer Response: None.

Problem Determination: Table I, items 25b, 29.

IEF3071 ddd WTR CLOSED-OUTPUT DCB FAILED TO OPEN

Explanation: While processing a START WTR command, the system was unsuccessful in opening the system output data set. In the message text, ddd is the unit address of the device assigned to the writer.

System Action: The SYSOUT Writer will terminate itself.

Operator Response: Restart the writer.

Problem Determination: Table I, items 2, 7a, 29.

IEF3081 jjj - NOT ENOUGH CORE FOR PROCESSING

Explanation: When trying to initiate job jjj, the scheduler could not obtain enough storage for its work area.

System Action: The job was terminated.

Operator Response: Redefine the region size to increase the amount of storage available to the scheduler.

IEF3091 jjj - QUEUE MGR. READ ERROR ON SIOT

Explanation: An error was detected by the queue manager while reading a step input/output table (SIOT) from the SYS1.SYSJOBQE data set for job jjj.

System Action: The job was terminated.

Problem Determination: Table I, items 1, 3, 4, 7a, 8c, 29.

IEF3101 jjj - QUEUE MGR. READ ERROR ON VOLT

Explanation: An error was detected by the queue manager while reading a volume table (VOLT) from the SYS1.SYSJOBQE data set for job jjj.

System Action: The job was terminated.

Problem Determination: Table I, items 1, 3, 4, 7a, 8c, 29.

IEF3111 NOP - SETPRT PARAMETER LIST INVALID

Explanation: When the SYSOUT writer issued the SETPRT macro to load the UCS/FCB buffer(s) on a 3211 printer for the input data set, no operation was performed because the SETPRT parameter list was not valid.

System Action: The SYSOUT writer stopped processing the input data set and will go to process other input data sets.

Programmer Response: Make sure that the UCS/FCB parameters are correctly specified on the DD statement.

Problem Determination: Table I, items 1, 2, 3, 15, 29.

IEF3121 INVALID BLKSIZE SPECIFIED FOR PROCEDURE LIBRARY

Explanation: The blocksize specified for the procedure library was not a multiple of 80.

System Action: The SYSIN reader was unable to read the procedure library and terminated the job.

Since the job scheduler is invoked by means of procedures existing in the procedure library, the system is rendered unusable.

Operator Response: Report this message to the system programmer. He should change the blocksize of the procedure library to a multiple of 80.

IEF3141 SYSIO

Explanation: While a SYSOUT writer was printing or punching a SYSOUT data set, one of the following was detected:

- An uncorrectable input/output error in reading the input data set.
- For an input data set containing blocked variable format records, a logical record that was too short; that is, less than 5 characters for blocked variable format with control characters or less than 4 characters for blocked variable format with no control characters.
- For an input data set containing fixed or fixed blocked records, the BLKSIZE or LRECL of the data is not the same as the BLKSIZE or LRECL which describe the attributes of the data set.

System Action: The SYSOUT writer stopped processing the input data set and will go on to process other input data sets.

Programmer Response: Probable user error. Make sure that the input data set does not have a blocked variable format record that is too short. Then recreate the data set by again executing the job step that produced it.

Problem Determination: Table I, items 1, 3, 4, 25b, of the volume containing the SYSOUT data set, 29.

IEF315I VOLUME COUNT INCONSISTENT WITH UNIT COUNT

Explanation: One of the following conditions has occurred:

- The number of devices specified in the UNIT = parameter of the DD statement is greater than the number of volumes available to be mounted, or is greater than the number of volume serial numbers specified in the VOL = parameter.
- The starting volume specified in the volume sequence number subparameter of the VOL = parameter of the DD statement is not the first volume in the series of volumes; therefore the number of volumes to be mounted is less than the number of devices specified in the UNIT = parameter.

System Action: The job is terminated.

Programmer Response: Probable user error. Correct the erroneous UNIT = or VOL = parameter and rerun the job.

Problem Determination: Table I, items 1, 2, 3, 4, 7a, 29.

IEF316I CCBAD

Explanation: While a SYSOUT writer was printing or punching a SYSOUT data set, an invalid machine control character was detected in the input data set. The SYSOUT writer could not translate the character into an ASA character.

System Action: The SYSOUT writer stopped processing the input data set and will go on to process other input data sets.

Programmer Response: Probable user error. Make sure that the input data set contains valid control characters.

Problem Determination: Table I, items 1, 3, 4, 15, 29.

IEF317I TEMPORARY FAILURE OF OPEN FOR JOB jjj sss

Explanation: An error occurred during execution of an OPEN macro instruction for the JOBLIB, FETCHLIB, or STEPLIB data set for the step named sss of the job named jjj.

System Action: The job is terminated.

Operator Response: Rerun the job.

Problem Determination: Table I, items 1, 2, 3, 4, 7a, 29.

IEF318I ddn INVALID UNIT AFFINITY REQUEST FOR DIRECT ACCESS

Explanation: The AFF subparameter of the unit parameter was specified for a new direct access data set. In the message text, ddn is the name of the DD statement defining the data set.

System Action: The job is terminated.

Programmer Response: Probable user error. If the data set is new, remove the AFF subparameter and ensure that the UNIT parameter specifies a unit address or unit type. Then run the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF321I INVALID SEGMENT

Explanation: In an input data set, a variable record extension (VRE) segment descriptor word is incorrect. For example, a beginning segment occurred before the end segment of the last logical record.

System Action: The writer closed its output data set and stopped itself.

Programmer Response: Probable user error. Make sure the segment descriptor words in the input data set are being created correctly. Then execute the job step again.

Problem Determination: Table I, items 1, 2, 3, 15, 29. 3, 15, 29.

IEF322I NO FCB IMAGE-ID SPECIFIED FOR VERIFICATION

Explanation: In response to a user request for verification of the FCB image on a 3211 printer, no image-id had been specified with the verification request.

System Action: The SYSOUT writer ignores the request for verification and continues with remaining requests.

Programmer Response: VERIFY should only be specified with the FCB image-ID to be verified. Make sure the FCB image-ID is correctly included following the FCB = keywords parameter on the DD statement.

Problem Determination: Table I, items 1,

IEF323I NO FCB IMAGE-ID SPECIFIED FOR ALIGNMENT

Explanation: In response to a user request for alignment of the FCB forms on a 3211 Printer, no image-ID had been specified with the alignment request.

System Action: The SYSOUT writer ignores the request for alignment and continues with remaining requests.

Programmer Response: ALIGN should only be specified with the FCB image-ID to be aligned. Make sure the FCB image-ID is correctly included following the FCB = keyword parameter on the DD statement.

Problem Determination: Table I, items 1, 2, 3, 15, 29.

IEF324I NO IMAGE-ID SPECIFIED FOR VERIFICATION

Explanation: In response to a user request for verification of the UCS image on a 3211 Printer, no image-ID had been specified with the verification request.

System Action: The SYSOUT writer ignore the request for verification and continues with remaining requests.

Programmer Response: VERIFY should only be specified with the UCS-ID to be verified. Make sure the UCS image-ID is correctly included following the UCS = keyword parameter on the DD statement.

Problem Determination: Table I, items 1, 2, 3, 15, 29.

IEF325I OPERATOR CANCELLED LOAD. UCS/FCB IMAGE-ID/TRAIN NOT AVAILABLE.

Explanation: When the SYSOUT writer issued the SETPRT macro to load the UCS/FCB buffer(s) on a 3211 printer for the input data set, either the image could not be found in the image library (SVCLIB) or the requested train was not available. Therefore, the operator cancelled the load.

System Action: The SYSOUT writer stopped processing the input data set and will go on to process other input data sets.

Programmer Response: Load the required image into the system library or respecify the image-ID on the DD card to use an image and train available at the installation.

Problem Determination: Table I, items 1, 2, 3, 15, 29. Execute System Utility IEHLIST, LISTPDS DSN= image library on volume which contains the image library; save output.

IEF326I PERMANENT I/O ERROR ON BLDL LOCATE ON UCS/FCB IMAGE IN IMAGE LIBRARY

Explanation: When the SYSOUT writer issues the SETPRT macro to load the UCS/FCB buffer(s) on a 3211 printer for the input data set, a permanent I/O error was detected when the BLDL macro instruction was issued by data management to locate the character set image in the image library.

System Action: The SYSOUT writer stopped processing the input data set and will go on to process other input data sets.

Operator Response: Enter another START WTR command specifying the class name of the data that was being written.

Problem Determination: Table I, items 2, 29. Save associated output from WTR. Execute system utility IEHLIST, LISTPDS, DSNAMES = image library on volume which contains the image library; save output.

IEF3271 WTR ddd CLOSED. PERMANENT I/O ERROR WHILE LOADING UCS/FCB BUFFER

Explanation: When the SYSOUT writer issued the SETPRT macro to load the UCS/FCB buffer(s) on a 3211 printer for the input data set, a permanent I/O error persisted after two attempts were made to load the associated buffer.
System Action: The SYSOUT writer closed its SYSOUT data set on device ddd and stopped itself.
Operator Response: Enter another START WTR command, specifying the class name of the data that was being written.
Problem Determination: Table I, items 2, 29. Save associated output from WTR.

IEF3281 WTR ddd CLOSED. PERMANENT I/O ERROR ON UCS/FCB IMAGE VERIFICATION.

Explanation: When the SYSOUT writer issued the SETPRT macro to load the UCS/FCB buffer(s) on a 3211 printer for the input data set, a permanent I/O error was detected when an attempt was made to display the character set image on the printer for visual verification.
System Action: The SYSOUT writer closed its SYSOUT data set on device ddd and stopped itself.
Operator Response: Enter another START WTR command, specifying the class name of the data that was being written.
Problem Determination: Table I, items 2, 29.

IEF3291 WTR ddd CLOSED. OPERATOR CANCELLED LOAD. INCORRECT UCS/FCB IMAGE DISPLAYED FOR VERIFICATION

Explanation: When the SYSOUT writer issued the SETPRT macro to load the UCS/FCB buffer(s) on 3211 printer for the input data set, no operation was performed due to an incorrect image was displayed on the printer for visual verification.
System Action: The SYSOUT writer closed its SYSOUT data set on device ddd and stopped itself.
Programmer Response: Insure that the requested train contains the graphics necessary to print the image-ID specified and that the image-ID and desired verification image are correctly defined.
Problem Determination: Table I, items 1, 2, 3, 15, 29.

IEF3311 WTR ddd CLOSED. SETPRT NOP-UNCORRECTABLE OUTPUT ERROR ON PREVIOUS OPERATION

Explanation: When the SYSOUT writer issued the SETPRT macro to load the UCS/FCB buffer(s) on a 3211 printer for the input data set, no operation was performed due to an uncorrectable error in a previously initiated output operation.
System Action: The SYSOUT writer closes its SYSOUT data set on device ddd because of the uncorrectable output error, and stops itself.
Operator Response: Follow action specified for those companion messages which describe the nature of the uncorrectable error. Enter another START WTR command, specifying the class name of the data that was being written.
Problem Determination: Table I, items 2, 29. Save associated output from WTR.

IEF3701 INSUFFICIENT MAIN STORAGE FOR MOUNT PROCESSING

Explanation: There is not enough storage available to allocate volumes to a job step whose DD statements specify old data sets that reside on unmounted volumes.
System Action: The job step is terminated.
Programmer Response: Increase the value specified in the REGION parameter of the JOB statement, or reduce the number of DD statements that specify old data sets residing on unmounted direct access volumes.
Problem Determination: Table I, items 1, 2, 4, 7a, 29.

IEF3721 ddn VOLUME FIELD CONTAINS REFERENCE TO A DD NOT PREVIOUSLY RESOLVED

Explanation: In a DD statement (ddn in the message text), the VOLUME parameter contains a reference to a DD statement in a previous step. However, the previous step, which contains the referenced DD statement, was not executed because the condition test specified by the COND parameter of that step was satisfied.
System Action: The job was terminated.
Programmer Response: Probable user error. In the EXEC statement of the step containing DD statement ddn, include the same condition test specified in the EXEC statement of the step being referenced by ddn.
Problem Determination: Table I, items 2, 4, 7a, 29.

IEF3731 STEP/sss START/yyddd.hhmm

Explanation: At step termination for SMF, this message indicates the time and date that step sss was started. In the message text, yy specifies the year, ddd specifies the day of the year (001-366), hh specifies the hour (00-23), and mm specifies the minute (00-59).
Programmer Response: None.

**IEF3741 STEP/sss STOP/yyddd.hhmm CPU xxxxMIN
xx.xxSEC STOR { REAL } xxxK
 { VIRTUAL }**

Explanation: At step termination for SMF, this message indicates the time and date that step sss was terminated, the step problem program CPU time, and the total storage used. In the message text, yy specifies the year, ddd specifies the day of the year (001-366), hh specifies the hour (00-23), and mm specifies the minute (00-59). For the CPU time, xxxxMIN specifies the minute and xx.xxSEC specifies the second (in seconds and hundredths of a second). STOR REAL or VIRTUAL xxxK states the amount of storage that was actually used within the allocated region.
Programmer Response: None.

IEF3751 JOB/jjj START/yyddd.hhmm

Explanation: At job termination for SMF, this message indicates the time and date that job jjj was started. In the message text, yy specifies the year, ddd specifies the day of the year (001-366), hh specifies the hour (00-23), and mm specifies the minute (00-59).
Programmer Response: None.

IEF3761 JOB/jjj STOP/yyddd.hhmm CPU xxxxMIN xx.xxSEC

Explanation: At job termination for SMF, this message indicates the time and date that job jjj was terminated and the job problem program CPU time.

In the message text, yy specifies the year, ddd specifies the day of the year (001-366), hh specifies the hour (00-23), and mm specifies the minute (00-59). For the CPU time, xxxxMIN specifies the minute and xx.xxSEC specifies the second (in seconds and hundredths of a second).

Programmer Response: None.

IEF382A ddd WTR WAIT DUE TO PAUSE

Explanation: In response to a MODIFY command with a PAUSE = DATASET parameter, the SYSOUT writer is waiting before starting to write a SYSOUT data set on device ddd. The previous data set or messages are completed; that is, all lines or cards have been printed or punched and completely checked.

Operator Response: Perform any desired actions on device ddd; then enter REPLY xx,'y' where y is any single character. This reply causes the writer to begin processing the data set.

IEF383A ddd WTR, CHANGE FORM TO nnn

Explanation: The SYSOUT writer is waiting for the operator to change the forms on device ddd to form number nnn. This message appears only when a data set to be printed or punched needs forms different from the forms used for the data set just printed by the SYSOUT writer.

The previous data set or messages are completed; that is, all lines have been printed or punched and completely checked.
Operator Response: Change the forms to form number nnn; then enter REPLY xx,'y' where y is any single character. This reply causes the writer to begin processing the data set.

IEF388I jjj.sss.ddn WAITING FOR DEVICES

Explanation: The system was unable to satisfy the device requests by the data set named ddn for the step named sss of the job named jjj.

System Action: The initiator for step sss of job jjj will enter a wait state until the requested devices have been unallocated by terminating tasks and are available for use. Other jobs cannot go through allocation until this wait has terminated and current allocation processing has completed.

Operator Response: If desired, enter a CANCEL command to terminate the job named jjj.

IEF389I jjj.sss.ddn SEP REQUEST IGNORED

Explanation: In a DD statement, channel or unit separation was requested by the SEP parameter or the SEP subparameter of the UNIT parameter. However, the system was unable to satisfy the request.

Separation was requested in the DD statement whose name field contains ddn for the step named sss of the job named jjj.

System Action: The system will ignore the separation request and attempt reallocation.

Operator Response: None.

IEF401W JOBQUE FORMAT I/O ERROR

Explanation: While starting the system, an uncorrectable input/output error occurred when the system was writing in the SYS1.SYSJOBQE data set.

System Action: System processing was stopped.

Operator Response: Re-IPL the system and format the job queue.

Problem Determination: Table I, items 2, 7a, 8a, 29.

IEF403I jjj STARTED [TIME = hh.mm.ss]

Explanation: In response to a DISPLAY command with JOBNAMES in its operand, this message indicates that the system has begun processing the job named jjj.

If T is also specified in the operand of the DISPLAY command, then the time of day appears, where hh specifies the hour (00-23), mm specifies the minute (00-59), and ss specifies the second (00-59). The time, if specified, does not necessarily correspond to any time accounting time stamp.

Operator Response: None. However, if the job should not be executed at this time, issue a CANCEL command and the job will be bypassed.

IEF404I jjj ENDED [TIME = hh.mm.ss]

Explanation: In response to a DISPLAY command with JOBNAMES in its operand, this message indicates that job jjj has terminated.

Note: If job jjj has been cancelled by the operator and not by the system, this message will not be issued.

If T is also specified in the operand of the DISPLAY command, then the time of day appears, where hh specifies the hour (00-23), mm specifies the minute (00-59), and ss specifies the second (00-59).

Operator Response: None.

IEF406I ddd - READER CANNOT BE OPENED

Explanation: The data control block for the SYSIN data set on device ddd could not be opened. Probably, the IEFRRDR DD statement in the reader procedure was specified incorrectly.

Operator Response: Probable user error. Report this message to the programmer responsible for the system. He should correct any errors on the IEFRRDR DD statement in the reader procedure, and then restart the reader procedure.

Problem Determination: Table I, items 1, 2, 3, 4, 7a, 29.

IEF407I ddd - PROCLIB CANNOT BE OPENED FOR READER

Explanation: The data control block for the SYS1.PROCLIB data set on device ddd could not be opened. Probably, the IEFPSDI DD statement in the reader procedure was specified incorrectly.

Operator Response: Report this message to the programmer responsible for the system. He should correct any errors on the IEFPSDI DD statement in the reader procedure, and then restart the reader procedure.

Problem Determination: Table I, items 1, 2, 3, 4, 7a, 29.

IEF408I ddd - jjj JOB NOT FOUND FOR READER

Explanation: In a START command for reader ddd, job jjj was specified as a jobname parameter value. However, job jjj was not found in the input stream.

Operator Response: Probable user error. Make sure the jobname is spelled correctly in the START command, and make sure the job has been placed in the input stream. Then reenter the command.

Problem Determination: Table I, items 1, 2, 3, 4, 7a, 29.

IEF409I jjj,CLASS = cc,PRTY = pp,POS = nn,qqqq

Explanation: In response to a DISPLAY command with the job name jjj in its operand, the system is displaying the following information about the job:

cc

The job class assigned to the job if it is on an input queue or the output class assigned to the job if it is on a SYSOUT queue.

pp

The priority of the job queue entry.

nn

The position of the job on its queue.

qqqq

The name of the queue. This can be either JOBQ x (where x is the class identifier of an input queue), BRDRQ, HOLDQ, ASBQ, or SOUTQ x (where x is the output class identifier of an output queue).

System Action: None.

Operator Response: None.

IEF412I SPOOL DEVICE I/O ERROR WRITING FOR JOB jji

Explanation: While a SYSIN reader was writing a data set from the input stream on a direct access device an uncorrectable input/output error was encountered. The data set being moved was specified by a DD * or DD DATA statement.

System Action: Job jji, which contains the input stream data set, was terminated. The job scheduler also wrote message IEF608I in the SYSOUT data set to inform the programmer.

Operator Response: Reenter job jji through the input stream.

Problem Determination: Table I, items 1, 2, 4, 7a, 29.

IEF413I QUEUE DEVICE I/O ERROR INTERPRETING JOB jji

Explanation: An uncorrectable input/output error occurred while a SYSIN reader was writing in the SYS1.SYSJOBQE data set; the reader was queuing job jji in the input work queue.

System Action: Job jji was removed from the input work queue and was terminated.

Operator Response: Reenter job jji through the input stream.

Problem Determination: Table I, items 1, 2, 4, 7a, 8b, 29.

IEF414I QUEUE DEVICE I/O ERROR ENQUEUEING JOB jji

Explanation: An uncorrectable input/output error occurred while a SYSIN reader was writing in the SYS1.SYSJOBQE data set; the reader was queuing job jji in the input work queue.

System Action: Job jji was removed from the input work queue and was terminated.

Operator Response: Reenter job jji through the input stream.

Problem Determination: Table I, items 1, 2, 4, 7a, 8b, 29.

IEF415I I/O ERROR ON ddd PURGING JOB jji

Explanation: An uncorrectable input/output error occurred while the job scheduler was purging job jji from the SYS1.SYSJOBQE data set, which is on device ddd.

This message can occur only during the job removal after message IEF413I or IEF414I.

System Action: Job removal on device ddd was stopped; however, removal continued on other devices.

Operator Response: Respond as indicated for message IEF413I or IEF414I. Notify the system programmer at the installation of this message.

Problem Determination: Table I, items 1, 2, 4, 7a, 8b, 29.

IEF416I SPOOL FULL AND WAITING jji

Explanation: A SYSIN reader placing an input stream data set for job jji on a direct access device found that no more space was available on the device. The data set was defined by a DD * or DD DATA statement.

System Action: The timer was set for 1 minute; at the end of the minute, the reader will determine if space had in the meantime become available on the direct access device. If space had become available, the reader will resume placing the data set on the direct access device. If space had not become available, the timer will again be set for 1 minute. Thus, this message will be issued once a minute until space becomes available.

Operator Response: If this message is repeated for too long a time, enter a STOP RDR command.

If space has become available, the system will continue processing and close the reader after job jji has been read. In this case, reenter the JOB card for the job following jji before the reader is started again, or the job following jji will be flushed.

If space has not become available, the system will flush the input data for job jji and stop the reader. In this case, reenter job jji and the JOB card for the job following jji.

IEF417I PROCLIB DEVICE I/O ERROR READING FOR JOB jji

Explanation: During the processing of a request for a cataloged procedure, an input/output error occurred in reading or searching the SYS1.PROCLIB data set.

System Action: Job jji, which was being processed, was terminated. If the error occurred in reading the procedure library, the job scheduler also wrote message IEF603I in the SYSOUT data set; if the error occurred in searching the procedure library, the job scheduler also wrote message IEF614I in the SYSOUT data set.

Operator Response: Reenter job jji through the input stream.

Problem Determination: Table I, items 1, 2, 4, 7a, 29.

IEF418I SPOOL DEVICE I/O ERROR OPENING FOR JOB jji

Explanation: An uncorrectable input/output error occurred while the system was opening the data control block (DCB) that the job scheduler had created for a data set in the input stream. (The data set was defined by a DD * or DD DATA statement.)

System Action: Job jji, which contained the input stream data set, was terminated.

Operator Response: Reenter job jji through the input stream. If this message appears a second time for the same job notify the programmer that job jji could not be executed.

Problem Determination: Table I, items 1, 2, 4, 7a, 29.

IEF419I INPUT DEVICE I/O ERROR READING JOB jji

Explanation: An uncorrectable input/output error occurred while a SYSIN reader was reading the input stream.

System Action: The SYSIN reader closed the input stream and stopped itself. The interpreter terminated the job named jji, which was being read when the error occurred. The job scheduler also wrote message IEF602I in the SYSOUT data set to inform the programmer.

Operator Response: Enter a START RDR command and reenter job jji through the input stream. If this message appears a second time for the same job, tell the programmer the name of the job; his action is needed to correct the card image being read when the error occurred.

Problem Determination: Table I, items 1, 2, 4, 7a, 29.

IEF420I RDR = jji

Explanation: The job named jji was being processed by the reader/interpreter when a system failure occurred or the power was turned off. (This message is issued during the subsequent system restart.)

Operator Response: Enter the job named jji through the input stream.

IEF421I INIT = jji.sss.ppp (x) cond

Explanation: When a system failure occurred or the power was turned off, procedure step ppp of step sss of job jji was being initiated (x = 1), was being executed (x = 2), or was being terminated (x = 3). (This message is issued during the subsequent system restart.)

If x = 1 and cond = CANCELLED, initiation could not be resumed and the job was canceled.

If $x = 2$ and $cond = NO\ RESTART$, either the step requested restart and the operator denied the request or the step did not request restart. Restart will not be performed.

If $x = 2$ and $cond = RESTART$, the step requested restart. The operator authorized the restart and the restart will be performed.

If $x = 3$ and $cond = CANCELLED$, the job failed before system failure occurred.

If $x = 3$ and $cond = CONTINUING$, the step was not the last step. Termination was completed normally and the next step will be initiated normally.

If $x = 3$ and $cond = ENDED$, the step was the last step. Step termination and job termination have completed normally.

Operator Response: Enter `START WTR` commands for the installation-defined classes. If $cond = RESTART$ or `CONTINUING`, start an initiator for the job's input class.

If $x = 1$, the following will be written:

- `SYSOUT` data sets for all steps preceding sss (or ppp).
- Job control statements and system messages for steps preceding sss (or ppp).
- Job control statements, but not messages, for step sss (or ppp) and all subsequent steps.

If $x = 2$ and $cond = NO\ RESTART$ or $x = 3$ and $cond = CANCELLED$, the following will be written:

- `SYSOUT` data sets for steps preceding sss (or ppp) and, if they contain data, for step sss (or ppp).
- Job control statements and system messages for steps preceding sss (or ppp).
- Job scheduler messages (message code `IEF`), including device allocation messages, for step sss (or ppp).
- Job control statements, but not messages, for steps following sss (or ppp).

If $x = 2$ and $cond = RESTART$ or $x = 3$ and $cond = CONTINUING$, all `SYSOUT` data sets, job control statements, and system messages for the job will be written after the initiator has finished processing the job.

If $x = 3$ and $cond = ENDED$, all output for the job will be written.

Report the message to the programmer:

- If $x = 1$, nontemporary data sets for step sss (or ppp) may have been created before the failure.
- If $x = 2$ or 3 , termination for step sss (or ppp) has completed normally.

IEF422I ddd I/O ERROR DURING SYSTEM RESTART (c)

Explanation: During system restart, an uncorrectable input/output error or unusual condition occurred while the system was reading or writing a data set control block (DSCB) for `SYSIN` data set on device ddd . The `SYSIN` data set was for a job that was abnormally terminated before the system was stopped. The (c) indicates that either (1) not all `SYSIN` data sets for abnormally terminated jobs were scratched from ddd or (2) the volume table of contents (VTOC) on ddd is unusable.

System Action: System restart continues.

Operator Response: None. However, the message indicates a potential problem on device ddd . If later messages indicate problems on ddd , then enter a `VARY` command to vary device ddd offline.

Problem Determination: Table I, items 1, 2, 3, 4, 7a, 29.

IEF423A SPECIFY JOB QUEUE PARAMETERS

Explanation: During system start, in response to a `SET` command with an `F` in its `Q` parameter, this message requests parameters describing the format for the `SYS1.SYSJOBQE` data set.

Operator Response: Enter one of the following, as specified by the system programmer at the installation:

- `REPLY xx,'U'` to indicate that the values specified during system generation are to be used.
- `REPLY xx,'n,t,k,p'` where n , t , k , and p are positional parameters that are either replaced by the desired values or omitted to indicate that the value specified during system generation is to be used. The parameters are:
 - n Number of queue records per logical track. (Decimal number from 10 through 255.)
 - t Number of queue records to be reserved for each initiator. (Up to 4 decimal digits.)
 - k Number of queue records to be reserved for termination of jobs that require more than t records to initiate. (Up to 4 decimal digits.)
 - p Number of queue records to be reserved for the write-to-programmer routine. (Decimal number from 0 through 20.)

Examples are:

- `REPLY xx,'12'` indicates that n is the only parameter to be different from the system generation values.
- `REPLY xx,'',5'` indicates that k is the only parameter to be different from the system generation values. Notice the commas that represent the two omitted positional parameters.

IEF424A INVALID PARAMETER/FORMAT

Explanation: The reply to message `IEF423A` was invalid. One or more parameters in the reply either contained characters other than numbers or were not within the allowable range (n : 10 through 255, t : 4 decimal digits, k : 4 decimal digits).

System Action: The system ignored the reply.

Operator Response: Probable user error. Enter the reply again correctly.

Problem Determination: Table I, items 2, 7a, 11, 29.

IEF425I jjj EXCEEDED SPECIFIED QUEUE SPACE

Explanation: The job named jjj requires too much queue space in the `SYS1.SYSJOBQE` data set for initiation.

The space reserved for each initiator was specified either during system generation or in the t parameter of the reply to message `IEF423A`.

Message `IEF450I` will normally follow this message. However, if the job exceeded the specified queue space during job termination, message `IEF404I` will follow.

System Action: The job was terminated.

Operator Response: Probable user error. Report this message to the programmer responsible for the system. He should either have the programmer divide the steps of the terminated job into two or more jobs or, the next time the system is started, specify that (1) the format of the `SYS1.SYSJOBQE` data set be changed (`F` in the `Q` parameter of the `SET` command) and (2) a larger t parameter be used in the reply to message `IEF423A`.

Problem Determination: Table I, items 1, 2, 3, 4, 7a, 29.

IEF426I QUEUE CRITICAL

Explanation: No space was available when the system attempted to terminate one or more jobs that required too much queue space in the `SYS1.SYSJOBQE` data set for initiation, or to start a system task.

The space reserved for termination of jobs that require too much space for initiation was specified either during system generation or in the k parameter of the reply to message `IEF423A`.

If this message is preceded by message IEA425I, a job was being terminated. Otherwise, the failure occurred during allocation of a job or when a starting system task had no space to interpret the JCL.

System Action: No more queue space can be assigned. Therefore, the reader/interpreters, initiators, and SYSOUT writers can do no more work. Currently executing job steps will continue.

Operator Response: Probable user error. Report this message to the programmer responsible for the system. Then start the system, specifying that the format of the SYS1.SYSJOBQE data set be changed (F in the Q parameter of the SET command) and, in the reply to message IEF423A, using the larger t and/or k parameters specified by the programmer responsible for the system.

IEF427I COMD REJECTED FOR INITIATOR 'ident' - INSUFFICIENT QUEUE SPACE

Explanation: A START command was entered; however, not enough space is available in the SYS1.SYSJOBQE data set for another initiator.

The space to be reserved for each initiator was specified either during system generation or in the t parameter of the reply to message IEF423A.

In the message text, 'ident' specifies the identifier assigned to the task when it was started.

Operator Response: Enter a START command later when the queue has more free space. Free space is produced when a SYSOUT writer or the current initiator(s) finish processing a job.

IEF428I jjj TERMINATED DUE TO I/O ERROR

Explanation: An I/O error occurred while reading or writing to the job queue during the interpretation of START command JCL. In the message text, jjj is the name of the job being read or written.

System Action: Job jjj is terminated by flushing it from the system. No JOB jjj ENDED message will appear.

Operator Response: Reissue the START command that caused the error.

Problem Determination: Table I, items 2, 7a, 29.

IEF429I INITIATOR 'ident' WAITING FOR WORK

Explanation: Each input queue for the initiator either contains no jobs or is in a held status. Input queues are held with the HOLD Q command.

In the message text, 'ident' specifies the identifier assigned to the task when it was started.

System Action: While waiting for a job to initiate, the initiator's region is free and its storage is made available to other tasks.

Operator Response: More jobs may be read into the system or the RELEASE Q command may be entered, as desired.

IEF430I RESTART STEP NOT FOUND jjj

Explanation: During execution of a deferred restart for job jjj, it was found that the RESTART parameter of the JOB statement specified a step name that could not be found either in the resubmitted deck or in the specified cataloged procedure.

System Action: Restart for job jjj is terminated.

Operator Response: None.

IEF431W SYSTEM RESTART I/O ERROR ON JOB QUEUE

Explanation: The system restart function has encountered an uncorrectable input/output error on the SYS1.SYSJOBQE data set.

System Action: The system will enter a one-instruction loop.

Operator Response: Restart the system and reformat the SYS1.SYSJOBQE and SYS1.SYSPool data sets.

Problem Determination: Table I, items 2, 7a, 8, 11, 29.

IEF432I START INIT REJECTED

Explanation: A START command was entered; however, not enough space is available in the SYS1.SYSJOBQE data set for another initiator.

The space to be reserved for each initiator was specified either during system generation or in the t parameter of the reply to message IEF423A.

Operator Response: Enter a START command later when the queue has more free space. Free space is produced when a SYSOUT writer or the current initiator(s) finish processing a job.

IEF438I SUBTASK OF utn TERMINATED. SYSTEM COMPLETION CODE hhh

Explanation: A subtask abnormally terminated; therefore, the system output (SYSOUT) writer was unable to print or punch the SYSOUT data set. In the message text, utn is the applicable unit name and hhh is the completion code, in hexadecimal.

Operator Response: None.

IEF439I DATASET WRITER xxx FOR DDN ddn COMPLETION CODE hhh

Explanation: The data set writer whose module name is xxx abnormally terminated while attempting to write the data set described by DD statement ddn; hhh, the completion code, is in hexadecimal.

System Action: The system output (SYSOUT) writer stopped processing the input data set, but will continue to process other input data sets.

Programmer Response: Use the system completion code specified in the message text to determine the cause of the failure. After correcting the error, resubmit the job step which created the data set.

IEF440I I/O ERROR IN THE SYS1.SYSJOBQE DATA SET FOR jjj sss nnn

Explanation: An uncorrectable input/output error occurred while the system was trying to read or write in the SYS1.SYSJOBQE data set.

jjj sss is the jobname and stepname or task name identifier for which information was being written at the time of the error. nnn is the IOS return code from the read/write operation in question. It will be one of the following:

X'41' The I/O activity was not completed because an uncorrectable error occurred. Probable hardware error.

X'42' The activity was not started because a pointer referenced an area out of the SYS1.SYSJOBQE direct access extent. Probable software error.

X'44' The request was intercepted because a permanent error occurred the last time the device was used.

X'48' The request element has been freed because the data set is permanently in error.

X'4F' A direct access error recovery routine was unable to read the home address or record 0.

System Action: The read or write operation was not performed.

Operator Response: Report this message to system programmer or installation manager. The message indicates a potential problem with the SYS1.SYSJOBQE data set. If the message is repeated, restart the system and reformat the queue at the earliest convenient opportunity.

Problem Determination: Table I, items 1, 2, 4, 7b, 8b, 29.

IEF441I SYSTEM RESTART ERROR ON { jji
FREELIST } , qqqq,
QUEUE }
{ TTR = nnn } , { status } , [sense] , mod
{ NN = nn } } C
E
S

Explanation: An uncorrectable error occurred during system restart processing for job jji. In the message text, the first variable field contains one of the following:

- Name of the job being processed (jji).
- FREELIST, which indicates that an error occurred while tracks were being returned to the free track queue on the SYS1.SYSJOBQE data set.
- QUEUE, which indicates that the error occurred during processing of a queue control record. The TTR = nnn or NN = nn field will contain blanks if QUEUE appears in this field, and messages IEF442I and IEF443I will follow this message.
- bbbbbbbb (blanks), which indicates that the error occurred while the system was attempting to read the logical track header for a job.

The qqqq field identifies the queue type that was being processed at the time of the error.

- HOLD
- OUTPUT = x
- INPUT = x
- BRDRQ
- RESERVED

where x is the input or output class identifier, and RESERVED is for an unassigned queue control word.

The mod field contains the three-byte identifier.

In the next field, TTR = nnn or NN = nn represents the address of the logical track header assigned to the job on the queue.

The status field contains either the two-byte portion of the channel status word (CSW) followed by the first two sense bytes for the error condition, or one of the following error codes:

- C - The error occurred during the conversion of the TTR.
- E - The error occurred while the job was being enqueued.
- D - The error occurred while a job was being deleted from a queue identifier of the module that detected the error condition. The assembly module name can be determined by adding the prefix IEFSD to this identifier.

System Action: System restart processing for job jji is terminated; however, processing will continue with the next job on the SYS1.SYSJOBQE data set. The tracks assigned to job jji are not released.

Operator Response: Process current work on the queues. Reformat the SYS1.SYSJOBQE data set at the earliest convenient time by entering SET Q = ([unitname],F). Jobname jji must be reentered into the system after the queue has been reformatted.

Problem Determination: Table 1, items 2, 3, 8a, 29.

IEF442I AUTO COMMANDS SUPPRESSED ON RESTART ERROR

Explanation: An uncorrectable error occurred during processing of a queue control record (QCR). Any automatic start commands that were authorized for initiation have been suppressed. Message IEF443I follows this message to indicate the queues that have work on them.

System Action: The system issues message IEF443I and then enters a wait state until the operator enters a start command.
Operator Response: Respond as indicated to message IEF443I.

IEF443I WORK ON QUEUES: [HOLD],[OUTPUT = list],[INPUT = list],[BRDRQ]

Explanation: This message follows message IEF442A; it indicates the queues that have data on them and can have writers or initiators started for them.

System Action: The system enters a wait state until the operator enters a START command.

Operator Response: Start writers and/or initiators for the indicated classes as required.

Once the operating system has quiesced, execute the standalone program IMCJDMP to dump the SYS1.SYSJOBQE data set. Then reformat the SYS1.SYSJOBQE data set using the Q = parameter of the SET command.

IEF444I SYSTEM RESTART ERROR TERMINATING JOB jji

Explanation: The system restart function encountered an uncorrectable input/output error on the SYS1.SYSJOBQE data set. In the message text, jji is the jobname.

System Action: The read or write operation was not performed. Processing continues.

Operator Response: Report this message and the circumstances to the system programmer.

Problem Determination: Table 1, items 2, 7a, 29.

IEF450I jji/sss/[ppp]ABEND { Shhh
Udddd }
{ Shhh Udddd }

TIME = hh.mm.ss

Explanation: A job step was abnormally terminated during (1) step sss of job jji, or (2) step ppp, which is part of a cataloged procedure called by step sss of job jji.

The first format of the message indicates that the job step was abnormally terminated by the control program; hhh, the completion code, is in hexadecimal. The second format of the message indicates that the job step was terminated by the problem program; dddd, the completion code, consists of 4 decimal digits.

This message also indicates the time of day, where hh specifies the hour (00-23), mm specifies the minutes (00-59), and ss specifies the second (00-59).

Operator Response: None.

IEF451I jji.sss.[ppp] ENDED BY CC dddd TIME = hh.mm.ss

Explanation: A condition test specified in the COND parameter of a JOB statement was satisfied by the completion code dddd for (1) step sss of job jji, or (2) step ppp, which is part of a cataloged procedure called by step sss of job jji. Completion code dddd consists of 4 decimal digits.

This message also indicates the time of day, where hh specifies the hour (00-23), mm specifies the minute (00-59), and ss specifies the second (00-59).

System Action: The job named jji was terminated.

Operator Response: None.

IEF452I xxx JOB NOT RUN - JCL ERROR [TIME = hh.mm.ss]

Explanation: If xxx is a job name, the reader/interpreter detected an error in a job control statement, or the job was canceled while on the input queue. If the error was detected on a JOB statement, the xxx appears as JOBFAIL.

This message will also be written if one of the following is true:

- Either message IEF094I or message IEF092I was issued and the operator cancelled the job while it was waiting.
- Message IEF100I was issued.
- xxx was a TSO foreground job, therefore, it could not wait for data sets.

If xxx is a cataloged procedure name, the procedure was specified in the first operand of a START command. In this case, either the procedure was not found in the system procedure library (SYS1.PROCLIB) or, if found, the procedure had an error in a job control statement. Message IEE132I will always follow this message.

The actual error message appears in the system output (SYSOUT) data set.

In response to a DISPLAY JOBNAME,T command, this message also indicates the time of day, where hh specifies the hour (00-23), mm specifies the minute (00-59), and ss specifies the second (00-59).

System Action: If xxx was cancelled by the operator, all steps of the job, beginning with the step currently being processed, will be terminated. Otherwise, if xxx is a job name, the job will not be initiated; no steps will be executed. If xxx is a procedure name, the START command will not be executed.

Operator Response: If xxx is a job name, none. If xxx is a procedure name, either reenter the START command with the correct procedure name, or, if the procedure name is correct, have the system programmer check the procedure for errors.

Problem Determination: Table I, items 1, 2, 3, 4, 7a, 29.

IEF453I jji JOB FAILED - JCL ERROR

Explanation: In a job control statement, an error was detected by the initiator, or an error was detected in a subsequent job step by the reader/interpreter. The actual error message appears in the system output (SYSOUT) data set.

System Action: The job named jji was terminated. If the error was detected by the initiator, the job was terminated either before or after any steps were executed; if the error was detected by the reader/interpreter, the job was terminated after one or more steps were executed.

Operator Response: None.

IEF454I DOS VTOC CANNOT BE CONVERTED TO OS VTOC

Explanation: A DD statement requested space on a direct access volume on which the DOS contamination bit was set. In attempting to convert the DOS VTOC to OS VTOC format, one of the following data set allocations was found:

- A split cylinder data set was located on cylinder zero.
- A split cylinder data set was located on the same cylinder as the VTOC.
- A split cylinder data set was located on the same cylinder as a non-split cylinder data set.
- Two data sets have overlapping extents.

System Action: If the DD statement specifically requested this volume then the job will be terminated. The system will issue a mount message.

Programmer Response: Either scratch or move the split cylinder data set that is creating the error, and execute the job again.

Operator Response: Demount the volume on which the split cylinder data set resides. (Note that it may be used only in a DOS environment until the offending split cylinder data set has been moved or scratched.) Respond to the mount messages issued following this message.

Problem Determination: Table I, items 1, 2, 4, 7b, 29.

IEF459I WTP SYSTEM MESSAGE LIMIT EXCEEDED

Explanation: The write-to-programmer routine was attempting to process a system message but all available SYS1.SYSJOBQE records for WTP had been used. (The maximum number of records allowed for WTP messages is specified at system generation time in the JOBQWTP parameter of the SCHEDULR macro instruction.)

System Action: The system will suppress the message that the write-to-programmer routine was attempting to process and all

subsequent messages to be processed by the write-to-programmer routine for this step. In subsequent steps, one SYS1.SYSJOBQE record will be allocated for use by system tasks for WTP messages.

Programmer Response: Probable user error. Increase the value of the system generation JOBQWTP parameter.

IEF460I WTP MESSAGE LIMIT EXCEEDED

Explanation: A WTOR or WTO message with a ROUTCDE = 11 parameter was issued for a task that used the maximum number of SYS1.SYSJOBQE records available; the limit was specified at system generation in the JOBQWTP parameter of the SCHEDULR macro instruction.

System Action: Problem program messages to be processed by the write-to-programmer routine for the current job are suppressed; message IEF459I will be issued.

If the write-to-programmer routine was attempting to process a system message, the message will be processed (and will follow this message). In this step, one additional system message will also be processed. Further system messages will be suppressed.

Operator Response: Probable user error. Increase the value of the system generation JOBQWTP parameter or change the value of the parameter in response to message IEE423A.

Problem Determination: Table I, items 1, 2, 3, 4, 7a, 29.

IEF461I I/O ERROR SYS1.SYSJOBQE, WTP PROCESSING FOR jji

Explanation: One of the following occurred:

- An uncorrectable input/output error occurred on the SYS1.SYSJOBQE data set while the write-to-programmer routine was processing a message for job jji. The message routine was attempting to process follows this message.
- Error recovery routines were in control of the SYS1.SYSJOBQE device when the write-to-programmer routine was processing a message. To prevent a possible interlock condition if the message being processed was issued by the error routine, the write-to-programmer is bypassed.

System Action: In both cases, any subsequent messages are processed by the write-to-programmer routine for this job.

Operator Response: Probable hardware error. Report this message to the system programmer.

Problem Determination: Table I, items 1, 2, 3, 4, 7a, 8b, 29.

IEF462I NO RECORDS AVAILABLE SYS1.SYSJOBQE, WTP PROCESSING jji

Explanation: The write-to-programmer routine attempted to process a message for job jji, but was unable to get a record in the SYS1.SYSJOBQE data set.

System Action: If the write-to-programmer routine was attempting to process a problem program message, the message is not processed; if the routine was attempting to process a system message, the message will be processed. (One, two, or three system messages may follow this message.)

Operator Response: Report this message to the programmer responsible for the system. The problem was caused by the initiator using records belonging to the write-to-programmer routine.

Problem Determination: Table I, items 1, 2, 3, 4, 7a, 29.

IEF491I ddn - DD GENERATIONS CAUSE TOTAL DD STATEMENTS TO EXCEED 255

Explanation: The total number of DD statements generated internally for different device types has exceeded 255, the maximum for any job step. In the message text, ddn is the

name of the DD statement which caused the DD generations.
System Action: The job is terminated.
Programmer Response: Decrease the number of data sets for the job to less than 256 and resubmit the job.

IEF

Operator Response: Mount the volume on any available device of the proper type. If the volume cannot be mounted, cancel the job.

IEF505I UNIT REQUIRED

Explanation: A volume has to be unloaded to provide a free device to hold the volume which has been, or will be, requested by message IEF504A. Message IEF234E follows, indicating the volume to be demounted.

Operator Response: None. However, perform the actions indicated in accompanying messages.

IEF506I ddn NO STORAGE VOLUMES. 'VOLUME = PRIVATE' ASSUMED.

Explanation: The DD statement named ddn requested allocation of space for a new data set on a non-private volume; the statement did not specify a volume serial number.

The only way to satisfy such a request is allocation on a storage volume; however, the system contains no storage volumes.

System Action: The system assumed VOLUME = PRIVATE and allocated space to the data set on that basis.

IEF508I VOLUME MOUNTED ON INELIGIBLE DEVICE

Explanation: A DD statement requested that a tape volume be mounted on a 3400 series tape drive, and the tape volume was found mounted on a 2400 series drive. A 2400 series tape drive cannot satisfy a request for a 3400 series drive because the 2400 drives do not have the unload security feature.

System Action: Message IEF234E follows, indicating that the volume is to be demounted.

Operator Response: After the volume is demounted, in response to message IEF233A, mount the volume on the appropriate 3400 series tape drive.

IEF510E VOLUME HAS ANS LABEL.

Explanation: A tape volume that has an American National Standard label was mounted in a system which does not support ASCII tape processing.

System Action: The tape volume is unloaded. A demount message, IEF234E, is issued to point out the device on which the wrong volume was mounted.

Operator Response: Set aside jobs that require ASCII tapes until a system that supports ASCII is available.

IEF533A M ddd,ser, $\left. \begin{array}{l} \text{jjj} \\ \text{jjj,sss} \\ \text{jjj,sss,dsn} \\ \text{jjj,,dsn} \end{array} \right\}$

Explanation: Job jjj requires that volume ser be mounted on device ddd. If a DISPLAY DSNNAME command is active in the system, the first nontemporary data set name appears in the message text as dsn. (This field will not appear if a DISPLAY DSNNAME command is not active or if this message follows message IEF534E.) In the message text, sss is the name of the step that requires the volume; if no step name was specified in the EXEC statement, the sss field is left blank.

This message may be issued for more than one job at a time.

System Action: The task waits for the volume to be mounted. Other jobs may be allocated or terminated.

Operator Response: If device ddd is direct access, and if this message appears in conjunction with message IEF233A, honor the IEF233A mount message first. Otherwise, mount volume ser on device ddd as indicated in the message text, and ready the device. If the volume cannot be mounted, enter a CANCEL

command for job jjj and for all other jobs that require the volume.

Problem Determination: Table I, item 30.

IEF594I jjj.sss.ddn INVALID SPLIT REQUEST

Explanation: The specified DD statement made invalid use of the SPLIT parameter for one of the following reasons:

- Split cylinder allocation is limited to one volume on one unit, and more than one unit was requested.
- DD statements using the SPLIT parameter are not in correct sequence. Every DD statement using the SPLIT parameter must be preceded by another SPLIT request or it must be the DD statement which requests the amount of space to be allocated to the split cylinder data sets.

System Action: The job is terminated.

Programmer Response: Probable user error. Make sure that only one device was requested for each allocation and that the DD statements are in the proper sequence. Then run the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF601I INVALID STATEMENT IN PROCEDURE

Explanation: One of the following invalid statements was found in a procedure:

- JOB statement.
- A statement other than a job control statement; that is, a statement that does not begin with //.
- A DD * or a DD DATA statement in an instream procedure.
- A null statement or a delimiter.

System Action: The job is terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the procedure by removing the invalid card. The invalid card will appear in the SYSOUT listing immediately before the error message if MSGLEVEL = 1 is coded on the job statement. Rerun the job.

Problem Determination: Table I, items 1, 3, 4, 7a, 29.

IEF602I INPUT DEVICE I/O ERROR READING JOB

Explanation: An uncorrectable input/output error occurred while a SYSIN reader was reading the input stream.

System Action: The SYSIN reader closed the input stream and stopped itself. The job scheduler interpreter terminated the job being read when the error occurred. The job scheduler also wrote message IEF419I on the console; in response, the operator started a SYSIN reader and reentered the job through the input stream.

Programmer Response: If this message is repeated for the same job, as indicated by IEF419I, check the format of the card image being read when the error occurred. Make any corrections needed, and submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF603I PROCLIB DEVICE I/O ERROR READING FOR JOB

Explanation: An uncorrectable input/output error occurred in reading the procedure library (SYS1.PROCLIB) during processing of a job that requested a cataloged procedure.

System Action: The job being processed was terminated. The job scheduler also wrote message IEF417I on the console; in response, the operator reentered the job through the input stream.

Programmer Response: None.

IEF604I INPUT STREAM DATA FLUSHED

Explanation: The job was terminated for the reasons indicated in previous messages. While scanning the remaining job control

statements for the job for syntax errors, the scheduler found a data set in the input stream; the data set was specified by a DD * or DD DATA statement. The data in this data set was ignored. Scanning for errors was resumed with the first statement following the data set.

No previous message will have been issued if the input stream contained data that was not preceded by a valid EXEC statement.

Programmer Response: Insure that a valid EXEC statement precedes any data in the input stream.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF605I UNIDENTIFIED OPERATION FIELD

Explanation: In a job control statement, either an operation field could not be found or the operation field could not be identified as JOB, EXEC, DD, or any valid operator command.
System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.
Programmer Response: Probable user error. Check that the operation field is spelled correctly and that it is preceded and followed by at least one blank. After correcting the error, submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF606I MISPLACED DD STATEMENT

Explanation: A DD statement between the JOB statement and first EXEC statement did not contain JOBLIB or JOBCAT in its name field. Possibly, JOBLIB or JOBCAT was misspelled or misspelled. Possibly, the operation field of the first EXEC statement was not correctly specified.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.
Programmer Response: Probable user error. Correct the DD or EXEC statement, or place the DD statement in the job step in which it belongs. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF607I JOB HAS NO STEPS

Explanation: The job control statements following a JOB statement did not include an EXEC statement.

This message is also issued if the job contains a PROC statement prior to any EXEC or SYSCHK DD statement but contains no PEND statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors. A dummy EXEC statement with EXECFAIL in its name field was inserted.

If a PEND statement was omitted, the remainder of the job was considered part of the in-stream procedure.

Programmer Response: Probable user error. Insert an EXEC or PEND statement or correct an EXEC or PEND statement containing errors that made it unrecognizable as applicable. Submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF608I SPOOL DEVICE I/O ERROR WRITING FOR JOB

Explanation: While a SYSIN reader was writing a data set from the input stream on a direct access device, an uncorrectable input/output error was encountered.

System Action: The job containing the input stream data set was terminated. The job scheduler also wrote message IEF412I on the console; in response, the operator reentered the job through the input stream.

Programmer Response: None.

IEF609I INVALID OVERRIDE KEYWORD xxxx

Explanation: An EXEC statement containing a PROC parameter specified two identical override keywords that both refer to the same step in a cataloged or in-stream procedure.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Change the override parameters. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF610I PROCEDURE HAS NO STEP

Explanation: The job control statements in a procedure did not include an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the procedure by inserting an EXEC statement or correcting an EXEC statement that contained errors that made it unrecognizable. Submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF611I OVERRIDDEN STEP NOT FOUND IN PROCEDURE

Explanation: An EXEC or DD statement, which was to override a corresponding EXEC or DD statement in a cataloged or in-stream procedure, specified a step name that could not be found in the procedure. Probably, the step name was misspelled or the DD override statements did not appear in the same order as the corresponding statements in the procedure.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the step name in the EXEC or DD statement in the input stream, correct the order of the step names in the EXEC statement in the input stream, correct the order of the DD override statements in the input stream, or correct the procedure. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF612I PROCEDURE NOT FOUND

Explanation: The procedure specified in the first parameter of an EXEC statement could not be found in the procedure library (SYS1.PROCLIB) or in the in-stream procedure directory. Possibly, the procedure name was misspelled or the PEND statement ending the previous in-stream procedure was omitted.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.
Programmer Response: Probable user error. Correct the procedure name in the EXEC statement in the input stream, in the PROC statement in the input stream, or in the procedure library. If the procedure name is correct, insert the missing PEND statement. Then submit the job again.
Problem Determination: Table I, items 1, 4, 7a, 29.

IEF6131 PROCEDURE WITHIN A PROCEDURE

Explanation: In a procedure, an EXEC statement contained a PROC parameter or a procedure name, implying a procedure within a procedure. A procedure cannot be specified within a procedure.
System Action: The job containing the EXEC statement that invoked the procedure was terminated. The remaining job control statements for the job were scanned for syntax errors.
Programmer Response: Probable user error. Replace the invalid EXEC statement with either (1) the procedure that it called or (2) a valid EXEC statement containing a PGM parameter. Then submit the job again.
Problem Determination: Table I, items 1, 4, 7a, 29.

IEF6141 PROCLIB DEVICE I/O ERROR SEARCHING FOR PROCEDURE

Explanation: An uncorrectable input/output error occurred in searching the procedure library (SYS1.PROCLIB) during processing of a job that requested a cataloged procedure.
System Action: The job being processed was terminated. The job scheduler also wrote message IEF4171 on the console; in response, the operator reentered the job through the input stream.
Programmer Response: None.

IEF6151 EXCESSIVE PROCSTEP NAME xxxx

Explanation: In an EXEC statement that specified a procedure, the name of a step to be overridden was longer than 8 characters.
In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.
Programmer Response: Probable user error. Correct the step name so that it consists of not more than 8 alphameric characters, with the first character alphabetic. Then submit the job again.
Problem Determination: Table I, items 1, 4, 7a, 29.

IEF6161 SUBLIST WITHIN SUBLIST INCORRECT xxxx

Explanation: In a job control statement, a subparameter list was specified within a subparameter list. This arrangement is invalid. Possibly, too many parentheses were used, so that a list appeared to be within a list.
In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.
Programmer Response: Probable user error. Correct the subparameter. Then submit the job again.
Problem Determination: Table I, items 1, 4, 7a, 29.

IEF6171 NO NAME ON FIRST DD STATEMENT AFTER EXEC STATEMENT

Explanation: The first DD statement following an EXEC statement did not contain a data definition name in its name field; that is, column 3 of the DD statement was blank. Possibly, the first statement for a concatenation of data sets was omitted.
System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.
Programmer Response: Probable user error. Either put a data definition name in the name field of the DD statement or place it among other DD statements so that a proper concatenation is defined. Then submit the job again.
Problem Determination: Table I, items 1, 4, 7a, 29.

IEF6181 OPERAND FIELD DOES NOT TERMINATE IN COMMA OR BLANK

Explanation: In a job control statement, the operand field does not terminate with one of the following:

- A comma after the last parameter in the card image, if the statement is to be continued in the next card image. The comma must be before column 72.
- A blank after the last parameter, if the statement is not to be continued. The blank may be in column 72 or any previous column.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.
Programmer Response: Probable user error. Correct the operand field. Then submit the job again.
Problem Determination: Table I, items 1, 4, 7a, 29.

IEF619I DATA IN THE INPUT STREAM CANNOT BE PROCESSED, NO IEFDATA CARD IN THE READER PROCEDURE

Explanation: The reader procedure used to start the reader interpreter did not contain an IEFDATA statement. Therefore, no attempt was made to allocate a spooling device or create a spool data set and the data in the input stream cannot be processed.

System Action: The job was terminated and the data in the input stream was flushed.

Programmer Response: Probable user error. Insert an IEFDATA statement in the reader procedure.

Problem Determination: Table I, items 26d, 29.

IEF620I CPP PARAMETERS NOT COMPATIBLE WITH SYSTEM READER - DEFAULT VALUES USED xxxx

Explanation: A keyword parameter was syntactically incorrect or specified a value too large for the system reader reading the input stream. The parameter appeared on one of the following:

- The preceding DD * or DD DATA statement.
- A previous DD statement that contained a DDNAME parameter specifying the name of the DD * or DD DATA statement.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The parameter was ignored and the concurrent peripheral processing (CPP) data set was created on a direct access device using the system reader default values (as specified on the IEFDATA DD statement of the reader cataloged procedure). Processing continues.

Programmer Response: Probable user error. Correct any syntax errors. If the parameter specified too large a value for the system reader, either specify a smaller value or request the operator to start a system reader that can handle the larger value. Then resubmit the job.

Problem Determination: Table I, items 3, 4, 7a, 29.

IEF621I EXPECTED CONTINUATION NOT RECEIVED

Explanation: In a job control statement, continuation was indicated by a comma at the end of the operand or by a nonblank character in column 72, or both. However, the following card image was not a continuation.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Provide the missing continuation card, if it was lost. If no continuation was intended, correct the card so that column 72 is blank and the operand ends with a blank.

If the continuation card was present, correct it so that slashes (/) appear in columns 1 and 2, a blank appears in column 3, and the continuation of a comment begins anywhere after column 3 or the continuation of the operand begins in columns 4 through 16.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF622I UNBALANCED PARENTHESIS xxxx

Explanation: In a job control statement, one of the following appeared:

- A valid left parenthesis not followed by a right parenthesis.
- A valid right parenthesis not preceded by a left parenthesis.
- A right parenthesis where it is not permitted.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the error. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF623I SOURCE TEXT CONTAINS UNDEFINED OR ILLEGAL CHARACTERS xxxx

Explanation: A job control statement contained one or more invalid characters. All characters in a job control statement must belong to the character sets defined in the publication *IBM System/360 Operating System: Job Control Language GC28-6539*.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.
Programmer Response: If the statement contains any invalid characters, correct it. Then submit the job again.
Problem Determination: Table I, items 1, 4, 7a, 29.

IEF624I INCORRECT USE OF PERIOD xxxx

Explanation: In a job control statement, a period appeared in a parameter or field in which a period is not permitted.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.
Programmer Response: Probable user error. Correct the parameter or field. Then submit the job again.
Problem Determination: Table I, items 1, 4, 7a, 29.

IEF625I INCORRECT USE OF LEFT PARENTHESIS xxxx

Explanation: In a job control statement, a left parenthesis appeared in a parameter or field in which a left parenthesis is not permitted.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.
Programmer Response: Probable user error. Correct the parameter or field. Then submit the job again.
Problem Determination: Table I, items 1, 4, 7a, 29.

IEF626I INCORRECT USE OF PLUS xxxx

Explanation: In a job control statement, a plus sign appeared in a parameter or field in which a plus sign is not permitted.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the parameter or field. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF627I INCORRECT USE OF AMPERSAND xxxx

Explanation: In a job control statement, an ampersand appeared in a parameter or field in which an ampersand is not permitted.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the parameter or field. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF628I INCORRECT USE OF ASTERISK xxxx

Explanation: In a job control statement, an asterisk appeared in a parameter or field in which an asterisk is not permitted.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase

usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)

- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the parameter or field. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF629I INCORRECT USE OF APOSTROPHE xxxx

Explanation: In a job control statement, an apostrophe was used incorrectly.

Single apostrophes are used to enclose certain parameters containing special characters or blanks. Two apostrophes within a parameter enclosed in apostrophes are used to represent an apostrophe.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the invalid use of the apostrophe. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF630I UNIDENTIFIED KEYWORD xxxx

Explanation: In a job control statement, the scheduler found that:

- A character string followed a blank or comma and preceded an equal sign, but could not be recognized as a valid keyword. Either the keyword was misspelled, the equal sign was misplaced or, because of the absence of a right parenthesis after the previous major keyword, a valid major keyword was considered a minor keyword.
- A valid subparameter keyword appeared without the corresponding parameter keyword; for example, SER without VOLUME.

- A valid keyword was not consistent with the statement operation code; for example, DSNAME in an EXEC statement.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is the most recently encountered minor keyword parameter associated with the major keyword parameter prm2, which precedes the error.
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the statement. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF631I NUMBER OF DDNAMES EXCEEDS MAXIMUM

Explanation: In the DD statements for a step, the DDNAME parameter appeared in 6 or more DD statements. This parameter can appear in no more than 5 DD statements in a step.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Change the DD statements for the step so that 5 or fewer use the DDNAME parameter. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF632I FORMAT ERROR xxxx

Explanation: In a job control statement, the format of a parameter was incorrect. For example:

- Too many or too few levels of qualification were specified.
- No enclosing parentheses appeared.
- An operator was missing in a COND parameter.
- The EVEN and ONLY subparameters were both specified in the COND parameter of the EXEC statement.
- A comma, right parenthesis, ampersand, or blank did not follow a right parenthesis in a SPACE parameter.
- The keyword specified is shorter than the required length.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.

- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
 - IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.
 - IN THE prm FIELD, where the value specified for the particular prm was less than the acceptable length.
- System Action:* The job was terminated. The remaining job control statements for the job were scanned for syntax errors.
Programmer Response: Probable user error. Correct the parameter. Then submit the job again.
Problem Determination: Table I, items 1, 4, 7a, 29.

IEF6331 PROGRAMMER NAME MISSING xxxx

Explanation: The programmer's name, established as an installation requirement in the PARM parameter of the reader procedure, was omitted from the JOB statement.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Specify a programmer's name. If a programmer's name had been specified, correct the order of the positional parameters. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF6341 ACCOUNT NUMBER MISSING xxxx

Explanation: The account number, established as an installation requirement in the PARM parameter of the reader procedure, was omitted from the JOB statement.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.

- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.
- System Action:* The job was terminated. The remaining job control statements for the job were scanned for syntax errors.
Programmer Response: Probable user error. Specify an account number. If an account number had been specified, check for a comma or a parameter before the account number; if one appears, remove it. Then submit the job again.
Problem Determination: Table I, items 1, 4, 7a, 29.

IEF6351 JOBNAME MISSING xxxx

Explanation: The job name, which must appear in the name field of a JOB statement, was missing.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr
- IN THE VALUE FIELD OF THE SYMBOLIC indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter. PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Specify a job name. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF6361 MISPLACED JOBLIB STATEMENT

Explanation: A DD statement containing JOBLIB in its name field appeared after an EXEC statement. Or a second JOBLIB DD statement appeared in the control statements for a job. A JOBLIB DD statement, which defines a job library, can appear only immediately after a JOB statement and before the first EXEC statement in a job. Only one statement containing JOBLIB in its name field can appear in the statements for a job.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Place the JOBLIB DD statement immediately after the JOB statement. If two or more job libraries are to be used as one library, put blanks in the name fields of the concatenated DD statements. Place the concatenated DD statements immediately after the JOBLIB DD statement. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF6371 EXCESSIVE ACCOUNT FIELD LENGTH xxxx

Explanation: In a JOB or EXEC statement, the accounting information was longer than the 142 characters permitted.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword

parameters were processed. (For example, an error was detected in the name field of a statement.)

- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Shorten the accounting information. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF638I SPECIFIED NUMERIC EXCEEDS MAXIMUM ALLOWED xxxx

Explanation: In a job control statement, a parameter or subparameter value contains a valid number of digits, but exceeds the maximum numeric limit.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the parameter or subparameter value. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF639I INVALID CLASS DESIGNATION xxxx

Explanation: In a job control statement, the class name specified as the operand of a parameter or subparameter was not one of a set of names or values acceptable for that parameter or subparameter.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error. (For example, CLASS = U is invalid since the acceptable class names for the CLASS parameter are A through O.)
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were

- IN THE prm OVERRIDE FIELD, where prm is processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter. an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the class name. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF640I EXCESSIVE NUMBER OF POSITIONAL PARAMETERS xxxx

Explanation: A job control statement contained too many positional parameters. A misplaced comma, a duplication, or a null operand field could cause such an error.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the statement, and submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF641I IMPROPER SUBPARAMETER LIST xxxx

Explanation: A job control statement contains an incorrect subparameter list for a positional parameter. Either such a list is required and is missing, or is not permitted but is present.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)

- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the parameter. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF642I EXCESSIVE PARAMETER LENGTH xxxx

Explanation: In a job control statement, a positional parameter was longer than permitted.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Shorten the parameter to the maximum permitted length or less. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF643I UNIDENTIFIED POSITIONAL PARAMETER xxxx

Explanation: In a job control statement, a positional parameter that has certain permitted values was not recognized. It may be invalid, misspelled, or misspelled.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.

- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the erroneous positional parameter. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF644I INVALID NUMERIC xxxx

Explanation: In a job control statement, an alphabetic or special character appeared in a parameter that can contain only numeric characters.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the erroneous parameter. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF645I INVALID REFER BACK xxxx

Explanation: In a job control statement, a parameter specified the name of a previous statement. However, a statement with that name was not found.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Check the spelling and punching of the parameter containing the reference and of the name in the statement to which it refers. Determine if the parameter containing the reference can validly contain a reference. After correcting the error, submit the job again.
Problem Determination: Table I, items 1, 4, 7a, 29.

IEF646I REQUIRED POSITIONAL PARAMETER MISSING xxxx

Explanation: In a job control statement, a required positional parameter or subparameter was not specified.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Insert the missing parameter or subparameter. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF647I NON-ALPHABETIC FIRST CHARACTER OF NAME xxxx

Explanation: In a job control statement, the first character in a name is not alphabetic. The name can be the name field, a procedure name in a parameter, or a program name in a parameter.

This message will also appear when a relative generation number of a generation data group is used without a plus or minus sign. For example, DSNAME = dsname(+1) is correct, whereas DSNAME = dsname(1) is incorrect.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the name field. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF648I INVALID DISP FIELD - xxxx SUBSTITUTED

Explanation: In a DD statement, a subparameter specified in the DISP parameter is invalid:

- A disposition of KEEP is invalid for a temporary data set. In this case, xxxx will appear as PASS. If a DSNAME parameter references a data set which has a disposition of DELETE, xxxx will also appear as PASS.
- A disposition of CATLG is invalid for a data set whose data set name is enclosed in apostrophes. (In this case, xxxx will appear as KEEP.)

System Action: The system changed the disposition of the data set to xxxx. Processing continued.

Programmer Response: Probable user error. If the job is to be executed again, correct the invalid disposition.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF649I EXCESSIVE NUMBER OF DD STATEMENTS

Explanation: More than 255 DD statements appeared in one job step. Possibly, an EXEC statement is missing.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors. The system printed the message with each DD statement after the 255th.

Programmer Response: Probable user error. Either remove the excess DD statement(s) or add a missing EXEC statement. Then submit the job again.

Problem Determination: Table I, items 1, 7a, 29.

IEF650I INCORRECT USE OF SLASH xxxx

Explanation: In a job control statement, a slash appeared in a parameter or field in which a slash is not permitted.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the parameter or field. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF651I INCORRECT USE OF MINUS xxxx

Explanation: In a job control statement, a hyphen (or minus sign) appeared in a parameter or field in which a hyphen is not permitted.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the parameter or field. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF652I MUTUALLY EXCLUSIVE KEYWORDS - KEYWORD IN THE prm FIELD IS MUTUALLY EXCLUSIVE WITH KEYWORD ON THE cntr STATEMENT

Explanation: The job control statement indicated by cntr in the message text was flagged for one of the following reasons:

- The keyword indicated by prm in the message text and another keyword or positional parameter on the same statement are either mutually exclusive or identical.
- The DLM keyword was detected on the statement before the required asterisk (*) or DATA. Therefore, any other major keywords that might appear on the statement, except DCB, will be mutually exclusive with DLM.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the statement in error and run the job again.

Determination: Table I, items 1, 4, 7a, 29.

IEF653I SUBSTITUTION JCL - xxxx

Explanation: In a cataloged procedure statement, one or more symbolic parameters were used. In the message text, xxxx represents the text that results from the symbolic parameter substitution.

If DD DUMMY or DD DYNAM is used to override a JCL statement in a cataloged procedure, the overridden parameters in the message text will appear as DUMM = or DYNA = .

Programmer Response: None.

IEF654I MULTIPLE DDNAMES REFER TO ONE DD STATEMENT

Explanation: In the job control statements for a job step, two DD statements contain DDNAME parameters that specify the same name.

System Action: The job is terminated. The remaining job control statements for the job are scanned for syntax errors.

Programmer Response: Probable user error. Either delete one of the DD statements or change the name in one of the duplicate DDNAME parameters. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF655I DSNAME INVALID WHEN SYSOUT SPECIFIED

Explanation: A DD statement contained a SYSOUT parameter and a DSNAME parameter.

System Action: The DSNAME parameter was ignored. Processing continued.

Programmer Response: Probable user error. If the job is to be executed again, correct the statement by removing the DSNAME or SYSOUT parameter.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF656I 16 EXTENTS EXCEEDED SPOOLING JOB [-jjj]

Explanation: A SYSIN reader was writing an input stream data set, defined by a DD * or DD DATA statement, on a direct access device. Because the data set was large, the reader had to repeatedly ask for more storage. This message was issued when so much storage was required that a 17th extent would have been needed.

In the message text, jjj is the job name.

System Action: The SYSIN reader stopped writing the data set. If the message appears on the console, the reader stopped itself; if the message appears on the SYSOUT job listing, only job jjj was terminated.

Operator Response: Report the message to the programmer, and restart the SYSIN reader.

Programmer Response: Probable user error. Remove the data set from the input stream, change its DD statement so that * or DATA is not specified, and place the data set on magnetic tape, direct access storage, or another card reader; then submit the job again.

If the data set must remain in the input stream, change the IEFDATA DD statement in the cataloged reader procedure to specify a larger incremental quantity in the SPACE parameter; then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF657I SYMBOL NOT DEFINED IN PROCEDURE

Explanation: In an EXEC statement calling a cataloged procedure, a value was assigned to a symbolic parameter not defined for that procedure.

System Action: The job is terminated.

Programmer Response: Probable user error. Include the symbolic parameter in the procedure's PROC statement, or remove the symbolic parameter from the EXEC statement.

Problem Determination: Table I, items 1, 3, 4, 7a, 29.

IEF658I PROC VERB STATEMENT OUT OF SEQUENCE

Explanation: A statement which specified PROC in its operation field was not the first statement in a procedure. The PROC statement is valid only as the first statement in a procedure.

System Action: The job was terminated.

Programmer Response: Probable user error. If a PROC statement is to be used, make sure that it appears only as the first statement in the procedure.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF659I MISPLACED SYSCHK DD STATEMENT

Explanation: During execution of a deferred restart, it was found that a SYSCHK DD statement preceded the first EXEC statement in the resubmitted deck. However, the RESTART parameter of the JOB statement did not specify a checkpoint identification.

System Action: Restart was terminated.

Programmer Response: Probable user error. If checkpoint restart is desired, specify a checkpoint identification in the RESTART parameter of the JOB statement. If step restart is desired, remove the SYSCHK DD statement.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF660I MISSING SYSCHK DD STATEMENT

Explanation: During execution of a deferred checkpoint restart, it was found that the RESTART parameter of the JOB statement specified a checkpoint identification. However, a SYSCHK DD statement did not precede the first EXEC statement in the resubmitted deck.

System Action: Restart was terminated.

Programmer Response: Probable user error. Place a SYSCHK DD statement before the first EXEC statement. Then resubmit the job.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF661I RESTART STEP NOT FOUND

Explanation: During execution of a deferred restart, it was found that the RESTART parameter of the JOB statement specified a step name that could not be found either in the resubmitted deck or in the specified cataloged procedure.

System Action: Restart was terminated.

Programmer Response: Probable user error. Correct the RESTART parameter and resubmit the job.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF662I INVALID LABEL ON THE {PROC} STATEMENT {PEND}

Explanation: The name in the name field of the PROC or PEND statement, as indicated in the message text, either is too long or contains an invalid character.

System Action: The job is terminated. The remaining job control statements for the job are scanned for syntax errors.

Programmer Response: Probable user error. Correct the name field of the statement. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF663I NO LABEL ON THE PROC STATEMENT

Explanation: No name was specified in the name field of the PROC statement for an in-stream procedure.

System Action: The job is terminated. The remaining job control statements for the job are scanned for syntax errors.

Programmer Response: Probable user error. Specify a name in the name field of the PROC statement. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF665I EXCESSIVE NUMBER OF IN-STREAM PROCEDURES

Explanation: The job contains more than 15 in-stream procedures.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Make sure that no more than 15 in-stream procedures are specified in the job. Then submit the job again.

Problem Determination: Table I, items 1,4,7a,29.

IEF667I Sccc ABEND IN OPEN DURING INTERPRETER INITIALIZATION

Explanation: The reader/interpreter failed during OPEN processing with a completion code of ccc. If messages IEF406I and IEF407I follow, the termination occurred during opening of the SYSIN data set. If the message IEF407I follows, the termination occurred during opening of the SYS1.PROCLIB data set.

System Action: The reader closes and processing continues.

Operator Response: Probable user error. Report this message to the system programmer or installation manager.

Programmer Response: Check the IEFRDER and IEFPSDI DD statements in the reader procedure. Correct any errors and restart the reader.

Problem Determination: Table I, items 2, 7ab, 29.

IEF668I PEND VERB STATEMENT OUT OF SEQUENCE

Explanation: A PEND statement has been encountered which does not terminate an in-stream procedure; that is, either it is not preceded by a valid PROC statement, or the procedure contains data, a DD * statement, or a DD DATA statement. The PEND verb is valid only as the last statement in the in-stream procedure.

System Action: The job was terminated. The remaining job control statements for the job are scanned for syntax errors.

Programmer Response: If the PEND statement is unnecessary, remove it. Otherwise, either supply a correct PROC statement or remove from the in-stream procedure the data, DD * statement or DD DATA statement. Resubmit the job.

IEF669I INVALID REFER FORWARD TO DYNAM DATA SET

Explanation: The system has encountered a DD statement in which the DDNAME parameter specifies the name of a DD statement that contains a DYNAM parameter.

System Action: The job is terminated. The remaining job control statements are scanned for syntax errors.

Programmer Response: Probable user error. Either change the reference in the DDNAME parameter or delete the DYNAM parameter in the referenced DD statement. Submit the job again.

Problem Determination: Table I, items 1, 4, 5a, 29.

IEF670I NO VALUE ASSIGNED TO SYMBOLIC PARAMETER ON PROC STMT VIA THE EXEC STMT

Explanation: A jobstep calling a cataloged procedure has not provided a value in its EXEC statement for a symbolic parameter contained in the PROC statement of the procedure. The symbol has no default value, and is therefore undefined. Note: The symbolic parameter in question may have the same spelling as some valid EXEC statement keyword, such as REGION.

System Action: The job is terminated.

Programmer Response: Correct the error by giving the symbolic parameter a default value on the PROC statement, by making a value assignment for it on the EXEC statement, or by changing the name of the symbolic parameter.

Problem Determination: Table I, items 1, 3, 4, 7a, 29.

IEF671I MISPLACED JOBCAT DD STATEMENT

Explanation: A JOBCAT DD statement appeared after an EXEC statement, or a second JOBCAT DD statement appeared in the control statements of the job.

A JOBCAT DD statement, which defines a user catalog for the job, must precede the first EXEC statement in a job. Only one statement containing JOBCAT in its name field may appear in the control statements of a job. If a JOBLIB DD statement appears in the same job, it must immediately precede the JOBCAT statement.

System Action: The job is terminated. The remaining control statements are scanned for syntax errors.

Programmer Response: Probable user error. Make sure that the JOBCAT DD statement immediately precedes the first EXEC statement. If two or more user catalogs are to be used as one catalog, put blanks in the name field of the concatenated DD statements, and make sure that the concatenated DD statements immediately follow the JOBCAT DD statement. Then run the job again.

IEF

IEF672I DUPLICATE STEPCAT DD STATEMENT

Explanation: Only one STEPCAT DD statement may appear in a job step; more than one was found.

System Action: The job terminates and the remaining control statements are scanned for syntax errors.

Programmer Response: Probable user error. Remove all duplicate STEPCAT DD statements. If two or more user catalogs are to be used as one catalog, put blanks in the name fields of the concatenated DD statements. Make sure that the concatenated DD statements are immediately after the STEPCAT DD statement and run the job again.

IEF673I ADDRSPC = REAL INVALID ON THE cntr STATEMENT

Explanation: An unauthorized user is attempting to acquire real storage. Currently, TSO is the only unauthorized user. In the message text, cntr is either JOB or EXEC.

System Action: The job is terminated. The remaining job control statements are scanned for syntax errors.

Programmer Response: Probable user error. Either remove the ADDRSPC keyword from the statement in error (allowing ADDRSPC to default to VIRT) or specify ADDRSPC = VIRT. Run the job again.

IEF861I FOLLOWING RESERVED DATA SET NAMES UNAVAILABLE TO jjj

Explanation: Job jjj requested the use of one or more data sets that are currently unavailable. The data sets are either reserved for other jobs currently executing in the system or are permanently unavailable. Message IEF863I follows, listing the data set names and indicating whether each data set is permanently unavailable.

System Action: Processing of the job named jjj is suspended.

Operator Response: None.

IEF863I DSN = dsn [-PERMANENTLY]

Explanation: Data set name dsn is not available to the job named in preceding message IEF861I. This message will appear for each data set name that is not available.

If -PERMANENTLY is present, that data set was reserved for a job that terminated abnormally while in 'must complete' mode.

System Action: One of the following messages will be issued to explain the status of the job:

- IEF099I JOB jjj WAITING FOR DATA SETS
- IEF100I JOB jjj CANCELED BY SYSTEM
- IEF452I xxx JOB NOT RUN - JCL ERROR [TIME = hh.mm.ss] message IEF452I will be written if the job is a TSO LOGON, which would have to wait for data sets.

Operator Response: None.

**IEF869I hh.mm.ss QUEUE DISPLAY [id]
 QUEUE JOBS STAT QUEUE JOBS STAT
 XXXX X XXXX XXXX XXXX X XXXX XXXX
 QUEUE JOBS STAT QUEUE JOBS STAT
 XXXX X XXXX XXXX XXXX X XXXX XXXX**

Explanation: This is the control line of the Status Display initiated by the DISPLAY Q or DISPLAY Q, (list) command. The label line describes the fields of data.

[id]

A three-digit decimal identification number. It is used in conjunction with the CONTROL C,D command for canceling status displays being written on typewriter or printer consoles or being displayed in-line (not in a display area on a display (CRT) console. This identification number does not appear when the display is presented in a display area on a display console.

QUEUE

This field is one of the following:

- JOB X, where X is the class identifier of an input queue.
- HOLD, which contains all jobs assigned to the HOLD queue by the HOLD command, or by the TYPRUN = HOLD parameter of the JOB statement.
- SOUT X, where X is the class identifier of an output queue.

JOBS

The number, in decimal, of the jobs contained in the queue of the QUEUE field.

STAT

HELD if queue has been held.

Operator Response: None.

IEF874I ddd DSO INVALID DCB SUBPARAMETER

Explanation: While processing a start command, the direct system output (DSO) writer detected an error in one of the DCB subparameters. If a 3525 punch is on the system, check the DSO procedure; the FUNC parameter values are probably invalid for the IEFORDER DD statement. (Valid parameters are I and P.)

System Action: The DSO writer will terminate.

Operator Response: Probable user error. Notify the system programmer or installation manager.

Problem Determination: Table I, items 2, 7a, 26a, 29.

IEF875I proc FAILED, JCL ERROR

Explanation: A START command was entered for procedure proc in the SYS1.PROCLIB data set but the system encountered an error in the job control statements in the procedure.

System Action: The job is terminated.

Operator Response: Inform the programmer that you have received this message.

Programmer Response: Probable user error. Correct any errors in the job control statements in the procedure, and execute the job step again.

Problem Determination: Table I, items 2, 26d, 29.

IEF876I proc FAILED, I/O ERROR

Explanation: A START command was entered for procedure proc in the SYS1.PROCLIB data set but the system encountered an input/output error while attempting to read the job control statements in the procedure.

System Action: The job is terminated.

Operator Response: Inform the programmer that you have received this message.

Programmer Response: Probable user error. Make sure that the SYS1.PROCLIB data set has not been modified incorrectly.

Problem Determination: Table I, items 2, 7a, 26d, 29.

IEF877I proc FAILED, INSUFFICIENT Q-SPACE

Explanation: A START command was entered for procedure proc in the SYS1.PROCLIB data set; the procedure could not be started because not enough logical tracks were available in the SYS1.SYSJOBQ data set.

System Action: The job is terminated.

Operator Response: Probable user error. Stop some of the readers that are operating and allow the jobs that are in the system to finish processing. Then run the job again.

Problem Determination: Table I, items 2, 8a, 29.

System Generation Messages (IEI)

Component Name	IEI
Program Producing Message	Assembler program during expansion of system generation macro instructions.
Audience and Where Produced	For system programmer: assembler listing in SYSPRINT data set.
Message Format	<p>s, * * * IEIaaaann text s</p> <p>Severity code: 0 Warning message; the condition indicated may cause errors in new system. 5 Error message; error is in coding of a system generation macro instruction. 7 Error message; message is produced by GENERATE macro instruction.</p> <p>aaa Indication of system generation macro instruction at which error was detected: CEN CENPROCS GEN GENERATE RES RESMODS CHA CHANNEL GPH GRAPHICS SCH SCHEDULR CKP CKPTREST IOD IODEVICE SCN SECONSLB CTR CTRLPROG LDR LOADER SVC SVCTABLE DAT DATAMGT LNK LINKLIB SVL SVCLIB DTS DATASET LPA LPALIB TSO TSO EDI EDIT MAL MACLIB UCS UCS EDT EDITOR PAG PAGE UNI UNITNAME</p> <p>nnn Message serial number. text Message text.</p>
Comments	None.
Associated Publications	OS/VS2 System Generation Reference, GC26-3792.
Problem Determination	Refer to the fold-out Tables I and II at the back of this publication for problem determination instructions.

IEIaaaann text

Explanation: Error: The error indicated by the message text is a coding error in the system generation macro instruction, aaa. The message serial number, nnn, identifies the message. For the CHANNEL, and IODEVICE macro instructions, the message text begins with either the name field of the macro instruction or, if the name field was omitted, the sequential identification number provided by the system.

Examples of these messages are:

```
5,*** IEICEN100 MODEL VALUE NOT SPECIFIED
5,*** IEICHA102 CHANNEL2-ADDRESS VALUE NOT SPECIFIED
5,*** IEICHA102 CHAN#2-ADDRESS VALUE NOT SPECIFIED
```

The first example illustrates a message for the CENPROCS macro instruction.

The second example illustrates a message for a CHANNEL macro instruction. "CHANNEL2" is the name field of the macro instruction.

The third example illustrates the same message, but in this case, the name fields was omitted and "CHAN#2" was supplied by the macro instruction.

System Action: The assembler program did not produce a job stream in the SYSPUNCH data set. The program analyzed all remaining system generation macro instructions and printed any other required messages. Either message IEIGEN113 or IEIGEN116 was printed, followed by the message: GENERATION TERMINATED. Then the system generation process was abnormally terminated.

Severity Code: 5

Programmer Response: Probable user error. Correct the errors indicated and begin the system generation process from the start of Stage I.

Problem Determination: Table I, items 17a, 29. Have the hardware configuration available.

IEIGEN113 QUIT SWITCH PRIOR TO GENERATE MACRO

Explanation: One or more errors, indicated by messages, were detected before the GENERATE macro instruction was expanded.

Severity Code: 7

Programmer Response: Correct the errors indicated and begin the system generation process from the start of Stage I.

IEIGEN116 QUIT SWITCH SET IN GENERATE MACRO

Explanation: One or more errors were detected during the expansion of the GENERATE macro instruction.

Severity Code: 7

Programmer Response: Correct the errors indicated and begin the system generation process from the start of Stage I.

7.* * * GENERATION TERMINATED * * *

Explanation: The system generation process was abnormally terminated.

Severity Code: 7

Programmer Response: None. This message follows message IEIGEN113 and/or message IEIGEN116.

Warning Messages

IEIaaann text

Explanation: The message text indicates a condition in macro instruction aaa that may cause errors in the new system. The message serial number nnn identifies the message.

For example:

```
0,* * * IEIGEN940 { EDITOR      } MACRO DEFAULTED
                   { CTRLPROG   }
                   { PAGE        }
                   { LOADER      }
```

Explanation: The indicated macro instruction was not specified and the default options were taken.

Severity Code: 0

Programmer Response: None.

```
0,* * * IEIGEN942 LPA = YES NOT SPECIFIED ON ANY
PAGE MACRO -- DEFAULTED TO FIRST PAGE MACRO
```

Explanation: A device was not specified in a PAGE macro to contain the pageable link pack area. The system defaulted to the unit address specified in the first PAGE macro.

Severity Code: 0

Programmer Response: None.

Informative Messages

*, text

Explanation: This type of message documents the options selected for the new system through the system generation macro instructions. All options are described, whether the selection was explicit or implicit.

```
**macro name***component
name***component ID**
```

Explanation: A message of this type appears before any PUNCH statements that were produced by the macro expansion. The macro name is the name of the macro instruction that produced any succeeding PUNCH statements. The component name is the name of the component group responsible for maintaining the particular macro expansion. The component ID is the identification to be used in reporting trouble if a problem is isolated to the code produced by the particular macro expansion.

SMF Dump Program Messages (IFA)

Component Name	IFA
Program Producing Message	SMF Dump Program IFASMFDP.
Audience and Where Produced	For Programmer: SYSPRINT
Message Format	IFAnns text nnn Message serial number. text Message text. s Type code: I Information; no operator action is required. A Action; operator must perform a specific action.
Associated Publications	OS/VS2 System Management Facilities (SMF), GC35-0004.
Problem Determination	Refer to the fold-out Tables I and II at the back of this publication for problem determination instructions.

IFA001I DCB OPEN FAILED FOR DUMPIN DATA SET

Explanation: The data set defined by the DUMPIN DD statement failed to be opened successfully. Message IEC130I is also issued if the DD statement is missing.

System Action: The job step is terminated.

Programmer Response: Probable user error. Provide a DD statement if it is missing and run the job again.

Problem Determination: Table I, items 1, 4, 29, (if the DD statement is present.)

IFA002I DCB OPEN FAILED FOR DUMPOUT DATA SET

Explanation: The data set defined by the DUMPOUT DD statement failed to be opened successfully. Message IEC130I is also issued if the DD statement is missing.

System Action: The job step is terminated.

Programmer Response: Probable user error. Provide a DD statement if it is missing.

Problem Determination: Table I, items 1, 4, 29, (if the DD statement is present.)

IFA004I OUTPUT BLOCKSIZE IS SMALLER THAN INPUT

Explanation: The blocksize of the input data set is greater than the blocksize of the output data set.

System Action: The job step is terminated.

Programmer Response: Make sure the output blocksize is not smaller than the input blocksize.

Problem Determination: Table I, items 1, 4, 29.

IFA005I PERMANENT I/O ERROR DIAGNOSIS error description

Explanation: A permanent I/O error has occurred on the dumpin or dumpout data set. The error description portion is error diagnosis produced by the SYNADAF error analysis routine.

System Action: The job step is terminated.

Programmer Response: Correct the error condition indicated in the message text.

Problem Determination: Table I, items 1, 13, 29.

IFA006A REQUEST MADE TO DUMP ACTIVE SMF DATA SET - REPLY CANCEL

Explanation: The SMF Dump program is attempting to dump the active SMF data set. This request is invalid and must be cancelled because SMF records would have been lost.

System Action: The SMF Dump program enters a wait pending the operator's reply.

Operator Response: Enter REPLY xx,'CANCEL' to acknowledge the cancellation of the SMF Dump program. If the wrong SMF data set was specified in the dump program, enter the program to dump the correct data set.

To dump the currently active data set, enter the SWITCH SMF or HALT EOD command from the console. Either command will activate the inactive SMF data set if it is empty and free the currently active one for dumping. If the inactive SMF data set is full, it must be dumped prior to issuing the above commands or data will be lost.

Problem Determination: Table I, items 2, 29. Have a copy of the SMF Dump procedure.

IFA007I SMF DUMP CANCELLED

Explanation: This message is issued to notify the operator that a program attempting to dump the SMF data set has been cancelled.

System Action: The program IFASMFDP is cancelled.

Operator Response: Enter the SMF Dump program to dump the correct SMF data set. If a dump of the active SMF data set is desired first enter a SWITCH SMF or HALT EOD command from the console. Either command will activate the inactive SMF data set if it is empty and free the currently active one for dumping via the SMF Dump program IFASMFDP. If the inactive SMF data set is full, it must be dumped prior to entering the above commands or data will be lost.

Problem Determination: Table I, items 2, 29. Have a copy of the SMF Dump procedure available.

IFA

**IFA008I SMF DUMP CANCELLED - REQUEST MADE TO
DUMP ACTIVE DATA SET**

Explanation: This message is issued to notify the programmer that the SMF Dump program attempted to dump the active SMF data set and has been cancelled.

System Action: The job step is terminated.

Programmer Response: If the wrong SMF data set was specified in the dump program, enter the program to dump the

correct data set. If you want to dump the currently active data set, that data set must be made inactive by the operator before the request will be honored, (because SMF records would be lost.)

Problem Determination: Table I, items 1, 2, 4, 29. Have a copy of SMF Dump procedures available.

Environment Recording Messages (IFB)

Component Name	IFB
Program Producing Message	Input/output environment recording routines OBR and SDR.
Audience and Where Produced	For operator: console.
Message Format	xx IFBnnns text xx Message reply identification (absent, if operator reply not required). nnn Message serial number. s Type code: D Decision; operator must choose an alternative. E Eventual action; operator must perform action when he has time. I Information; no operator action is required. text Message text.
Associated Publications	OS/VIS SYS1.LOGREC Error Recording, GC28-0638.
Problem Determination	Refer to the fold-out Tables I and II at the back of this publication for problem determination instructions.

IFB002I CHANNEL DETECTED ERROR ON ddd RECORDED,xxxx,op,stat,hh.mm.ss

Explanation: A channel-detected error occurred during the operation of device ddd and has been recorded on the SYS1.LOGREC data set by input/output environment recording routine OBR. The message applies to both recovered and permanent channel-detected errors for which error records have been created.

Note: The ddd field will contain the device address (CUA) unless the address is invalid. When invalid, ddd will contain the channel address followed by 'XX' for the control unit and device addresses.

In the message text, the fields are:

xxxx

```

error source:
CU control unit
CHAN channel
PROC processor (CPU)
SCU storage control unit
STOR storage
    
```

op

failing command code

stat

channel and unit status from command status word (CSW)
hh.mm.ss

time in hours, minutes, and seconds

System Action: None.

Operator Response: Probable hardware error. Log the error in the operator's log. If this message is repeated frequently, execute the IFCEREPO service aid to dump the SYS1.LOGREC data set. If Alternate Path Retry (APR) is included in the system, consider varying the path offline. If the system is a Model 65 Multiprocessing system, consider varying the channel offline.

Problem Determination: Table I, items 2, 14, 30.

IFB010D ENTER 'IPL REASON, SUBSYSTEM ID' OR 'U'

Explanation: This message requests the operator to provide:

- The reason for the IPL.
- The device or program (subsystem) responsible for the IPL restart.

or

- U - to continue operation with default values.

System Action: RDE waits pending the operator's reply.

Operator Response: Enter a reply in the format REPLY xx,'rr,ss' where xx is the reply ID, rr is the RDE IPL reason code, and ss is the subsystem ID code. For further information on the reason code and subsystem ID codes see: *OS/VIS RDE Guide*, GC28-0642.

IFB020I INVALID REPLY TO IFB010D

Explanation: The reply to message IFB010D is incorrect.

System Action: Message IFB010D is reissued to allow the operator to reenter his reply.

Operator Response: Either enter the IPL reason code and subsystem ID code in the proper format or reply 'U' to select default values, in response to message IFB010D.

IFB030I SYS1.LOGREC I/O ACCESS ERROR

Explanation: SYS1.LOGREC was accessed for either a read or write operation, and an inrecoverable input/output error occurred. This may occur during the updating of SDR external counters.

System Action: For updating of SDR counters the routine will not attempt re-try of the access that failed, but will attempt subsequent access requests.

Operator Response: Execute the IFCEREPO service aid to dump the SYS1.LOGREC data set; then execute the IFCDIP00 service aid program.

IFB

IFB040I SYS1.LOGREC AREA IS FULL, hh.mm.ss

Explanation: The SYS1.LOGREC data set is full and cannot contain further environment records. At least one record has been lost.

System Action: Processing continues, but further environment records will be lost.

Operator Response: Execute the IFCEREPO program to dump the SYS1.LOGREC data set.

IFB050I SYS1.LOGREC FORMAT ERROR, hh.mm.ss

Explanation: The header record of the SYS1.LOGREC data set is missing or invalid.

System Action: Processing continues.

Operator Response: Execute the IFCDIP00 service aid program to rewrite the header record and re-initialize SYS1.LOGREC.

IFB060E SYS1.LOGREC NEAR FULL

Explanation: The SYS1.LOGREC data set has reached 90% of its capacity for data.

System Action: Processing continues.

Operator Response: Execute the IFCEREPO service aid to dump the SYS1.LOGREC data set. Continued processing, without the data set being dumped, may cause the data set to become full. To compile a history of hardware failures, do the following:

- Save the IFCEREPO output.
- Save the master console listing.

(Pages 149 and 150 deleted)

Machine-Check Handler and Dynamic Device Reconfiguration Messages (IGF)

Component Name	IGF
Program Producing Message	Machine-check handler program and dynamic device reconfiguration program.
Audience and Where Produced	For operator: console.
Message Format	IGFnns text nnn Message serial number. s Type code: I This message supplies information about the error recovery attempt. W The system has been placed in wait state by MCH. E This message supplies error recovery information and indicates that operator action is required, but that the action may be delayed until convenient. Type code (dynamic device reconfiguration program): A Action; operator must perform a specific action. D Decision; operator must choose an alternative. E Eventual action; operator must perform action when he has time. I Information; no operator action is required. text Message text.
Comments	None.
Associated Publications	OS/VS2 Recovery Management Support Logic, SY27-7239.
Problem Determination	Refer to the fold-out Tables I and II at the back of this publication for problem determination instructions.

IGF500I SWAP xxx TO yyy
IGF500D REPLY 'YES', DEVC, OR 'NO'
REPLY 'YES' OR 'NO'

Explanation: The message is a repeat of a SWAP command entered by the operator.
 If the device address is not allowed in the reply, device xxx is a shared direct access storage device. It can only be removed and replaced on a spare drive on the same control unit and readied with the address plug xxx or yyy.
System Action: The system continues operation. The operator-initiated request will not complete until the operator responds to the message. The 'YES' or DEVC reply invokes the DDR function. The 'NO' reply causes a permanent I/O error to be posted for the device xxx, or the operator SWAP command to be cancelled as appropriate.
Operator Response: When the device is not shared direct access:
 • If a swap to device yyy is desired, reply YES.
 • If a swap is desired, but device yyy is not acceptable, enter the channel unit address of the device to which the volume on xxx is to be moved. Insure that the specified device is available to the system before entering this reply.
 • If a swap is not desired, reply NO.
 When the device is a shared direct access volume (DEVC option, not in message), the YES and NO replies will cause the swap to the same channel unit address to proceed, or be cancelled.
 If message IGF500I or IGF509I is received again for the same error, do not swap again.

Note: When continuing with the swap, either by answering YES or a three-character device address, do not move the volume until the 'PROCEED' message, IGF502F, is issued or data set integrity may be lost.

Caution: If the volume is a direct access storage device, care must be taken to insure that no head-disk interference ("head crash") problem exists.

Caution: If a 7-track tape drive is being used at 200 cpi, the operator must be certain that the 'TO' device has the 200 cpi feature.

Problem Determination: Table I, items 2, 30.

IGF502E PROCEED WITH SWAP xxx TO yyy

Explanation: DDR is waiting for the operator to swap volumes.
System Action: The system continues operation.
Operator Response: Move the volume on device xxx to device yyy. If a volume is on yyy move that volume to xxx. Make both devices ready. If xxx and yyy are the same, make the device not ready and then make it ready.

IGF503I ERROR ON yyy, SELECT NEW DEVICE

Explanation: A permanent I/O error has occurred during DDR tape repositioning which was in process in response to a SWAP request to yyy. The error occurred positioning the tape from load point on yyy. This message is followed by IGF509D to allow operator response.
System Action: The tape is rewound and unloaded. The system continues operation.

IGF

Operator Response: Specify a new device address to replace yyy in response to message IGF509D, or reply NO. If the reply is NO, the associated job must be cancelled by the operator.

IGF504I AN ERP IS IN PROCESS FOR xxx

Explanation: A swap was requested from tape device xxx. DDR found an error recovery procedure in control of the device.

System Action: The system continues operation. The operator initiated swap request is cancelled. If the error recovery procedure is unsuccessful, the system will initiate a swap.

Operator Response: If the system does not request a swap, the error recovery procedure was successful and the SWAP command may be entered again.

IGF505I SWAP FROM xxx TO yyy COMPLETE

Explanation: The swap requested for the volume originally on xxx is now complete.

System Action: The system continues operation.

Operator Response: If an operator initiated swap has previously been rejected by the system because another swap request was processing, reissue the SWAP command. Otherwise, none.

IGF508I OPERATOR SWAP CANCELLED BY SYSTEM

Explanation: If SYSRES is indicated, either the "to" device specified in the SWAP command was found inoperative, or the execution of the command was interrupted by a system-initiated system residence volume swap. Otherwise, a conflict among DDR, WTO, and device allocation is imminent and DDR cannot process the command.

System Action: The SWAP command is not executed. The system continues operation.

Operator Response: Reenter the SWAP command if a SYSRES swap is still desired.

**IGF509I SWAP xxx
IGF509D REPLY DEVC, OR 'NO'**

Explanation: A permanent I/O error has occurred on the device with channel unit address xxx. The I/O error recovery procedures may be repeated by removing the volume from device xxx and replacing it or moving it to another device.

System Action: The system continues operation. The job will not complete until the operator responds with one of the indicated replies.

Operator Response: If the DDR function is desired, reply with the three character primary device address of the same type as xxx. An unallocated device on a different channel is usually preferred. Insure that the specified device is available to the system before entering the reply. If the DDR function is not desired, reply NO.

Note: When continuing with the swap by answering a three-character device address, do not move the volume until the 'PROCEED' message, IGF502E, is issued or data set integrity may be lost.

Caution: If a 7-track tape drive is being used at 200 cpi, the operator must be certain that the 'TO' device has the 200 cpi feature.

Caution: If the volume is a direct access storage device, care must be taken to insure that no head-disk job is cancelled.

IGF511A WRONG VOLUME MOUNTED ON yyy

Explanation: In performing a swap, the volume that had been on the "from" device was not put on yyy.

System Action: The system continues operation.

Operator Response: Remove the volume on yyy and replace it with the correct volume.

IGF512I DDR TERMINATED

Explanation: One of the following conditions exists following an operator-initiated swap request:

- The user did not specify REPOS = Y in his DCB when using EXCP. This is an indication that the user is not keeping an accurate block count.
- OPEN, CLOSE, or EOVS was found to be in process.
- There was no task using the "from" device, DDR is not needed at this time.
- The job using the tape has terminated since the beginning of the SWAP.

System Action: The system continues operation.

Operator Response: Enter a DISPLAY UNITS command to determine if the "from" device is allocated. If it is not, you need not use DDR to move the volume.

If, however, the device is allocated, enter a DISPLAY REQUESTS command to see if a mount is pending for the device. If it is, the job using the tape has issued an OPEN macro for the device and a SWAP cannot be performed until the mount is satisfied. Reenter the command at a later time. If no mount is pending, enter a DISPLAY ACTIVE command to see if the job using the device is still active. If it is not, DDR cannot be performed.

However, if none of the above reasons are applicable you may assume the program using the tape does not have an accurate blockcount indicated in his DCB. The programmer must correct the DCB parameter 'REPOS' in his EXCP format DCB.

IGF513I yyy INVALID FOR SWAP

Explanation: Device yyy specified in reply to message IGF500D for SWAP xxx,yyy is one of the following:

- not of the same device type as xxx.
 - an invalid address.
 - not operational.
 - not a supported device.
- Teleprocessing devices and graphics devices
Integrated Emulator second generation tapes
Unit record devices in ready status
Shared DASD request not to same address
Tape swaps where yyy is allocated
DASD volumes marked permanently resident (including SYSRES and paging data set volume)

System Action: The command is not executed. The system continues operation.

Operator Response: Reply to the IGF500I and IGF500D messages which follow to change the yyy device to one which is acceptable or to cancel the swap.

The following unit record swaps are supported for swapping. The system will not initiate a swap on these devices, but the operator may request a swap during 'intervention required' conditions.

1403/1404 to 1403/1404	2540 to 2540
1442 to 1442	3211 to 3211
2501 to 2501	3505 to 3505
2520 to 2520	3525 to 3525

The following tape swaps are supported:

7-track to 7-track
9-track 800 bpi to 9-track 800 bpi
9-track dual density 800 bpi to 9-track 800 bpi
9-track dual density 800 bpi to 9-track dual density 800 bpi
9-track 1600 bpi to 9-track 1600 bpi
9-track dual density 1600 bpi to 9-track 1600 bpi
9-track dual density 1600 bpi to 9-track dual density 1600 bpi

Note: May go from 2400 to 3400 but not 3400 to 2400.

**IGF900W SUPERVISOR DAMAGE, [RUN SEREP,]
RESTART SYSTEM**

Explanation: MCH has encountered a non-recoverable error within a supervisor area. (Wait State A05.)
System Action: Enter disabled wait state.
Operator Response: Probable hardware error.
Problem Determination: Table I, items 12, 19, 30. To recover possible unrecorded machine check error records, see Table I, item 11.

IGF910W SYSTEM INTEGRITY LOST, [RUN SEREP,] RESTART SYSTEM

Explanation: An unexpected error occurred while RMS was performing a recovery. The probable causes of this error are:

- erroneous machine check interrupt code. (Wait state A11)
- a hard machine check occurred during the processing of a hard machine check. (Wait state A01)
- a program check occurred within the machine check handler. (Wait state A03)

System Action: Enter disabled wait state.
Operator Response: Probable hardware or RMS program problem.
Problem Determination: Table I, items 12, 18, 30. If a program check occurred, (wait state code A03), or if SEREP is indicated, see Table I, item 11.

IGF920I TASK jobname - ABNORMAL TERMINATION SCHEDULED

Explanation: MCH has encountered a non-recoverable condition in a task which can be abnormally terminated. The jobname will appear in the message if one can be associated with the failing task, otherwise 'XXXXXXXX' will be printed.
System Action: The affected task is scheduled for an abnormal termination with a completion code of 0F3. System operation continues.
Operator Response: Probable hardware failure.
Problem Determination: Table I, items 18, 30.

IGF924E TASK jobname - SET NON-DISPATCHABLE

Explanation: The Machine Check Handler has encountered a solid storage failure and is unable to continue the affected task. The jobname will appear in the message if one can be associated with the failing task, otherwise 'XXXXXXXX' will be printed.
System Action: The affected task cannot continue. The resources in use by the task are unavailable to other tasks or to the system. System operation continues, but may quiesce if the affected task has made critical resources unavailable.
Operator Response: Probable hardware failure. Monitor the system until it quiesces and restart the system.
Problem Determination: Table I, items 18, 30.

**IGF930W CATASTROPHIC I/O FAILURE, [RUN SEREP,]
RESTART SYSTEM**

Explanation: MCH has encountered an I/O error during a machine check recovery. (Wait state A04)
System Action: Enter disabled wait state.
Operator Response: Probable hardware error.
Problem Determination: Table I, items 12, 19, 30. To recover possible unrecorded machine check records, see Table I, item 11.

**IGF940I TSO { [SUBSYSTEM] }
 { [USER] } ABNORMAL TERMINATION
 SCHEDULED**

Explanation: MCH has associated a non-recoverable failure with a task in the subsystem area.
System Action: The affected task in the specified subsystem has been scheduled for abnormal termination with a completion code of 0F3. System operation continues.
Operator Response: Probable hardware failure. See the problem determination section below.
Problem Determination: Table I, items 4, 13, 18, 30.

**IGF944I SUCCESSFUL RECOVERY BY { [HARDWARE] }
 { [SOFTWARE] }**

Explanation: MCH has identified one of the following failures:

- If HARDWARE is specified, a single bit storage data failure was corrected by the Error Correction Code (ECC) hardware facility, or an instruction was retried successfully by the Hardware Retry facility.
- If SOFTWARE is specified, the Machine Check Handler has successfully repaired a failing Storage Protection Feature (SPF) key.

These are normal corrective actions. If they become too frequent they may indicate the beginnings of more severe hardware failure. Message IGF955I will be issued if the number of hardware corrections is excessive.
System Action: System operation continues.
Operator Response: Probable hardware failure. See the problem determination section below.
Problem Determination: Table I, items 18, 30.

IGF950W TIMING FACILITY FAILURE, [RUN SEREP,] RESTART SYSTEM

Explanation: MCH has encountered a failure in the Time of Day Clock, the Interval Timer, the Clock Comparator or the CPU Timer.

Wait state code:
Time of Day Clock (A16)
Clock Comparator (A16)
CPU Timer (A16)
Interval Timer (A17)

System Action: Enter disabled wait state.
Operator Response: Probable hardware error.
Problem Determination: Table I, items 12, 19, 30. To recover possible unrecorded machine check error records, see Table I, item 11.

IGF952I BUFFER BLOCKS DELETED

Explanation: MCH has encountered a Buffer Storage partially disabled.
System Action: System operation continues.
Operator Response: Probable hardware failure.
Problem Determination: Table I, items 4, 13, 18, 30.

**IGF953I STATUS: INSTRUCTION RETRY - { [QUIET] },
 { [RECORD] }**

**MAIN STORAGE - { [QUIET] }
 { [RECORD] }**

**IGF953I ,CONTROL STORAGE - { [QUIET] }
 { [THRESHOLD] }**

IGF953I ,BUFFER BLOCKS DELETED

Explanation: The status of the error recovery facilities is presented on request and contains information as to the mode of operation of the hardware recovery circuitry for the specific processor that is presently running the operating system. Processors that do not support certain hardware recovery



facilities (i.e. Control Storage or High Speed Buffer deletion) will not respond with the complete status message.
System Action: Processing continues.
Operator Response: None.

IGF954E SYS1.LOGREC DATA SET { [FORMAT ERROR] }
 { [RECORDING FAILURE] }
 { [NEARLY FULL] }
 { [IS FULL] }

Explanation: The MCH recorder found that the indicated condition existed in regard to the SYS1.LOGREC data set.
System Action: System operation continues.
Operator Response: If the condition of SYS1.LOGREC data set is full or nearly full, schedule the utility program IFCEREPO to print the output and reinitialize the data set so that further recording may occur and records will be lost. If an error condition is reported and recurs, the above should be done and LOGREC should be reallocated and reinitialized.
Warning: IFCEREPO must be run before IFCDIPO0 is executed or error records will be lost.

IGF955I { [CONTROL STORAGE] } { [QUIET RECORD] }
 { [MAIN STORAGE] } NOW IN { [QUIET THRESHOLD] }
 { [INSTRUCTION RETRY] }
 { [MODE] }

Explanation: The threshold count for hardware instruction retry (HIR) and error correction code (ECC) has been exceeded and the processor has been placed in the mode specified, or the MODE command has been issued for the indicated mode.
System Action: System operation continues.
Operator Response: When issued as a result of reaching the threshold for automatically entering quiet mode, there is a probable hardware failure.
Problem Determination: Table I, items 18, 30.

IGF961I DAMAGED PAGE NOW { [UNAVAILABLE] }
 { [DELETED] }

Explanation: MCH has determined that a resident page has been damaged and the corrective action specified has been taken to circumvent the problem.

System Action: System operation continues.
Operator Response: Probable hardware failure.
Problem Determination: Table I, items 18, 30.

IGF991E { MOUNT }
 { DEVICE AND CHANNEL END } PENDING FOR DEVICE
 { CHANNEL END } ddd
 { DEVICE END }

Explanation: The missing interrupt checker has found the named condition pending for device ddd for more than the time period specified by the installation; the default time is 3 minutes. The explanation depends on the condition named in the message:

- MOUNT - the system issued a MOUNT request for device ddd, however, it has not been satisfied within a specified period of time.
- DEVICE AND CHANNEL END - Both a device end and a channel end interruption have been pending for device ddd for more than a specified period of time.
- CHANNEL END - A channel end interruption for device ddd had been pending for more than a specified period of time.
- DEVICE END - A device end interruption for device ddd has been pending for more than a specified period of time.

System Action: Processing continues.
Operator Response: The response depends on the condition named in the message:

- MOUNT - Ready device ddd. If the unit is ready, issue a VARY ONLINE command to generate a pseudo device end so that MOUNT processing may continue.
- DEVICE AND CHANNEL END - A hardware malfunction has occurred. The jobs using device ddd should be cancelled.
- DEVICE END - Examine device ddd for hardware malfunctions such as the SELECT light on a tape drive, or the SELECT LOCK light on disk devices. Check control or switching units for proper connection. If the device was just rewound or mounted, issue a VARY ONLINE command to generate a pseudo device end. Note: Issuing a VARY ONLINE command at any other time is inadvisable since file integrity may be lost.

Problem Determination: Table I, items 2, 5a, 16, 24, 30.

Supervisor and Data Management Assembler Macro Expansion Messages (IHB)

Component Name	IHB
Program Producing Message	Assembler program during expansion of supervisor and data management macro instructions.
Audience and Where Produced	For programmer: assembler listing in SYSPRINT data set.
Message Format	<pre> ss, ***IHBnnn text nnnn ss Severity code indicating effect of error on execution of program being assembled: * Informational message; no effect on execution. 0 Information only; normal execution is expected. 4 Warning message; successful execution is probable. 8 Error; execution may fail. 12 Serious error; successful execution is improbable. 16 Terminal error; successful execution is impossible. nnn or nnnn Message serial number. text Message text. </pre>
Comments	None.
Associated Publications	OS/VS Supervisor Services and Macro Instructions, GC27-6979. OS/VS Data Management Macro Instructions, GC26-3793. OS/VS TCAM Programmer's Guide, GC30-2034.
Problem Determination	Refer to the fold-out Tables I and II at the back of this publication for problem determination instructions.

IHB001 xxx OPERAND REQ'D-NOT SPECIFIED

Explanation: A required positional or keyword operand was omitted. The position or name of the operand is xxx.
System Action: The macro instruction was partially expanded; expansion stopped on detection of the error. Severity code = 12.
Programmer Response: Probable user error. Provide the required operand and reassemble.
Problem Determination: Table I, items 15, 29.

IHB002 INVALID xxx OPERAND SPECIFIED - yyy

Explanation: An operand, whose position or name is xxx, was specified as yyy. The specified operand is invalid.
System Action: The macro instruction was partially expanded; expansion stopped on detection of the error. Severity code = 12.
Programmer Response: Probable user error. Correct the invalid operand and reassemble.
Problem Determination: Table I, items 15, 29.

IHB004 REQUIRED OPERAND(S) NOT SPECIFIED

Explanation: One or more required operands were omitted.
System Action: The macro instruction was partially expanded; expansion stopped on detection of the error. Severity code = 12.
Programmer Response: Probable user error. Provide all required operands and reassemble.
Problem Determination: Table I, items 15, 29.

IHB005 INVALID REGISTER NOTATION IN RC OPERAND-xxx

Explanation: The RC operand of a RETURN macro instruction specifies a return code location other than register 15. xxx is the operand as specified.
System Action: The macro instruction was not expanded. Severity code = 12.
Programmer Response: Probable user error. Either load the return code into register 15 and rewrite the operand as RC = (15), or specify the return code in the RC operand; recompile.
Problem Determination: Table I, items 13, 23, 29.

IHB006 INVALID REGISTER NOTATION WITH MF = L FORM

Explanation: An operand of an L-form macro instruction (with an MF = L operand) is specified in register notation.
System Action: The macro instruction was partially expanded; expansion stopped on detection of the error. Severity code = 12.
Programmer Response: Probable user error. Specify the value in the operand, or omit the operand; resubmit the job.
Problem Determination: Table I, items 13, 23, 29.

IHB007 PARAM = OPERAND INVALID WITH SF = L FORM

Explanation: A PARAM operand is in an L-form ATTACH or LINK macro instruction.
System Action: The macro instruction was partially expanded; expansion stopped on detection of the error. Severity code = 12.

IHB

Programmer Response: Probable user error. Omit the PARAM operand. To create a remote problem program parameter list, use the L-form of the CALL macro instruction; resubmit the job.

Problem Determination: Table I, items 13, 23, 29.

IHB008 INVALID REGISTER NOTATION WITH SF = L FORM

Explanation: An operand of an L-form macro instruction (with an SF = L operand) is specified in register notation.

System Action: The macro instruction was partially expanded; expansion stopped on detection of the error. Severity code = 12.

Programmer Response: Probable user error. Specify the value in the operand or omit the operand; resubmit the job.

Problem Determination: Table I, items 13, 23, 29.

IHB009 ENTRY SYMBOL NOT ALLOWED WITH MF = L FORM

Explanation: The first positional (entry point) operand is specified in an L-form CALL macro instruction.

System Action: The macro instruction was partially expanded; expansion stopped on detection of the error. Severity code = 12.

Programmer Response: Probable user error. Omit the first positional operand and resubmit the job.

Problem Determination: Table I, items 13, 23, 29.

IHB010 ID = OPERAND INVALID WITH MF = L FORM

Explanation: The ID operand is specified in an L-form CALL macro instruction.

System Action: The macro instruction was partially expanded; expansion stopped on detection of the error. Severity code = 12.

Programmer Response: Probable user error. Omit the ID operand and resubmit the job.

Problem Determination: Table I, items 13, 23, 29.

IHB011 INVALID OPERAND SPECIFIED WITH SF = L FORM

Explanation: An operand does not conform to the special operand requirements of an L-form macro instruction (with an SF = L operand).

System Action: The macro instruction was partially expanded; expansion stopped on detection of the error. Severity code = 12.

Programmer Response: Probable user error. Check the special operand requirements for L-form use; omit the invalid operand and resubmit the job.

Problem Determination: Table I, items 13, 23, 29.

IHB012 PARAM OR VL ALLOWED ONLY WITH MF = (E,ADDR)

Explanation: A PARAM or VL operand is specified in an XCTL macro instruction.

These operands are allowed only in the E-form of the macro instruction (with an MF = E operand).

System Action: The macro instruction was partially expanded; expansion stopped on detection of the error. Severity code = 12.

Programmer Response: Probable user error. Omit the PARAM or VL operand, or provide an MF = E operand that specifies the address of a remote problem program parameter list; resubmit the job.

Problem Determination: Table I, items 13, 23, 29.

IHB013 MF = L NOT ALLOWED

Explanation: An MF = L operand appears in an ATTACH, LINK, or XCTL macro instruction.

System Action: The macro instruction was partially expanded; expansion stopped on detection of the error. Severity code = 12.

Programmer Response: Probable user error. To form a remote supervisor parameter list, specify an SF = L operand. To form a remote problem program parameter list, use an L-form CALL macro instruction; resubmit the job.

Problem Determination: Table I, items 13, 23, 29.

IHB014 DECB NOT SPECIFIED AS SYMBOL

Explanation: The first positional operand of a READ or WRITE macro instruction does not specify a name for an associated data event control block (DECB).

System Action: The macro instruction was partially expanded; expansion stopped on detection of the error. Severity code = 12.

Programmer Response: Probable user error. Write the first operand as a symbolic name for a data event control block to be posted on completion of the input or output operation. Resubmit the job.

Problem Determination: Table I, items 13, 29.

IHB015 MORE THAN ONE OF EP, EPLOC, OR DE PRESENT

Explanation: More than one of the alternate operands EP, EPLOC, and DE is specified in an ATTACH, DELETE, LINK, LOAD, or XCTL macro instruction.

System Action: The macro instruction was partially expanded; expansion stopped on detection of the error. Severity code = 12.

Programmer Response: Probable user error. Rewrite the macro instruction, specifying only one of the 3 alternate operands, and resubmit the job.

Problem Determination: Table I, items 13, 23, 29.

IHB016 LV OPERAND NOT ALLOWED WITH SPECIFIED MODE

Explanation: The LV operand is inconsistent with the first positional (mode) operand of an S-type GETMAIN or FREEMAIN macro instruction. The mode operand is VU, VC, or V, which specifies allocation or release of a variable-length storage area, or it is LU, LC, or L, which specifies allocation or release of a list of fixed-length storage areas. The LV operand implies allocation or release of a single fixed-length storage area; this operand can be used only if the mode operand is EU, EC, or E.

System Action: The macro instruction was partially expanded; expansion stopped on detection of the error. Severity code = 12.

Programmer Response: Probable user error. Change the mode operand to EU, EC, or E, or replace the LV operand; resubmit the job.

Problem Determination: Table I, items 13, 23, 29.

IHB017 LA OPERAND NOT ALLOWED WITH SPECIFIED MODE

Explanation: The LA operand is inconsistent with the first positional (mode) operand of an S-type GETMAIN or FREEMAIN macro instruction. The mode operand is EU, EC, or E, which specifies either allocation or release of a single fixed-length storage area, or it is V, which specifies release of a variable-length storage area. The LA operand implies allocation or release of a list of fixed-length storage areas, or allocation of a variable-length storage area; this operand can be used only if the mode operand is VU, VC, LU, LC, or L.

System Action: The macro instruction was partially expanded; expansion stopped on detection of the error. Severity code = 12.

Programmer Response: Probable user error. For a GETMAIN macro instruction, change the mode operand to VU, VC, LU, LC, or L, or replace the LA operand with an LV operand. For a FREEMAIN macro instruction, omit the LA operand. Resubmit the job.

Problem Determination: Table I, items 13, 23, 29.

IHB018 BOTH LV AND LA OPERANDS SPECIFIED

Explanation: Both the LV and LA operands are specified in an S-type GETMAIN or FREEMAIN macro instruction.

System Action: The macro instruction was partially expanded; expansion stopped on detection of the error. Severity code = 12.

Programmer Response: Probable user error. Omit one or both of these operands, according to which mode operand is specified, and resubmit the job.

Problem Determination: Table I, items 13, 23, 29.

IHB019 SP NOT ALLOWED WITH LV SPECIAL REG. NOTATION

Explanation: The SP operand is specified in an R-type GETMAIN or FREEMAIN macro instruction and the optional value of the LV operand is specified in special register notation.

System Action: The macro instruction was partially expanded; expansion stopped on detection of the error. Severity code = 12.

Programmer Response: Probable user error. Either load the subpool number into the leftmost byte of parameter register 0 and omit the SP operand, or specify both the LV and SP operand values in the macro instruction. Resubmit the job.

Problem Determination: Table I, items 13, 23, 29.

IHB020 A = OPERAND NOT ALLOWED IN R-TYPE MACRO

Explanation: The A operand is specified in an R-type GETMAIN macro instruction.

System Action: The macro instruction was partially expanded; expansion stopped on detection of the error. Severity code = 12.

Programmer Response: Probable user error. Omit the A operand and resubmit the job.

Problem Determination: Table I, items 13, 23, 29.

IHB021 MORE THAN MAXIMUM VALUE IN FIELDS OPERAND

Explanation: The FIELDS operands of an EXTRACT macro instruction contain more than the maximum value.

System Action: The macro instruction was partially expanded; expansion stopped on detection of the error. Severity code = 12.

Programmer Response: Probable user error. Reduce the number of value to the maximum value and recompile.

Problem Determination: Table I, items 13, 23, 29.

IHB023 THIRD OPERAND INVALID WITH SCRATCH - SPECIFIED AS - xxx

Explanation: In a CAMLST macro instruction, the first operand specifies SCRATCH and the third operand specifies xxx. This combination of operands is invalid.

System Action: The macro instruction was partially expanded; expansion stopped on detection of the error. Severity code = 12.

Programmer Response: Probable user error. Change the first or third operand. Resubmit the job.

Problem Determination: Table I, items 13, 19, 29.

IHB024 CSECT NAME OMITTED. MACRO NAME FIELD BLANK

Explanation: A SAVE macro instruction, in an unnamed control section, contains an asterisk as the third positional (entry point identifier) operand, but it does not contain a name in its name field.

System Action: The macro instruction was expanded normally. Severity code = 4.

Programmer Response: Probable user error. Provide an entry point identifier for the program by specifying a name for the SAVE macro instruction or for the control section in which it is located and resubmit the job.

Problem Determination: Table I, items 13, 23, 29.

IHB025 INVALID HIARCHY OPERAND SPECIFIED

Explanation: In a GETMAIN, GETPOOL, DCB, LINK, LOAD, XCTL, or ATTACH macro instruction, the HIARCHY parameter specified a value other than 0 or 1.

System Action: The macro instruction was not expanded. Severity code = 12.

Programmer Response: Probable user error. Correct the HIARCHY parameter to specify a value of 0 or 1. Resubmit the job.

Problem Determination: Table I, items 13, 19, 29.

IHB026 FCB SUBLIST IS INVALID

Explanation: In a SETPRT macro instruction, the FCB parameter list was incorrectly specified. One of the following occurred:

- The format of the FCB parameter list was invalid. For example, commas or parentheses were incorrectly placed.
- One of the FCB parameters was invalid. For example, the image-id was omitted, or the ALIGN or VERIFY parameter was misspelled.

System Action: The macro instruction was not expanded. Severity code = 12.

Programmer Response: Probable user error. Correct the FCB parameter list. Resubmit the job.

Problem Determination: Table I, items 4, 15, 29.

IHB027 EXCESSIVE POSITIONAL PARAMETERS SPECIFIED

Explanation: More positional parameters are specified in an OPEN, CLOSE, or RDJFCB macro instruction than are in the macro prototypes.

System Action: The macro instruction is expanded, but the extra parameters are ignored. Severity code = 12.

Programmer Response: Probable user error. This error often occurs because the parameter list is not enclosed with parentheses. Omit invalid or unnecessary parameters and rerun the job.

Problem Determination: Table I, items 15, 29.

IHB030 LPS MACRO xxx IMPROPERLY USED

Explanation: Macro instruction xxx cannot be used in all Line Procedure Specifications (LPS).

System Action: The macro instruction was not expanded. Severity code = 12.

Programmer Response: Probable user error. Remove the macro instruction from the Line Procedure Specifications and resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB050 xxx OPERAND INCONSISTENT-IGNORED

Explanation: In a DCB macro instruction, an operand is inconsistent with the optional value of the DSORG, DEVD, LRECL, MACRF, or RECFM operand. The name of the inconsistent operand is xxx.

System Action: The macro instruction was expanded, but the inconsistent operand was ignored. Severity code = 4.

Programmer Response: Probable user error. Correct the inconsistent operand. Resubmit the job.

Problem Determination: Table I, items 13, 19, 29.

IHB051 xxx INVALID CODE FOR yyy-IGNORED

Explanation: In a DCB macro instruction, an invalid character string was specified as the optional value of a keyword operand. The name of the keyword operand is yyy. The character string is xxx.

System Action: The macro instruction was expanded, but the invalid operand was ignored. Severity code = 8.

Programmer Response: Probable user error. Correct optional value. Resubmit the job.

Problem Determination: Table I, items 13, 19, 29.

IHB052 DSORG OMITTED

Explanation: The DSORG operand was omitted from a DCB macro instruction. The MACRF operand does not specify use of the EXCP macro instruction.

System Action: The macro instruction was partially expanded; expansion stopped on detection of the error. Severity code = 12.

Programmer Response: Probable user error. Provide the DSORG operand, or specify in the MACRF operand use of the EXCP macro instruction. Resubmit the job.

Problem Determination: Table I, items 13, 19, 29.

IHB053 yyy INVALID CODE FOR DSORG

Explanation: In a DCB macro instruction, the optional value of a DSORG operand is yyy. This optional value is not valid for the DSORG operand.

System Action: The macro instruction was partially expanded; expansion stopped on detection of the error. Severity code = 12.

Programmer Response: Probable user error. Correct the optional value of the DSORG operand. Resubmit the job.

Problem Determination: Table I, items 13, 19, 29.

IHB054 y INVALID DSORG QUALIFIER-IGNORED

Explanation: In a DCB macro instruction, the third character of the optional value of a DSORG operand is y. This character is not a valid qualifier for the specified data set organization.

System Action: The macro instruction was expanded, but the invalid operand was ignored. Severity code = 8.

Programmer Response: Probable user error. Correct the optional value of the DSORG operand. Resubmit the job.

Problem Determination: Table I, items 13, 19, 29.

IHB055 MACRF NOT SPECIFIED-EXCP ASSUMED

Explanation: The MACRF operand was omitted from a DCB macro instruction.

System Action: The macro instruction was expanded; use of the EXCP macro instruction was assumed. Severity code = 8.

Programmer Response: Probable user error. If the EXCP macro instruction is not used, provide the MACRF operand. Resubmit the job.

Problem Determination: Table I, items 13, 19, 29.

IHB056 z OF MACRF INVALID WITH ESORG = yyy-IGNORED

Explanation: In a DCB macro instruction, the first or only character of a sublist element for the MACRF operand is z. This character is not consistent with the optional value of the DSORG operand, which is yyy.

System Action: The macro instruction was expanded, but the invalid MACRF sublist element was ignored. Severity code = 8.

Programmer Response: Probable user error. Correct the MACRF operand to specify a type of macro instruction consistent with the specified data set organization. Resubmit the job.

Problem Determination: Table I, items 13, 19, 29.

IHB057 x INVALID QUALIFIER FOR z OF MACRF IF DSORG = yyy-IGNORED

Explanation: In a DCB macro instruction, z is the first character, and x is a qualifier, of a sublist element for the MACRF operand. The optional value of the DSORG operand is yyy. For this combination of data set organization and z, x is not valid.

System Action: The macro instruction was expanded, but the x in the MACRF sublist element was ignored. Severity code = 8.

Programmer Response: Probable user error. Correct the MACRF operand to specify a type of macro instruction consistent with the specified data set organization. Resubmit the job.

Problem Determination: Table I, items 13, 19, 29.

IHB058 x OF RECFM INVALID WITH DSORG = yyy-IGNORED

Explanation: In a DCB macro instruction, the optional value of the RECFM operand is x. This optional value is not consistent with the optional value of the DSORG operand, which is yyy.

System Action: The macro instruction was expanded, but the x in the RECFM operand was ignored. Severity code = 8.

Programmer Response: Probable user error. Correct the RECFM operand to specify a record format consistent with the specified data set organization. Resubmit the job.

Problem Determination: Table I, items 13, 19, 29.

IHB059 x OF OPTCD INVALID WITH DSORG = yyy-IGNORED

Explanation: In a DCB macro instruction, a character in the optional value of the OPTCD operand is x. This character is not consistent with the optional value of the DSORG operand, which is yyy.

System Action: The macro instruction was expanded, but the x in the OPTCD operand was ignored. Severity code = 8.

Programmer Response: Probable user error. Correct the OPTCD operand to specify an optional service consistent with the specified data set organization. Resubmit the job.

Problem Determination: Table I, items 13, 19, 29.

IHB060 xxx INVALID CODE FOR DEVD WITH DSORG = yyy-IGNORED

Explanation: In a DCB macro instruction, the optional value of the DEVD operand is xxx. This optional value is not consistent with the optional value of the DSORG operand, which is yyy.

System Action: The macro instruction was expanded, but the DEVD operand was ignored. Severity code = 8.

Programmer Response: Probable user error. Correct the DEVD operand to specify a device dependence consistent with the specified data set organization. Resubmit the job.

Problem Determination: Table I, items 13, 19, 29.

IHB061 DDNAME NOT SPECIFIED

Explanation: The DDNAME operand was omitted from a DCB macro instruction.

System Action: The macro instruction was expanded normally. Severity code = *.

Programmer Response: If the name of the DD statement is not placed in the data control block during execution of the problem program, reassemble the program and provide the name through the DDNAME operand of the DCB macro instruction.

Problem Determination: Table I, items 13, 19, 29.

IHB062 DDNAME LONG-TRUNCATED TO 8 CHAR

Explanation: In a DCB macro instruction, the optional value of the DDNAME operand is longer than 8 characters.

System Action: The macro instruction was expanded; the name in the DDNAME operand was truncated to 8 characters. Severity code = 4.

Programmer Response: Probable user error. Correct the DDNAME operand by specifying not more than 8 alphameric characters, the first of which must be alphabetic. Resubmit the job.

Problem Determination: Table I, items 13, 19, 29.

IHB065 MACRF = xxx INVALID-EXCP ASSUMED

Explanation: In a DCB macro instruction, the optional value of the MACRF operand is xxx. This optional value is invalid.

System Action: The macro instruction was expanded; the invalid MARCF operand was ignored and use of the EXCP macro instruction was assumed. Severity code = 8.

Programmer Response: Probable user error. If the EXCP macro instruction is not used, correct the MACRF operand. Resubmit the job.

Problem Determination: Table I, items 13, 19, 29.

IHB066 INCONSISTENT OPERAND

Explanation: In a DCB macro instruction, the first character of every sublist element of the MACRF operand is not consistent with the optional value of the DSORG operand. Message IHB056 was given for each MACRF sublist element.

In a TCAM DATETIME macro instruction, both the Date and Time operands specified "NO".

In a TCAM SETSCAN macro instruction any of the following invalid conditions were specified:

- MOVE = RETURN, POINT = BACK
- Skip characters, POINT = BACK
- MOVE = RETURN, RESULT = Not Specified
- MOVE = KEEP, RESULT = Specified

In a TCAM STARTMH macro instruction, when neither STOP = nor CONT = are specified, either CONV = or LOGICAL = is coded.

System Action: The DCB macro instruction was not expanded. The MH macros were partially expanded; expansion stopped on detection of the error. Severity code = 12.

Programmer Response: Probable user error. Correct the DSORG and MACRF operands to specify a data set organization and macro instruction types that are consistent. Resubmit the job.

Problem Determination: Table I, items 13, 19, 29.

IHB067 xxx MACRO PREVIOUSLY USED

Explanation: More than one xxx macro instruction is present in a single assembly. Only the first is used.

System Action: No xxx macro instruction beyond the first encountered is expanded. Severity code: for TCAM macros, 12; for DCBD macros, 4.

Programmer Response: Probable user error. Limit to one the number of DCBD macro instructions in each assembly. Resubmit the job.

Problem Determination: Table I, items 13, 19, 29.

IHB068 NO VALID DSORG SPECIFIED-EXCP ASSUMED

Explanation: In a DCBD macro instruction, the DSORG operand is either absent or invalid.

System Action: The macro instruction was expanded; the DSORG operand, if present, was ignored and use of the EXCP macro instruction was assumed. Severity code = *.

Programmer Response: If the EXCP macro instruction is not used, provide or correct the DSORG operand. Resubmit the job.

Problem Determination: Table I, items 13, 19, 29.

IHB069 DEVD NOT SPECIFIED-ALL ASSUMED

Explanation: The DEVD operand was omitted from a DCBD macro instruction.

System Action: The macro instruction was expanded; if PS, BS, or QS was specified in the DSORG operand, symbolic names were provided for all possible device dependencies. If other values were specified in the DSORG operand, no symbolic names were provided. Severity code = *.

IHB070 SEQUENCE ERROR-MUST FOLLOW xxx MACRO

Explanation: The QTAM LPS macro instruction or the TCAM MH macro instruction is improperly placed in the source program. It must follow an xxx macro instruction.

System Action: The macro instruction is not expanded.

Severity Code = 12.

Programmer Response: Probable user error. Correctly place the macro instruction following an xxx macro instruction and resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB071 SEQUENCE ERROR IN LPS DELIMITER MACRO.

Explanation: The LPS delimiter macro instruction is improperly placed in the source program. The previous macro instruction or section may require a specific macro instruction.

System Action: The macro instruction was not expanded.

Severity code = 12.

Programmer Response: Probable user error. Place the macro instruction in the LPS section and resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB072 LERB REQUESTED-ERROPT = C ASSUMED

Explanation: LERB was coded in the DCB but ERROPT = C (indicating a request for line error recording) was not coded. *System Action:* The macro instruction was expanded normally with the line error recording provided. Severity code = *.

Programmer Response: Probable user error. Delete the LERB operand if line error recording is not wanted. Resubmit the job. If line error recording is wanted, code ERROPT = C.

Problem Determination: Table I, items 15, 29.

IHB073 LERB OMITTED-ERROPT = C IGNORED

Explanation: Line error recording was requested by ERROPT = C but no LERB address was given.

System Action: The macro instruction was expanded normally with no line error recording provided. Severity code = *.

Programmer Response: Probable user error. Delete ERROPT = C if line error recording is not wanted. If line error recording is wanted, code an LERB address. Resubmit the job.

Problem Determination: Table I, items 15, 29.



IHB074 ERROPT = N - LERB IGNORED

Explanation: LERB was coded in the DCB but error recovery procedure was not requested (ERROPT = N).
System Action: The macro instruction was expanded normally with no line error recording provided. Severity code = *.
Programmer Response: Probable user error. Delete the LERB operand if the line error recording is not wanted. If line error recording is wanted, code ERROPT = C. Resubmit the job.
Problem Determination: Table I, items 15, 29.

IHB075 TABLENAME OPERAND REPEATED-xxx

Explanation: In the ASMTTAB macro instruction, a table name operand was coded more than once. xxx is the repeated operand.
System Action: The macro instruction was expanded normally. Severity code = *.
Programmer Response: Probable user error. Remove the duplicate operand. Resubmit the job.
Problem Determination: Table I, items 15, 29.

IHB076 MACRO NAME FIELD BLANK - NAME REQUIRED

Explanation: A name must be specified in the name field of this macro instruction.
System Action: The macro instruction was not expanded. Severity code = 12.
Programmer Response: Probable user error. Code a name in the name field of the macro instruction and resubmit the job.
Problem Determination: Table I, items 15, 29.

IHB077 prm INVALID - SET TO xx

Explanation: The error occurred either in a SNAP macro instruction, or in a Graphics input/output (I/O) macro instruction for a 2260 device.
 In a SNAP macro instruction, the parameter named prm (either SDATA or PDATA) was invalid.
 In a GREAD, GWRITE, GCNTRL, or GREADR macro instruction for a 2260 device, the UNIT parameter (named prm) was not a self-defining term and may be invalid. This message may be issued as a result of a user-written, inner macro call.
System Action: The macro instruction was expanded. If the error is the result of a SNAP macro instruction, the value of the parameter is made xx (CB for SDATA or ALL for PDATA).
 If the error is the result of a Graphics I/O macro instruction (GREAD, GWRITE, GCNTRL, or GREADER), the UNIT field was assigned a value of xx.
 Severity code = 4.
Programmer Response: Probable user error.
 If the error is in a SNAP macro instruction, correct the SDATA or PDATA operand. Resubmit the job.
 If the error is in a Graphics I/O macro instruction issued by a user-written inner macro call, determine that the value xx is the desired unit; if it is, no further action is required. If it is not, correct the user-written inner macro instruction and resubmit the job. If the Graphics I/O macro instruction was not issued by an inner macro call, correct the UNIT operand so that it is a decimal integer between 1 and 25 and resubmit the job.
Problem Determination: Table I, items 15, 29.

IHB078 {XXX}OPERAND REGISTER NOTATION INVALID - {YYY}

Explanation: For the XXX operand, the operand was not enclosed in parentheses or specified an invalid register. YYY is an invalid notation.

System Action: The macro instruction was not expanded. Severity code = 12.
Programmer Response: Probable user error. Correct the register notation or specify a valid register and resubmit the job.
Problem Determination: Table I, items 15, 29.

IHB079 FIRST OPERAND REGISTER NOTATION REQUIRED

Explanation: Register notation is required for the first operand.
System Action: The macro instruction was not expanded. Severity code = 12.
Programmer Response: Probable user error. Specify a register notation for the first operand and resubmit the job.
Problem Determination: Table I, items 15, 29.

IHB080 ONE ECBLIST OPERAND ONLY REQUIRED

Explanation: The ECBLIST operand was omitted, or more than one supplied.
System Action: The macro instruction was not expanded. Severity code = 12.
Programmer Response: Probable user error. Supply only one ECBLIST operand and resubmit the job.
Problem Determination: Table I, items 15, 29.

IHB083 STORAGE/LIST FORMAT INCORRECT

Explanation: In the SNAP macro instruction, the STORAGE or LIST operand was invalid.
System Action: The macro instruction was not expanded. Severity code = 12.
Programmer Response: Probable user error. Correct the STORAGE or LIST operand and resubmit the job.
Problem Determination: Table I, items 13, 23, 29.

IHB084 IPLTXID OPERAND EXCEEDS 7 CHARACTERS

Explanation: An IPLTXID operand in a DCB macro instruction exceeds the allowable limit of 7 characters.
System Action: The macro instruction was not expanded. Severity code = 12.
Programmer Response: Probable user error. Correct the IPLTXID operand so that the operand does not exceed 7 characters.
Problem Determination: Table I, items 15, 29.

IHB085 DEVD = xx CODED - ERROPT = y IGNORED

Explanation: In a DCB macro instruction, one of the following occurred:

- Both DEVD = BS and ERROPT = N were coded. However, ERROPT = N is invalid for Binary Synchronous devices. Error recovery procedures are required.
- Both DEVD = WT and ERROPT = R, W, or T were coded. However, ERROPT = R, W, or T is invalid for World Trade Telegraph Terminals (WTTA).

System Action: The macro instruction was expanded normally. The ERROPT parameter was ignored. Severity code = *.
Programmer Response: Probable user error. Remove the ERROPT parameter and resubmit the job.
Problem Determination: Table I, items 15, 29.

IHB086 xxx INVALID KEYWORD, yyy ASSUMED

Explanation: Operand xxx does not conform to the requirements of the operand format.
System Action: The macro instruction was expanded, but the invalid operand was ignored and yyy was assumed. Severity code = 4.

Programmer Response: Probable user error. Correct the invalid operand. Resubmit the job.
Problem Determination: Table I, items 15, 29.

IHB087 INVALID OPERAND xxx PASSED TO SYSTEM MACRO IHERMAC

Explanation: Operand xxx is not valid.
System Action: Expansion of the macro instruction is terminated when the error is detected. Severity code = 12.
Programmer Response: Probable user error. Correct the listed operand, and resubmit the job.
Problem Determination: Table I, items 15, 29.

IHB088 REQUIRED OPTION MACRO NOT GENERATED

Explanation: The number of OPTION macros generated does not match the number of optional subfields specified in the TERM macro.
System Action: The macro instruction was not expanded. Severity code = 12.
Programmer Response: Probable user error. Check OPTION macros for errors or correct the optional subfields specified in the TERM macro. Resubmit the job.
Problem Determination: Table I, items 15, 29.

IHB090 INVALID AUTOPOL VALUE

Explanation: In a POLL macro instruction, the AUTOPOL operand specified a value other than 1 or 2.
System Action: The macro instruction was not expanded. Severity code = 12.
Programmer Response: Probable user error. For IBM 1030 terminals, specify an AUTOPOL operand of 1 in the POLL macro instruction. For other terminals, specify an AUTOPOL operand of 2 in the POLL macro instruction. Resubmit the job.
Problem Determination: Table I, items 15, 29.

IHB091 MORE THAN 123-1030'S OR 82 NON 1030'S

Explanation: The POLL macro instruction specified more than the allowable number of terminals.
System Action: The macro instruction was not expanded. Severity code = 12.
Programmer Response: Probable user error. For IBM 1030 terminals, reduce the number of terminals specified in the POLL macro instruction to 123 or less. For other terminals, reduce the number of terminals specified in the POLL macro instruction to 82 or less. Resubmit the job.
Problem Determination: Table I, items 15, 29.

IHB092 DCB IS MISSING OR INVALID

Explanation: In a SETPRT macro instruction, the DCB operand, which specifies the opened data control block (DCB) for the UCS printer data set, was either missing or incorrectly specified for the form of the macro instruction used.
System Action: The macro instruction was not expanded. Severity code = 12.
Programmer Response: Probable user error. Supply the missing DCB operand or correct the one that is in error. Resubmit the job.
Problem Determination: Table I, items 13, 19, 29.

IHB093 UCS SUBLIST IS INVALID

Explanation: In a SETPRT macro instruction, the UCS parameter list was incorrectly specified. One of the following occurred:

- The format of the UCS parameter list was invalid. For example, the commas or parentheses were incorrectly placed.

- One of the UCS subparameters was invalid. For example, the character set code was omitted, the FOLD and/or VERIFY subparameters were misspelled, or the subparameters were out of order.

System Action: The macro instruction was not expanded. Severity code = 12.

Programmer Response: Probable user error. Correct the UCS parameter list. Resubmit the job.
Problem Determination: Table I, items 13, 19, 29.

IHB094 MACRO-FORM INVALID

Explanation: In a SETPRT macro instruction, the MF operand was not specified as MF = L for the list form of the macro instruction or did not begin with MF = (E, for the execute form of the macro instruction.
System Action: The macro instruction was not expanded. Severity code = 12.
Programmer Response: Probable user error. Correct the MF operand according to the form of the macro instruction desired. Resubmit the job.
Problem Determination: Table I, items 13, 19, 29.

IHB095 OPTCD IS INVALID

Explanation: In a SETPRT macro instruction, the OPTCD operand was not specified as either U or B.
System Action: The macro instruction was not expanded. Severity code = 12.
Programmer Response: Probable user error. Correct the OPTCD operand. Resubmit the job.
Problem Determination: Table I, items 13, 19, 29.

IHB096 UCS, FCB, AND OPTCD SUBLISTS MISSING

Explanation: In a SETPRT macro instruction, the UCS, FCB, and OPTCD operands were omitted. At least one of these operands must be specified to execute the standard form of SETPRT macro instruction.
System Action: The macro instruction was not expanded. Severity code = 12.
Programmer Response: Probable user error. Specify the UCS operand, FCB operand, and/or the OPTCD operand according to the function desired. Resubmit the job.
Problem Determination: Table I, items 4, 15, 29.

IHB097 TCB OPERAND INVALID WITH MF = L FORM

Explanation: The TCB operand was specified in the list form of the SNAP macro instruction.
System Action: The macro instruction was not expanded. Severity code = 12.
Programmer Response: Probable user error. Omit the TCB operand and resubmit the job.
Problem Determination: Table I, items 13, 23, 29.

IHB098 BUFNO LESS THAN 12. 12 ASSUMED.

Explanation: In a DCB macro instruction, at least twelve buffers must be specified when processing a 1419/1275 data set.
System Action: Twelve buffers are assumed. Severity code = *.
Programmer Response: Probable user error. Correct the BUFNO parameter of the DCB and resubmit the job.
Problem Determination: Table I, items 3, 15, 29.

IHB099 BUFL AND BLKSIZE UNEQUAL. BUFL ASSUMED.

Explanation: In a DCB macro instruction, BLKSIZE and BUFL must be equal for a 1419/1275 data set.

System Action: BUFL length is assumed for BLKSIZE. Severity code = *.

Programmer Response: Probable user error. Correct the parameters and resubmit the job.

Problem Determination: Table I, items 3, 15, 29.

IHB100 X OR Y PARAMETER NOT WITHIN ALLOWABLE VAUE RANGE.

Explanation: In the ONLTST macro instruction, either the X or Y parameter specified an incorrect value. The X parameter must specify a value from 00 through 19, and the Y parameter must specify a value from 01 through 99.

System Action: The macro instruction was not expanded. Severity code = 12.

Programmer Response: Probable user error. Correct the X or Y parameter in the specification of the ONLTST macro instruction and resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB101 SSRTN TOO LONG. TRUNCATED TO 8 CHAR

Explanation: In a DCB macro instruction, the name of the user's stacker select routine must not be more than eight characters.

System Action: The name is truncated to eight characters. Severity code = 4.

Programmer Response: Probable user error. Correct the name, if necessary, and resubmit the job.

Problem Determination: Table I, items 3, 15, 29.

IHB102 LREC PLUS 6 IS GREATER THAN BUFL. BUFL ASSUMED.

Explanation: In a DCB macro instruction, LRECL plus 6 must not be greater than BUFL for the 1419/1275 data set.

System Action: BUFL is assumed to be correct. Severity code = *.

Programmer Response: Probable user error. Correct the parameter, if necessary, and resubmit the job.

Problem Determination: Table I, items 3, 15, 29.

IHB103 TEXT OR LENGTH MISSING WHEN X = 0 OR X = 1.

Explanation: In the ONLTST macro instruction, although the X parameter specified 0 or 1, either the TEXT or LENGTH parameter was missing. Whenever the X parameter specifies 0 or 1, the TEXT and LENGTH parameters must also be specified.

System Action: The macro instruction was not expanded. Severity code = 12.

Programmer Response: Probable user error. Include both the TEXT and LENGTH parameters in the specification of the ONLTST macro instruction and resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB104 TEXT OR LENGTH MISSING.

Explanation: In the ONLTST macro instruction, either the TEXT or LENGTH parameter was missing. If one of these two parameters is specified, the other parameter must be specified also.

System Action: The macro instruction was not expanded. Severity code = 1.

Programmer Response: Probable user error. Include both the TEXT and LENGTH parameters in the specification of the ONLTST macro instruction and resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB105 X GREATER THAN 1. TEXT AND LENGTH PARAMETERS IGNORED.

Explanation: In the ONLTST macro instruction, although the X parameter specified a value greater than 1, the TEXT and LENGTH parameters were also specified. Whenever the X parameter specifies a value greater than 1, the TEXT and LENGTH parameters should not be specified.

System Action: The macro instruction is expanded normally, and the TEXT and LENGTH parameters are ignored.

Programmer Response: Probable user error. Remove the TEXT and LENGTH parameters from the specification of the ONLTST macro instruction. Resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB107 DIALCOUNT AND DIALCHARS NOT IN AGREEMENT.

Explanation: In the DFTRMLST macro instruction, the length of the telephone number specified in the dialcount parameter is not the same as the number of dial digits specified in the dialchars parameter.

System Action: The dial digits are generated as specified in the dialchars parameter without regard to the length specified in the dialcount parameter. Severity code = 4.

Programmer Response: Probable user error. Correct the dialcount or dialchars parameter in error. Resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB108 POLLING CHARACTERS ARE IMPROPER.

Explanation: In the DFTRMLST macro instruction, the number of entries specified in the polling list was greater than 253 or one of the polling characters in an entry was hexadecimal FE, a value that must not be used as a polling character.

System Action: The macro instruction was not expanded. Severity code = 12.

Programmer Response: Probable user error. Correct the polling list. Resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB109 LENGTH OF POLLING CHARACTERS PER ENTRY IS IMPROPER.

Explanation: In the DFTRMLST macro instruction, the entries in the polling list are not all of the same length.

System Action: All entries are truncated or expanded to equal the length of the first entry. Severity code = 4.

Programmer Response: Probable user error. Correct the polling list so that all the entries are of the same length. Resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB110 DIAL CHARACTERS INVALID IN WTLIST.

Explanation: In the DFTRMLST macro instruction, dial digits were specified. However, a WTLIST should only be used for a manual dial, and no dial digits can be used.

System Action: The macro instruction was not expanded. Severity code = 12.

Programmer Response: Probable user error. Correct the specification of the dial digits in the terminal list and resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB111 LENGTH OR ADDRESS OF TONE OMITTED.

Explanation: In the DFTRMLST macro instruction, either the address or length operand was omitted. However, both operands must be included for an answering WTLIST.

System Action: The macro instruction was not expanded. Severity code = 12.

Programmer Response: Probable user error. Make sure both length and address operands are specified for an answering WTLIST. Resubmit the job.
Problem Determination: Table I, items 15, 29.

IHB113 IDCOUNT AND IDSENT DO NOT AGREE

Explanation: In a DFTRMLST macro instruction, the value specified for IDCOUNT does not equal the number of characters in IDSENT.
System Action: The macro instruction was partially expanded; expansion stopped upon detection of the error. Severity code = 12.
Programmer Response: Probable user error. Correct the IDCOUNT value. Resubmit the job.
Problem Determination: Table I, items 15, 29.

IHB114 IDCOUNT IS TOO LARGE

Explanation: In a DFTRMLST macro instruction, the value specified for IDCOUNT is greater than 16 (AD or MD calling list), or is greater than 17 (AN answering list).
System Action: The macro instruction was partially expanded; expansion stopped upon detection of the error. Severity code = 12.
Programmer Response: Probable user error. Correct the IDCOUNT value and resubmit the job.
Problem Determination: Table I, items 15, 29.

IHB115 INVALID TYPE ATTRIBUTES

Explanation: In a DFTRMLST macro instruction, an invalid type attribute was specified for one of the operands.
System Action: The macro instruction was partially expanded; expansion stopped upon detection of the error. Severity code = 12.
Programmer Response: Probable user error. Correct the operand and resubmit the job.
Problem Determination: Table I, items 15, 29.

IHB116 AUTHORIZED SEQUENCE IS MISSING

Explanation: In a DFTRMLST macro instruction, either a control value or user data area was specified without an authorized sequence having been specified.
System Action: The macro instruction was partially expanded; expansion stopped upon detection of the error. Severity code = 12.
Programmer Response: Probable user error. Either specify an authorized sequence or eliminate the control value or user data area. Resubmit the job.
Problem Determination: Table I, items 15, 29.

IHB117 PARENTHESIS IS MISSING

Explanation: In a MFTRMLST macro instruction, the authorized sequence was not enclosed in parentheses.
System Action: The macro was partially expanded; expansion stopped upon detection of the error. Severity code = 12.
Programmer Response: Probable user error. Enclose the authorized sequence in parentheses and resubmit the job.
Problem Determination: Table I, items 15, 29.

IHB120 DCB ADDRESS MISSING OR INVALID. GENERATION TERMINATED.

Explanation: In a RDLIN, DSPLY, or RESCN macro instruction, the required DCB address was not specified correctly.
System Action: The macro instruction was not expanded. Severity code = 16.

Programmer Response: Probable user error. Correct the DCB address operand and resubmit the job.
Problem Determination: Table I, items 3, 15, 29.

IHB121 REGISTER SPECIFICATION INVALID. GENERATION TERMINATED.

Explanation: In a DSPLY macro instruction, an optional register specification was not specified correctly.
System Action: The macro instruction was not expanded. Severity code = 16.
Programmer Response: Probable user error. Correct the register specification and resubmit the job.
Problem Determination: Table I, items 3, 15, 29.

IHB122 REGISTER SPECIFICATIONS NOT PAIRED. GENERATION TERMINATED.

Explanation: In a RESCN or DSPLY macro instruction, two valid registers were not specified.
System Action: The macro instruction was not expanded. Severity code = 16.
Programmer Response: Probable user error. Correct the register specification and resubmit the job.
Problem Determination: Table I, items 3, 15, 29.

IHB123 NUMBER OF RETRIES EXCEEDS 9. 9 ASSUMED.

Explanation: In a RESCN macro instruction, a number of retries greater than 9 was specified.
System Action: The macro instruction was expanded normally with a retry value of 9. Severity code = 4.
Programmer Response: Probable user error. Correct the retry value and resubmit the job.
Problem Determination: Table I, items 3, 15, 29.

IHB124 NUMBER OF RETRIES INVALID. 1 ASSUMED.

Explanation: In a RESCN macro instruction, an invalid number of retries (other than greater than 9) was specified.
System Action: The macro instruction was expanded normally with a retry value of 1. Severity code = 4.
Programmer Response: Probable user error. Correct the retry value and resubmit the job.
Problem Determination: Table I, items 3, 15, 29.

IHB125 UNRECOGNIZABLE PARAMETER. PARAMETER IGNORED.

Explanation: In a RESCN macro instruction, an unrecognizable parameter was specified.
System Action: The parameter was ignored, and the macro instruction was expanded normally. Severity code = 8.
Programmer Response: Probable user error. Correct the invalid parameter and resubmit the job.
Problem Determination: Table I, items 3, 15, 29.

IHB126 PARAMETER PREVIOUSLY DEFINED. FIRST DEFINITION ASSUMED.

Explanation: In a RESCN macro instruction, either the number of retries or the register specifications was repeated.
System Action: The macro instruction was expanded normally, using the first specification. Severity code = 4.
Programmer Response: Probable user error. Delete the unwanted specification and resubmit the job.
Problem Determination: Table I, items 3, 15, 29.

**IHB127 LABEL PREFIX MISSING OR INVALID.
GENERATION TERMINATED.**

Explanation: In a DEFAREA macro instruction, the required label prefix was not supplied correctly.
System Action: The macro instruction was not expanded.
Severity code = 16.
Programmer Response: Probable user error. Supply a correct label prefix and resubmit the job.
Problem Determination: Table I, items 3, 15, 29.

**IHB128 UNRECOGNIZABLE PARAMETER SPECIFIED.
GENERATION TERMINATED.**

Explanation: In a DEFAREA or DEFCCW macro instruction, an unrecognizable parameter was specified.
System Action: The macro instruction was not expanded.
Severity code = 16.
Programmer Response: Probable user error. Correct the parameter in error and resubmit the job.
Problem Determination: Table I, items 3, 15, 29.

**IHB129 TIMES NOT PRECEDED BY FIELD LENGTH.
GENERATION TERMINATED.**

Explanation: In a DEFAREA macro instruction, a TIMES operand was not preceded by a valid field length.
System Action: The macro instruction was not expanded.
Severity code = 16.
Programmer Response: Probable user error. Supply a valid field length and resubmit the job.
Problem Determination: Table I, items 3, 15, 29.

**IHB130 TIMES NOT FOLLOWED BY NUMBER. GENERATION
TERMINATED.**

Explanation: In a DEFAREA macro instruction, a TIMES operand was not followed by a valid duplication factor.
System Action: The macro instruction was not expanded.
Severity code = 16.
Programmer Response: Probable user error. Supply a valid duplication factor and resubmit the job.
Problem Determination: Table I, items 3, 15, 29.

**IHB131 OPTIONAL PARAMETER SPECIFIED AFTER FIELD
DEFINITION. PARAMETER IGNORED**

Explanation: In a DEFAREA macro instruction, an optional parameter (FLAG, CNTR, or RGHT) was specified after the first field was defined.
System Action: The parameter was ignored, and the macro instruction was expanded normally. *Severity code = 4.*
Programmer Response: Probable user error. Remove the optional parameter and resubmit the job.
Problem Determination: Table I, items 3, 15, 29.

**IHB132 LABEL FOR LOAD FORMAT DATA MISSING OR
INVALID. GENERATION TERMINATED.**

Explanation: In a DEFCCW macro instruction, the required label for the load format data was not specified correctly.
System Action: The macro instruction was not expanded.
Severity code = 16.
Programmer Response: Probable user error. Supply a valid label and resubmit the job.
Problem Determination: Table I, items 3, 15, 29.

**IHB133 LABEL PREFIX FOR DEFAREA MISSING OR INVALID.
GENERATION TERMINATED.**

Explanation: In a DEFCCW macro instruction, the label prefix

from the associated DEFAREA macro instruction was not specified correctly.

System Action: The macro instruction was not expanded.
Severity code = 16.
Programmer Response: Probable user error. Supply a valid label prefix and resubmit the job.
Problem Determination: Table I, items 3, 15, 29.

**IHB134 REFMARK OR UNFORMAT NOT SPECIFIED PRIOR
TO DEFINITION OF FIRST FIELD. FORMATTED MODE
ASSUMED.**

Explanation: In a DEFCCW macro instruction, the parameter REFMARK or UNFORMAT was not specified before defining the field.
System Action: The macro instruction was expanded normally in the formatted mode. REFMARK was assumed. *Severity code = 4.*
Programmer Response: Probable user error. If unformatted mode was desired, specify the UNFORMAT parameter, and resubmit the job.
Problem Determination: Table I, items 3, 15, 29.

**IHB135 REFMARK SPECIFIED WHEN PROCESSING IN
UNFORMATTED MODE. GENERATION TERMINATED.**

Explanation: In a DEFCCW macro instruction, REFMARK was specified after UNFORMAT was specified.
System Action: The macro instruction was not expanded.
Severity code = 16.
Programmer Response: Probable user error. Re-evaluate the desired CCW chain, and resubmit the job.
Problem Determination: Table I, items 3, 15, 29.

**IHB136 THRU NOT PRECEDED BY FIELD NUMBER.
GENERATION TERMINATED.**

Explanation: In a DEFCCW macro instruction, a THRU parameter was not preceded by a valid field number.
System Action: The macro instruction was not expanded.
Severity code = 16.
Programmer Response: Probable user error. Supply a valid field number, and resubmit the job.
Problem Determination: Table I, items 3, 15, 29.

**IHB137 THRU NOT FOLLOWED BY FIELD NUMBER.
GENERATION TERMINATED.**

Explanation: In a DEFCCW macro instruction, a THRU parameter was not followed by a valid field number.
System Action: The macro instruction was not expanded.
Severity code = 16.
Programmer Response: Probable user error. Supply a valid field number, and resubmit the job.
Problem Determination: Table I, items 3, 15, 29.

**IHB138 ENDING VALUE IN THRU LESS THAN STARTING
VALUE. GENERATION TERMINATED.**

Explanation: In a DEFCCW macro instruction, a THRU parameter was specified with a starting value greater than the ending value.
System Action: The macro instruction was not expanded.
Severity code = 16.
Programmer Response: Probable user error. Correct the ending value in THRU, and resubmit the job.
Problem Determination: Table I, items 3, 15, 29.

IHB139 LAST CCW GENERATED USES COMMAND CHAINING. POSSIBLE ERROR.

Explanation: In a DEFCCW macro instruction, the last defined CCW has the command chaining bit on.
System Action: The macro instruction was expanded normally.
Severity code = 8.
Programmer Response: Probable user error. If command chaining was not desired, specify the parameter NOCHAIN immediately before the parameters which generate the last CCW, and resubmit the job.
Problem Determination: Table I, items 3, 15, 29.

IHB140 SYMBOL WITH LABEL PARAMETER MISSING OR INVALID. GENERATION TERMINATED.

Explanation: In a DEFCCW macro instruction, a LABEL parameter was specified without a valid symbol.
System Action: The macro instruction was not expanded.
Severity code = 16.
Programmer Response: Probable user error. Supply a valid symbol and resubmit the job.
Problem Determination: Table I, items 3, 15, 29.

IHB141 FIELD NUMBER FOR RBT/RFT MISSING OR INVALID. GENERATION TERMINATED.

Explanation: In a DEFCCW macro instruction, an RBT or RFT parameter was not followed by a valid field number.
System Action: The macro instruction was not expanded.
Severity code = 16.
Programmer Response: Probable user error. Supply a valid field number, and resubmit the job.
Problem Determination: Table I, items 3, 15, 29.

IHB142 SYMBOL FOR RBT/RFT MISSING OR INVALID. GENERATION TERMINATED.

Explanation: In a DEFCCW macro instruction, an RBT or RFT parameter was specified without a validly specified symbol.
System Action: The macro instruction was not expanded.
Severity code = 16.
Programmer Response: Probable user error. Supply a valid symbol, and resubmit the job.
Problem Determination: Table I, items 3, 15, 29.

IHB143 SYMBOL(S) FOR COMPARE MISSING OR INVALID. GENERATION TERMINATED.

Explanation: In a DEFCCW macro instruction, a COMPARE parameter was specified with one or both of its associated symbols invalidly specified.
System Action: The macro instruction was not expanded.
Severity code = 16.
Programmer Response: Probable user error. Supply valid symbol(s), and resubmit the job.
Problem Determination: Table I, items 3, 15, 29.

IHB144 SYMBOL FOR BRANCH MISSING OR INVALID. GENERATION TERMINATED.

Explanation: In a DEFCCW macro instruction, a BRANCH parameter was specified without a validly specified symbol following it.
System Action: The macro instruction was not expanded.
Severity code = 16.
Programmer Response: Probable user error. Supply a valid symbol, and resubmit the job.
Problem Determination: Table I, items 3, 15, 29.

IHB145 STACKER NUMBER FOR ESD MISSING OR INVALID. GENERATION TERMINATED.

Explanation: In a DEFCCW macro instruction, an ESD parameter was specified without a valid stacker number.
System Action: The macro instruction was not expanded.
Severity code = 16.
Programmer Response: Probable user error. Supply a valid stacker number, and resubmit the job.
Problem Determination: Table I, items 3, 15, 29.

IHB146 SYMBOL FOLLOWING REFMARK MISSING OR INVALID. GENERATION TERMINATED.

Explanation: In a DEFCCW macro instruction, a REFMARK parameter was specified without a valid symbol.
System Action: The macro instruction was not expanded.
Severity code = 16.
Programmer Response: Probable user error. Supply a valid symbol and resubmit the job.
Problem Determination: Table I, items 3, 15, 29.

IHB147 GENERATION TERMINATED BY E OR DE LINETYPE

Explanation: In a multiple-line WTO macro instruction, a line type of E (end) or DE (data end) was encountered prior to the end of the message.
System Action: The macro expansion is terminated at the line in which the DE or E specification was found. *Severity code = **
Programmer Response: Probable user error. Supply a valid line type and resubmit the job.
Problem Determination: Table I, items 2 (with a printout of the WTO), 3, 15, 29.

IHB148 INVALID LINETYPE, E OR DE ASSUMED

Explanation: In a multiple-line WTO macro instruction expansion, a linetype other than C, L, D, DE, or E was encountered.
System Action: The expansion is terminated with the line containing the invalid line type. Any lines following that line are ignored. *Severity code = *.*
Programmer Response: Probable user error. Supply a valid line type, and resubmit the job.
Problem Determination: Table I, items 2 (with a printout of the WTO), 3, 15, 29.

IHB149 INVALID C OR L LINETYPE, DE ASSUMED - GENERATION TERMINATED

Explanation: In a multiple-line WTO macro instruction expansion, an invalid C (control) or L (label) line type was encountered:

- Line type C can be coded only for the first line of the multiple-line WTO message; any other specification is invalid.
- Line type L can be coded only for the first line of the message, the line following the C line of the message, or the line following the first L line of the message; any other specification is invalid.

System Action: Expansion is terminated with the line in which the invalid specification is encountered; any lines following that line are ignored, and SVC 35 is not issued. *Severity code = 16.*
Programmer Response: Probable user error. Supply the correct line type, and resubmit the job.
Problem Determination: Table I, items 2 (with a printout of the WTO), 3, 15, 29.

IHB150 INVALID COMBINATION OF CHARACTERS IN xxxx OPERAND - yyyy

Explanation: The xxxx operand of the DCB macro instruction was specified with yyyy, which is an invalid combination of characters.

System Action: The xxxx field was set to zero. Severity code = 12.

Programmer Response: Probable user error. Correct the specified operand and resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB151 INVALID CHARACTER IN xxxx OPERAND - y

Explanation: The xxx operand of the DCB macro instruction was specified with y, which is an invalid character for that function.

System Action: The xxxx field was set to zero. Severity code = 12.

Programmer Response: Probable user error. Correct the specified operand and resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB152 NUMBER OF LINES REQUESTED IS 0 OR GREATER THAN 10 - GENERATION TERMINATED

Explanation: In a WTO macro expansion, the number of lines coded was either 0 or greater than 10.

System Action: The macro is not expanded. Severity code = 16.

Programmer Response: Probable user error. Recode the WTO macro with a valid number of lines, and resubmit the job.

Problem Determination: Table I, items 3, 15, 29.

IHB153 MLWTO/WTOR MUTUALLY EXCLUSIVE - GENERATION TERMINATED

Explanation: A WTOR macro instruction was coded using the multiple-line WTO macro instruction format.

System Action: The macro is not expanded. Severity code = 16.

Programmer Response: Probable user error. Recode the WTOR using the correct format, and resubmit the job.

Problem Determination: Table I, items 3, 15, 29.

IHB154 xxxx NOT A MULT. OF 2, POSSIBLE ERROR

Explanation: The operand xxxx should be specified in unframed hexadecimal; a number of characters not evenly divisible by two was specified. The assembled data may be incorrect.

System Action: The macro is expanded. Severity code = 4.

Programmer Response: Probable user error. Check the operand to ensure that it is correctly specified and resubmit the job.

Problem Determination: Table I, items 3, 4, 13, 29.

IHB232 CLOCK = OR CINTVL = REQD WHEN RETRY SPECIFIED

Explanation: Either CLOCK = or CINTVL = is a required operand of the TERMINAL macro instruction when RETRY is specified. Neither was present.

System Action: The macro instruction is not expanded. Severity code = 12.

Programmer Response: Probable user error. Make sure that either the CLOCK = or CINTVL = operand is coded with the TERMINAL macro instruction if RETRY is specified.

Problem Determination: Table I, items 13, 19, 29.

IHB233 INCONSISTENT WITH xxxx OPERAND OF THE yyyy MACRO

Explanation: The macro specified does not agree with the specification of the xxxx operand of the yyyy macro.

System Action: The macro instruction is not expanded. Severity code = 8.

Programmer Response: Probable user error. Change the specification of the xxxx operand of the yyyy macro to agree with this macro specification.

Problem Determination: Table I, items 3, 4, 13, 29.

IHB234 xxxx MACRO PREVIOUSLY DEFINED IN INBLOCK

Explanation: Only one xxxx macro allowed in this inblock subgroup.

System Action: The macro instruction is not expanded. Severity code = 12.

Programmer Response: Ensure that only one xxxx macro coded in each inblock subgroup.

Problem Determination: Table I, items 13, 19, 29.

IHB236 SECOND OPERAND NOT ALLOWED -- IGNORED

Explanation: In a TIME macro instruction, a second operand was specified with the DEC, BIN, or TU operands. A second operand (,address) can be used only with the MIC operand.

System Action: The macro expansion took place as if the second operand had not been specified. Severity code = 4.

Programmer Response: Probable user error. Omit the second operand or code the macro instruction with the MIC operand. Resubmit the job.

Problem Determination: Table I, items 13, 23, 29.

IHB237 x SPECIFIED WITH OTHER OPERANDS

Explanation: The parameter x cannot be specified in conjunction with other operands or parameters.

System Action: The macro instruction was not expanded. Severity code = 12.

Programmer Response: Probable user error. Recode the macro instruction to eliminate the conflicting operands or parameters and resubmit the job.

Problem Determination: Table I, items 19, 29.

IHB238 x AND/OR y PARAMETER(S) INCORRECT

Explanation: The x and/or y parameter on the preceding macro instruction is incorrect. The relationship of the x and/or y parameter may be incorrect with respect to another parameter.

System Action: The macro expansion is terminated. Severity code = 12.

Programmer Response: Correct the x and/or y parameter and resubmit the job.

Problem Determination: Table I, items 13, 23, 29.

IHB239 MORE THAN ONE x PARM LIST ADDRESS

Explanation: An excessive number of subparameters was specified for the x parameter.

System Action: The macro instruction was not expanded. Severity code = 12.

Programmer Response: Probable user error. Correct the subparameter specification and resubmit the job.

Problem Determination: Table I, items 19, 29.

IHB240 x = a INVALID WITH LSQA

Explanation: The operand specified as x may not be used with the LSQA operand on the ATTACH macro instruction.

System Action: The macro expansion is terminated. Severity code = 12.

Programmer Response: Correct the ATTACH macro instruction, deleting the improper operand. Resubmit the job.

Problem Determination: Table I, items 13, 23, 29.

IHB242 a INVALID FOR x, b ASSUMED

Explanation: The operand indicated by a in the message text is invalid for x. The macro expansion has been generated with b substituted for a.

System Action: Macro expansion continues. Severity code = 4.

Programmer Response: If the value substituted (b) is acceptable, no action is required. Otherwise, change a to a valid value for x.

Problem Determination: Table I, items 13, 23, 29.

IHB243 INVALID OPERAND FOR xxx OPTION

Explanation: The xxx parameter was called with an invalid operand.

System Action: The macro expansion is terminated. Severity code = 12.

Programmer Response: Probable user error. Recode the xxx parameter and resubmit the job.

Problem Determination: Table I, items 13, 23, 29.

IHB244 INVALID { KEYWORD } xxx OPERAND { POSITIONAL }

Explanation: The specified keyword or positional operand is not allowed with the xxx operand.

System Action: The macro expansion is terminated. Severity code = 12.

Programmer Response: Probable user error. Recode the operand, eliminating the erroneous keyword or positional operand, and resubmit the job.

Problem Determination: Table I, items 13, 23, 29.

IHB245 COMPLETION CODE CANNOT APPEAR IN LIST FORM

Explanation: The completion code operand cannot appear in the list form of the POST macro instruction.

System Action: The macro instruction was not expanded. The severity code = 12.

Programmer Response: Probable user error. Correct the POST macro instruction by removing the completion code operand. Rerun the job.

Problem Determination: Table I, 15, 22, 29.

IHB246 TCB OPERAND SPECIFIED WITHOUT TJID OPERAND

Explanation: In the list form of the POST macro instruction, the TCB operand was specified without including the TJID operand.

System Action: The macro instruction was partially expanded; expansion stopped when the error was detected. Severity code = 12.

Programmer Response: Correct the POST macro instruction by including the TJID operand. Rerun the job.

Problem Determination: Table I, items 15, 22, 29.

IHB247 INCORRECT NUMBER OF xxx VALUES.

Explanation: An invalid number of values was specified for the operand indicated by xxx in the message text.

System Action: Macro expansion is terminated. Severity code = 12.

Programmer Response: Probable user error. Correct the number of values for the invalid operand and reassemble the job.

Problem Determination: Table I, items 13, 23, 29.

IHB248 xxx SPECIFICATIONS NOT PAIRED

Explanation: The operand indicated by xxx in the message text was specified with an odd number of values. The number of values must be even (paired).

System Action: Macro expansion is terminated. Severity code = 12.

Programmer Response: Correct the number of values for the xxx operand and reassemble the job.

Problem Determination: Table I, items 13, 23, 29.

IHB249 INVALID xxx PARAMETER SPECIFIED

Explanation: The value of the parameter indicated by xxx in the message text is incorrect.

System Action: Macro expansion is terminated on detection of the error. Severity code = 12.

Programmer Response: Probable user error. Correct the xxx parameter and reassemble the job.

Problem Determination: Table I, items 13, 23, 29.

IHB250 DDNAME SHORT-PADDED TO 8 CHAR

Explanation: In a DCB macro instruction, the optional value of the DDNAME operand is shorter than 8 characters.

System Action: The macro instruction was expanded; the name in the DDNAME operand was padded to 8 characters. Severity code = 0.

Programmer Response: None.

IHB252 id TOO LONG FOR apdg - TRUNCATED TO 2 CHAR

Explanation: In an EXCP DCB macro instruction, the user supplied ID (id) for the appendage (apdg) was too long.

System Action: The macro instruction was expanded; the user supplied ID was truncated to 2 characters. Severity code = *.

Programmer Response: Correct the ID specifying no more than 2 characters.

Problem Determination: Table I, items 15, 22, 29.

IHB253 id TOO SHORT FOR apdg - PADDED TO 2 CHAR

Explanation: In an EXCP DCB macro instruction, the user supplied ID (id) for the appendage (apdg) was too short.

System Action: The macro instruction was expanded; the user supplied ID was padded to 2 characters. Severity code = 0.

Programmer Response: Correct the ID specifying 2 characters.

Problem Determination: Table I, items 15, 22, 29.

IHB254 oprnd NOT SPECIFIED - PRESET TO y

Explanation: In a macro instruction, a required operand, oprnd, is not specified; therefore, it is assigned the value y.

System Action: The macro instruction is expanded. Severity code = 0.

Programmer Response: Check to see if the operand in question is required; if so, specify the correct value and reassemble the program.

Problem Determination: Table I, items 15, 22, 29.

IHB256 oprnd OPERAND INVALID OR NOT SPECIFIED - SET TO y

Explanation: In a macro instruction, a required operand, oprnd, is invalid or not specified; therefore, it is set to the value y.

System Action: The macro instruction is expanded. Severity code = 4.

Programmer Response: Correct the invalid operand, and reassemble the program.

Problem Determination: Table I, items 15, 22, 29.

IHB257 BPX COUNTER INDICATES WRAP AROUND TO TOP OF CRT

Explanation: The beam position counter for the X coordinate indicates that the wrap around condition is about to occur. That is, the beam position will change from the lower right-hand corner of the matrix to the upper left-hand corner.

System Action: The macro instruction is expanded. Severity code = 4.

Programmer Response: Verify previously specified image generation macros to determine if display distortion will occur.

Problem Determination: Table I, items 15, 22, 29.

IHB258 BLC GREATER THAN OR EQUAL TO BLIM

Explanation: The buffer load counter (BLC) exceeds specified or default buffer limits (BLIM).

System Action: The macro instruction is expanded. Severity code = 4.

Programmer Response: Adjust the graphic order program so that the Buffer Load Counter does not exceed the buffer limits. Rerun the job.

Problem Determination: Table I, items 15, 22, 29.

IHB259 CURRENT BUFFER xxx = y

Explanation: This message is issued as a result of a FIND macro instruction. xxx is the specific counter and y is the current value.

System Action: None. Severity code = 0.

Programmer Response: None.

IHB260 CURRENT BEAM POSITION COUNTER IS X = m, Y = n

Explanation: This message is issued as a result of a GBPOS macro instruction where m is the value of the X coordinate counter, and n is the value of the Y coordinate counter.

System Action: None. Severity code = 0.

Programmer Response: None.

IHB261 ctr COUNTER EXCEEDS CRT LIMITS

Explanation: The ctr counter value has exceeded the limits of the specified CRT device.

System Action: The macro instruction is expanded. Severity code = 4.

Programmer Response: Correct the graphic order program to remain within the CRT limits.

Problem Determination: Table I, items 15, 29.

IHB262 LOAD VARIABLE SPACE ORDER MAY HAVE NOT BEEN SPECIFIED PRIOR TO ENTERING STROKE MODE

Explanation: The Load Variable Space order has not been specified, and a request has been made to enter Stroke Mode. This is not allowed.

System Action: The assembly continues. Severity code = 4.

Programmer Response: Verify that the GLVS macro instruction is specified. If it is not, correct and reassemble the program.

Problem Determination: Table I, items 15, 29.

IHB263 INVALID ctlbk ADDR-X-y

Explanation: The indicated system control block (ctlbk) has an invalid address, and y indicates what action the system takes.

System Action: Severity code = 8.

Programmer Response: Correct the control block address and reassemble the program.

Problem Determination: Table I, items 15, 22, 29.

IHB264 mac MORE THAN 5 POSITIONAL OPERANDS

Explanation: The macro instruction (mac) contains more than 5 positional operands; this is not allowed.

System Action: Expansion of the macro (mac) is terminated.

Severity code = 12.

Programmer Response: Correct the macro instruction, specifying no more than 4 positional operands, and reassemble the program.

Problem Determination: Table I, items 15, 22, 29.

IHB276 x INCOMPATIBLE WITH y -- IGNORED

Explanation: The operand indicated by x in the message text cannot be specified with the operand indicated by y.

System Action: Operand y is ignored and the macro expansion continues. Severity code = 4.

Programmer Response: Correct the incompatible operand and reassemble the job if the macro instruction does not expand as desired.

Problem Determination: Table I, items 13, 23, 29.

IHB278 AREAID PARAMETER NOT ALPHABETIC CHARACTER. Z IS ASSUMED.

Explanation: The AREAID keyword parameter specified in a multiple line WTO macro instruction is not an alphabetic character.

System Action: The message stream area indicated by z in the message text is assumed. If the message is routed to a display console, it will appear in the message stream. Severity code = *.

Programmer Response: Probable user error. Supply a valid AREAID and resubmit the job.

Problem Determination: Table I, items 3, 15, 29.

IHB280 x INVALID WITH y

Explanation: The operand indicated by x in the message text is invalid when the operand indicated by y is specified in the macro instruction.

System Action: The macro expansion is terminated. Severity code = 12.

Programmer Response: Correct the invalid combination of x and y and reassemble the job.

Problem Determination: Table I, items 13, 23, 29.

IHB281 xxx NOT SPECIFIED WITH MF = L FORM.

Explanation: The operand indicated by xxx in the message text was not specified with the MF = L form of the macro instruction. The xxx operand is required with the MF = L form of the macro instruction.

System Action: The macro instruction was not expanded. Severity code = 12.

Programmer Response: Specify the xxx operand in the macro instruction and reassemble the job.

Problem Determination: Table I, items 13, 23, 29.

IHB300 xxxx OPERAND INVALID AS SPECIFIED

Explanation: In an INTRO macro instruction or an MH macro instruction, the specified operand did not satisfy TCAM requirements.

System Action: The macro instruction was partially expanded; expansion stopped when the error was detected. Severity code = 12.

Programmer Response: Probable user error. Check the requirements for the operand in error and correct it.
Problem Determination: Table I, items 13, 19, 29.

IHB301 QSTART SPECIFIED - NO EXPANSION

Explanation: The user has coded a QSTART macro instruction in a QTAM application program that is assumed to be compatible with TCAM.

System Action: The macro is not expanded.

Programmer Response: Probable user error. Check to see that the program containing the macro is being reassembled to achieve TCAM compatibility.

Problem Determination: Table I, items 13, 19, 29.

IHB302 NAME FIELD LONG - TRUNCATE TO xxx CHARACTERS

Explanation: The user coded a TERMINAL, PROCESS, or TLIST entry whose name field exceeds the length specified in the TTABLE macro instruction.

System Action: The entry name is truncated to xxx characters.

Programmer Response: Probable user error. Correct the erroneous entry, specifying the correct number of characters.

Problem Determination: Table I, items 13, 19, 29.

IHB303 INVALID OPERAND xxx, yy ASSUMED

Explanation: Operand xxx in an INTRO macro instruction is specified incorrectly. In the message text, yy is the default value assigned for the operand in error.

System Action: The macro instruction will be expanded with yy substituted for the invalid operand. Severity code = 12.

Programmer Response: Probable user error. If the default value does not satisfy the user's requirements, either recode the INTRO macro specifying the correct value for the operand in error and reassemble, or instruct the operator to specify a satisfactory value in responding to a message issued during execution.

Problem Determination: Table I, items 13, 19, 29.

IHB304 xxx SPECIFIED TOO MANY CHARACTERS

Explanation: The xxx operand on the INTRO macro instruction has specified a character string longer than eight characters.

System Action: The macro instruction is expanded and the default value is substituted for the erroneous operand. Severity code = 12.

Programmer Response: Probable user error. If the default value is unsatisfactory, either respecify the INTRO macro instruction correctly and reassemble, or instruct the operator to specify a satisfactory value in responding to a message issued at INTRO execution time.

Problem Determination: Table I, items 13, 19, 29.

IHB305 xxx MACRO NOT SPECIFIED

Explanation: An INTRO macro instruction has not been specified prior to the READY macro instruction, or a TTABLE macro instruction has not been specified prior to the INVLIST macro instruction.

System Action: The READY or INVLIST macro instruction is not expanded. Severity code = 12.

Programmer Response: Probable user error. Make sure that READY follows INTRO and/or that INVLIST follows TTABLE in the assembly of the TCAM message control program.

Problem Determination: Table I, items 13, 19, 29.

IHB306 TOO MANY OPDATA PARAMETERS

Explanation: The OPDATA operand of a TERMINAL, TPROCESS, or TLIST macro specified more OPTION fields than

were defined by OPTION macro instructions.

System Action: The OPDATA operands that exceeded the number of OPTION fields are ignored. Severity code = 12.

Programmer Response: Probable user error. Make sure that a sufficient number of OPTION macros is used to define the necessary number of OPTION fields.

Problem Determination: Table I, items 13, 19, 29.

IHB307 INCONSISTENT LENGTH FOR xxx

Explanation: The operand lengths of the INVLIST macro instructions are not consistent.

System Action: The macro instruction is not expanded.

Programmer Response: Probable user error. Make sure that the operands of the INVLIST macro instructions specify the same length for the polling characters.

Problem Determination: Table I, items 13, 19, 29.

IHB308 INVALID LENGTH QUALIFIER SPECIFIED

Explanation: The length qualifier for an OPTION macro instruction is invalid.

System Action: The macro instruction is not expanded.

Programmer Response: Probable user error. Make sure that any length qualifier for OPTION macro instructions are coded correctly. CL8' ' or XL4'0' are examples of correctly coded length qualifiers.

Problem Determination: Table I, items 13, 19, 29.

IHB309 LENGTH QUALIFIER REQUIRED

Explanation: The length has not been given for the fields defined by an OPTION macro instruction; length qualifiers are required.

System Action: The macro instruction is not expanded.

Programmer Response: Probable user error. Make sure that any fields defined by an OPTION macro instruction include length qualifiers; for example, make sure that XL8'0' is specified and not X'0000000000000000'.

Problem Determination: Table I, items 13, 19, 29.

IHB310 INVALID CONSTANT TYPE SPECIFIED

Explanation: An invalid constant has been specified while defining the fields for an OPTION macro instruction.

System Action: The macro instruction is not expanded.

Programmer Response: Probable user error. Make sure that the constants specified are defined correctly; for example, make sure that XL3'0' is specified, and not GL3'0'.

Problem Determination: Table I, items 13, 19, 29.

IHB311 xxx MACRO PREVIOUSLY SPECIFIED

Explanation: More than one xxx macro has been included in this Message Control Program.

System Action: The macro instruction is not expanded.

Programmer Response: Probable user error. Include only one xxx macro instruction in a Message Control Program. Resubmit the job.

Problem Determination: Table I, items 13, 19, 29.

IHB312 MACRO MUST FOLLOW xxx MACRO WITH yyy

Explanation: A TCAM macro instruction was improperly placed in the source program. It must follow an xxx macro instruction, and it must specify the required yyy operand.

System Action: The macro instruction was not expanded.

Programmer Response: Probable user error. Make sure that the macro instruction, with the required yyy operand, correctly follows the xxx macro instruction.

Problem Determination: Table I, items 13, 19, 29.

IHB313 MORE THAN ONE NOLOG EXIT

Explanation: More than one LOGON macro instruction in an MH has specified a NOLOG = operand, and only one exit routine may be specified for each MH.

System Action: The macro instruction is not expanded.

Severity code = 12.

Programmer Response: Probable user error. Only one LOGON macro instruction per MH may specify the NOLOG = operand. Remove any additional NOLOG = operands from subsequent LOGON macro instructions and reassemble the Message Control Program.

Problem Determination: Table I, items 13, 19, 29.

IHB315 SEQUENCE ERROR - MUST PRECEDE LAST ENTRY SPECIFIED BY TTABLE MACRO

Explanation: The last entry defined by the TTABLE macro instruction is not the last terminal entry specified.

System Action: The macro instruction is not expanded.

Programmer Response: Probable user error. Make sure that the last entry in the terminal table specified by the TTABLE macro instruction is the last terminal specified by a TERMINAL macro instruction.

Problem Determination: Table I, items 13, 19, 29.

IHB316 MAXIMUM NUMBER OF OPTION FIELDS EXCEEDED

Explanation: The TCAM user has specified more than the maximum number of OPTION macro instructions permitted in one Message Control Program.

System Action: The macro instruction will not be expanded.

Severity code = 12.

Programmer Response: Make sure that no more than 253 OPTION macro instructions are included in one Message Control Program.

Problem Determination: Table I, items 13, 19, 29.

IHB317 OPDATA INVALID - NO OPTION FIELDS SPECIFIED

Explanation: No OPTION macro instructions were coded in the terminal table, but an OPDATA operand was coded on a TERMINAL, TRPROCESS, or TLIST macro instruction.

System Action: All OPDATA operands are ignored. The macro is partially expanded. Severity code = 12.

Programmer Response: Probable user error. Make sure that the required OPTION macro instructions are coded, or remove OPDATA operand(s) from the macro instruction.

Problem Determination: Table I, items 13, 19, 29.

IHB318 QUEUES OPERAND xx INVALID WITH MSUNITS = 0

Explanation: The MSUNITS operand of the INTRO macro instruction specified that no storage Message Queues Data Set was to be used, but the QUEUES operand of a TERMINAL or TPROCESS macro instruction specified that storage message queues would be used.

System Action: The macro instruction is not expanded.

Severity code = 12.

Programmer Response: Probable user error. Modify the QUEUES operand to indicate disk message queues only, or code the MSUNITS operand of the INTRO macro instruction with a non-zero integer.

Problem Determination: Table I, items 13, 19, 29.

IHB319 CONTINUATION EXPECTED GENERATION DEFERRED

Explanation: An INVLIST macro instruction series using the continuation capability was coded. This statement is not the last in the series, and generation of the macro instruction is deferred until the operands of the last macro instruction have been validated.

Programmer Response: None.

IHB320 TOO MANY ENTRIES SPECIFIED

Explanation: More than 200 entries were specified by one INVLIST macro series using the continuation capability. Two hundred is the maximum number of entries supported by an INVLIST macro instruction.

System Action: The macro instruction is not expanded.

Severity code = 12.

Programmer Response: Probable user error. Recode the INVLIST macro series that is in error, and resubmit the job.

Problem Determination: Table I, items 13, 19, 29.

IHB342 INVALID OPERANDS SPECIFIED

Explanation: Operands invalid for the TCAM macro instruction are present.

System Action: The macro instruction is not expanded.

Severity code = 12.

Programmer Response: : Probable user error. Specify correct operands for the macro instruction, and resubmit the job.

Problem Determination: Table I, items 13, 19, 29.

IHB345 DIALNO = REQD WHEN CINTVL OR CLOCK SPECIFIED

Explanation: TERMINAL macro instruction operand DIALNO is required when CINTVL or CLOCK is specified.

System Action: The macro instruction is not expanded.

Severity code = 12.

Programmer Response: Probable user error. Make sure that the DIALNO operand is coded with the TERMINAL macro instruction if CINTVL or CLOCK is specified.

Problem Determination: Table I, items 13, 19, 29.

IHB346 xxx AND yyy MUTUALLY EXCLUSIVE

Explanation: TERMINAL macro instruction operands xxx and yyy are mutually exclusive.

System Action: The macro instruction is not expanded.

Severity code = 12.

Programmer Response: Probable user error. Make sure that the operands xxx and yyy are not coded with the same TERMINAL macro instruction.

Problem Determination: Table I, items 13, 19, 29.

IHB375 MCSFLAG = HRDCPY INVALID FOR MLWTO - GENERATION TERMINATED.

Explanation: The 'queue for hardcopy only' option (MCSFLAG = HRDCPY) may not be specified for a multiple line WTO message.

System Action: The macro generation is terminated. Severity code = 16.

Programmer Response: Specify the invalid parameter and resubmit the job.

Problem Determination: Table I, items 13, 11, 29.

Checkpoint/Restart Messages (IHJ)

Component Name	IHJ
Program Producing Message	Checkpoint/restart.
Audience and Where Produced	For operator: console.
Message Format	<pre> xx IHJnnns text xx Message reply identification (absent, if operator reply not required). nnn Message serial number. s Type code: A Action; operator must perform a specific action. I Information; no operator action is required. text Message text. </pre>
Comments	None.
Problem Determination	Refer to fold-out Tables I and II at the back of this publication for problem determination instructions.

IHJ0001 CHKPT jjj [(ddn] NOT TAKEN (xx)

Explanation: During execution of a CHKPT macro instruction, an error occurred before the checkpoint routine wrote any part of a checkpoint entry.

In the message text, jjj is the jobname, ddn is the data definition name of the checkpoint data set (which is omitted if xx is 01), and xx explains why the checkpoint entry was not written:

xx Explanation

- 01 A checkpoint parameter list error was encountered. (Return code - 08.)
- 02 An uncorrectable input/output error occurred or a DD statement error was encountered while opening the data control block (DCB) for the checkpoint data set. Possibly, a DD statement was missing. (Return code - 0C.)
- 03 Insufficient space was available for a work area. (Return code - 08.)
- 04 The checkpoint work area extended too low in storage; too few bytes were below the work area to write a valid record on the checkpoint device. (Return code - 08.)
- 05 The checkpoint data set key length was not equal to zero. (Return code - 08.)
- 06 The checkpoint data set record format was not U. (Return code - 08.)
- 07 The data control block (DCB) for the checkpoint data set was opened for other than basic sequential access method (BSAM) or basic partitioned access method (BPAM) processing. (Return code - 08.)
- 08 The time interval specified in the STIMER macro instruction had not elapsed. (Return code - 08.)
- 09 The CHKPT macro instruction was issued in an exit routine other than the end of volume exit routine. (Return code - 08.)

- 10 A graphic data control block (DCB) has been detected but is not supported in checkpoint restart. (Return code - 08.)
- 11 The current task was a subtask. (Return code - 08.)
- 12 The current task had subtasks. (Return code - 08.)
- 14 A reply to a WTOR macro instruction was not received. (Return code - 08.)
- 15 An incorrect checkpoint identification length or format was encountered. (Return code - 08.)
- 16 The checkpoint data set device type was not magnetic tape or direct access. (Return code - 08.)
- 19 Either MACRF = W was not specified for the checkpoint data control block (DCB), or the data control block was opened by the user's program, but was not opened for output. (Return code - 08.)
- 20 The step was using storage outside of its requested region. (Return code - 08.)
- 21 LABEL = AL or LABEL = AUL was coded in the DD statement for the checkpoint data set. These values for the LABEL parameter must not be used in a checkpoint data set DD statement. (Return code - 08.)
- 25 An uncorrectable input/output error occurred while reading a job control table (JCT). (Return code - 0C.)
- 27 Secondary allocation occurred while writing the checkpoint data set on a direct access volume, or end of volume occurred twice while writing the checkpoint data set on tape. (Return code - 08.)
- 29 The OPTCD subparameter of the DCB parameter was coded incorrectly. The value coded is not acceptable for a checkpoint data set. (Return code - 08.)
- 30 An uncorrectable input/output error occurred while quiescing pending input/output requests. (Return code - 0C.)

System Action: A checkpoint entry was not written. A restart was not requested, but any previous request for a restart remains in effect.

If MOD is not the disposition of the checkpoint data set and if this is the first issuance of the CHKPT macro instruction after the data control block for the data set was opened, then all checkpoint entries in the data set are lost. (The data control block may have been opened by the programmer or as a result of this checkpoint request.) However, if xx is 01, no entries are lost.

Programmer Response: If xx was 25 or 30, resubmit the job. If xx was other than 25 or 30, probable user error.

If xx is 01, 02, 05, 06, 07, 15, 16, 18, 19, 21, or 29, correct the indicated error and resubmit the job.

If xx is 03 or 04, use a larger storage area. Then resubmit the job.

If xx is 08, cancel the time interval before issuing the CHKPT macro instruction, and then restore the interval. Then resubmit the job.

If xx is 09, make sure that the CHKPT macro instruction is not issued in an exit routine other than the end-of-volume exit routine. Then resubmit the job.

If xx is 11 or 12, make sure that the CHKPT macro instruction is not issued when multiple tasks (created by the ATTACH macro instruction) exist. Then resubmit the job.

If xx is 14, issue a WAIT macro instruction after the WTOR macro instruction, but before the CHKPT macro instruction. Then resubmit the job.

If xx is 20, make the step ineligible to roll out other steps and use a REGION parameter requesting a larger storage area or change the step so that it does not issue a CHKPT macro instruction when it could cause rollout. Then resubmit the job.

Operator Response: If xx is 25 or 30, and if the programmer indicated that the job was to be canceled if it did not take checkpoints correctly, cancel the job; otherwise, none. (The job may execute successfully and not require restart.) If the error persists, specify a different location for the SYS1.SYSJOBQE data set when the system is restarted.

Problem Determination: Table I, items 1, 3, 13, 29.

IHJ001I jji (ddn,utn,ser) INVLN checkid (xx)

Explanation: During execution of a CHKPT macro instruction, an error occurred while the checkpoint routine was writing a checkpoint entry.

In the message text, jji is the jobname, ddn is the data definition name of the checkpoint data set, utn is the unit name, ser is the serial number of the volume containing the data set, checkid is the checkpoint identification, and xx explains why the checkpoint was invalid:

xx Explanation

- 17 Execution of a STOW macro instruction was unsuccessful; there was no space in the checkpoint data set directory. (Return code - 08.)
- 22 An uncorrectable input/output error occurred while reading system control blocks from the SYS1.SYSJOBQE data set. (Return code - 0C.)
- 23 An uncorrectable input/output error occurred while writing the checkpoint data set. (Return code - 0C.)
- 26 Execution of a STOW macro instruction was unsuccessful; a permanent input/output error occurred. (Return code - 0C.)
- 27 End-of-volume occurred while writing the checkpoint data set on a direct access volume and secondary allocation was requested and allocated, or end-of-volume occurred twice while writing the checkpoint data set on tape. (Return code - 08.)

System Action: A partial invalid checkpoint entry was written. A restart was not requested, but any previous request for a restart remains in effect.

Programmer Response: If checkpoint identifications specified by the programmer are being used in a sequential data set, then a checkpoint identification different from checkid in the message text must be specified for the next entry in order to make the next entry retrievable in a restart.

If xx is 17, correct the checkpoint data set directory, and resubmit the job.

If xx is 22, 23, or 26 resubmit the job.

If xx is 22, and if the programmer indicated that the job was to be canceled if it did not take checkpoints correctly, cancel the job; otherwise, none. If the error persists, specify a different location for the SYS1.SYSJOBQE data set when the system is started again.

If xx is 23, and if the programmer indicated that the job was to be canceled if it did not take checkpoints correctly, cancel the job; otherwise, none. If the job is canceled or terminates abnormally, and a rerun is attempted, then (1) if a nonspecific volume was requested for the checkpoint data set, mount a different volume during the rerun than was originally, or (2) vary offline the device originally containing the checkpoint data set.

If xx is 27, and if the programmer indicated that the job was to be canceled if it did not take checkpoints correctly, cancel the job; otherwise, none. If the job is canceled or terminates abnormally, attempt a rerun only if the volume containing the checkpoint data set was requested as a nonspecific volume. During the rerun, mount a volume (tape or direct access) containing more available space than was contained on the volume used originally.

Problem Determination: Table I, items 1, 3, 13, 29.

IHJ002I jji (ddn,utn,ser) ERROR checkid

Explanation: During execution of a CHKPT macro instruction, an uncorrectable input/output error occurred while the checkpoint routine was writing a job control table (JCT) after it had written a checkpoint entry.

In the message text, jji is the jobname, ddn is the data definition name of the checkpoint data set, utn is the unit name, ser is the serial number of the volume containing the data set, and checkid is the checkpoint identification.

System Action: A valid checkpoint entry that can be used to perform a deferred restart was written. A restart was not requested, but any previous request for a restart remains in effect.

Programmer Response: As desired, resubmit the job as is or request that a restart be performed at the indicated checkpoint.

Operator Response: The programmer indicated that the job was to be canceled if this message was issued, cancel the job; otherwise, none. (The job may execute successfully and not require restart.) If the error persists, specify a different location for the SYS1.SYSJOBQE data set when the system is started again.

Problem Determination: ; Table I, items 1, 3, 13, 29.

IHJ004I jji (ddn,utn,ser) CHKPT checkid

Explanation: A CHKPT macro instruction was executed successfully; no errors occurred.

In the message text, jji is the jobname, ddn is the data definition name of the checkpoint data set, utn is the unit name, ser is the serial number of the volume containing the data set, and checkid is the checkpoint identification.

System Action: A valid checkpoint entry was written. A restart was requested.

Programmer Response: If a deferred restart is to be performed:

- Code the checkpoint identification (checkid in the message text) in the RESTART parameter of the JOB statement.
- If multiple checkpoint data sets were used, use ddn in the message text to determine the name of the data set containing the desired checkpoint entry. Code the data set name in the DSNAM parameter of the SYSCHK DD statement.
- If the checkpoint data set is multivolume, indicate on the SYSCHK DD statement that the volume containing the checkpoint data set is the first (or only) volume containing the data set. That is, code the serial number (ser in the message text) in the VOLUME = SER parameter or, if the data set is to be retrieved using the catalog, code the sequence number of the volume in the volume sequence subparameter of the VOLUME parameter.

Then resubmit the job.

IHJ0051 jji (ddn,utn,ser) ENQS checkid

Explanation: A CHKPT macro instruction was executed successfully. Although no errors occurred, the user's program was enqueued upon resources. (The ENQ macro instruction was issued by either the problem program, the BDAM READ macro instruction with exclusive control, the RESERVE macro instruction, or the BDAM WRITE macro instruction with variable-length (V) or undefined (U) record format.) Note that the enqueues will not be re-established if restart occurs. In the message text, jji is the jobname, ddn is the data definition name of the checkpoint data set, utn is the unit name, ser is the serial number of the volume containing the data set, and checkid is the checkpoint identification.

System Action: A valid checkpoint entry was written. A restart was requested.

Programmer Response: Make sure that the program re-establishes the enqueues upon restart.

IHJ0061 jji RESTARTING AT wwwwww xxxxxx

Explanation: During execution of a checkpoint restart for job jji, the virtual storage indicated in the message was requested. In the message text, wwwwww is the lowest address and xxxxxx is the highest address in virtual storage.

System Action: If the required areas are currently unavailable, restart is delayed until the areas are available.

Operator Response: Use the DISPLAY A command to determine if the required areas are occupied by system tasks or by other job step tasks.

If the area is occupied by another job step task, either allow the system task to continue and terminate (if a reader), or stop the system task (if a reader or writer).

If the area is occupied by another job step task, either allow the job step task to continue and terminate, or cancel the job step task.

IHJ0071 RESTART NOT SUCCESSFUL FOR jji (xx,ddd)

Explanation: During execution of a checkpoint restart for job jji, an error occurred.

In the message text, xx is the code used to identify why the restart was not successful and, for tape errors, ddd identifies the unit address.

xx Explanation

- 02 Either one of the following conditions existed: 1) the checkpointing job or step specified ADDRSPC = REAL (V = R) and the restarting job or step did not, or 2) the checkpointing job or step did not specify ADDRSPC = REAL (V = R) and the restarting job or step did.

- 24 An uncorrectable input/output error occurred while reading a job file control block (JFCB).
- 28 An uncorrectable input/output error occurred in the user's nonstandard label (NSL) routine.
- 31 A system failure occurred in the reader/interpreter.
- 32 A system failure occurred during reinterpretation.
- 33 The checkpoint data set is partitioned and the specified entry could not be found.
- 34 A DD statement was missing for the restarted step.
- 35 A checkpoint entry record of undetermined type was encountered.
- 36 An uncorrectable input/output error occurred while reading or writing a system control block on the SYS1.SYSJOBQE data set. This error will also occur if MSGLEVEL = 1 is not specified on the restart JOB card of a deferred restart or in the original JOB card for an automatic restart.
- 37 A specified checkpoint entry could not be found.
- 38 An uncorrectable input/output error occurred while reading the checkpoint data set.
- 40 An uncorrectable input/output error occurred while reading standard volume labels.
- 44 Insufficient devices were available for restart.
- 48 An uncorrectable input/output error occurred while reading a volume label on a direct access device.
- 52 A module, which was located in the link pack area and was being used by job jji when the checkpoint was taken, is either not in that area now or is in a different location in that area.
- 54 ANSI label used for SYSIN/SYSOUT tape.
- 60 Data set repositioning errors occurred on tape.
- 64 Record repositioning errors occurred on tape.
- 72 An uncorrectable input/output error occurred while reading a data set control block (DSCB). This message is also issued if a data set was scratched or deleted.
- 76 A direct access data set (other than the system input data set) being processed for input did not occupy the same extent as it did originally; that is, discrepancies were found in comparing the space allocations described in the data extent block (DEB) and the data set control block (DSCB).
- 79 DUMMY was specified for an open data set and either the data set was not being processed by the basic or queued sequential access methods or the checkpoint at which restart was to occur was established in an end of volume exit routine for the data set.
- 82 The TCAM control program was not active at restart.
- 83 The QNAME = parameter's DCB is not the name of a process entry in the terminal table.
- 84 A QNAME = parameter's process entry is being used by another user.
- 85 Core storage is not available in the Message Control Program to build necessary control blocks.
- 92 An error occurred during basic partitioned access method (BPAM) processing. For example, an error was detected after the convert routine or after reading the directory blocks.
- 96 An error occurred during use of the STOW macro instruction to delete a member from the directory.
- System Action:** Restart for job jji is terminated.
- Programmer Response:** If xx is 33, 34, 35, 37, 44, 52, 76, or 79, probable user error.
- If xx is 02, make sure that the V = R status of both the checkpoints and restarting job or step is the same. That is, if ADDRSPC = REAL was specified at checkpoint time, it can only, and must be specified at restart time.
- If xx is 33 or 37, make sure that the checkpoint identification subparameter of the RESTART parameter of the JOB statement

specifies a checkpoint entry on the volume specified by the SYSCCHK DD statement. Then resubmit the job.

If xx is 34, supply the missing DD statement. Then resubmit the job.

If xx is 35, make sure that the program does not write in the checkpoint data set. Then resubmit the job.

If xx is 38, 60, 64, or 96, either restart at an earlier checkpoint or repeat the original execution, using a different volume. Then resubmit the job.

If xx is 44, ensure that the UNIT parameter of the DD statement accurately reflects the device requirements for the data set. Then resubmit the job.

If xx is 52, make sure that the IPL parameters are the same parameters that were in use when the checkpoint was taken.

If xx is 54, make sure that the type specified for SYSIN/SYSOUT has IBM standard labels. ANSI labels are not permitted for SYSIN/SYSOUT.

If xx is 72, ensure that no data set has been scratched or deleted.

If xx is 76, make sure that no input data set (other than the system input data set) has been expanded, or rewritten, in its original volume. Then resubmit the job.

If xx is 79, make sure that DUMMY is specified only for data sets being processed by the queued or basic sequential access methods. Also, make sure that restart is not to occur at a checkpoint that was established in an end of volume exit routine for a data set that has been made dummy.

If xx is 24, 36, or 92, and if the restart was deferred, the restart may be attempted again. If the error persists, specify a different location for the SYS1.SYSJOBQE data set when the system is started again.

If xx is 28, 40, 48, or 72, and if the restart was deferred, the restart may be attempted again. If a preceding input/output error message for the restarted job identified the device in error, vary offline the device before attempting the restart again.

If xx is 31 or 32, resubmit the job.

If xx is 38, and if the restart was deferred, the restart may be attempted again. However, vary offline the device containing the checkpoint data set before attempting the restart again.

If xx is 82 or 85 make sure that the TCAM control program region is active and is large enough to add control blocks. Resubmit the job.

If xx is 83 or 84 make the necessary corrections to the QNAME = parameter and resubmit the job.

Problem Determination: Table I, items 1, 3, 13, 29.

IHJ0081 jjj RESTARTED

Explanation: A checkpoint restart for job jjj has completed successfully.

System Action: Processing of job jjj continues.

Operator Response: None.

Problem Determination

Problem determination is the activity required to identify a failing hardware unit or program and determine who is responsible for maintenance.

Problem determination is accomplished by using procedures specified by IBM. In some cases, these procedures may be initiated by a message or code which requires operator or programmer response. The response may include the requirement for additional problem-related data to be collected and will attempt, where possible, to indicate "probable" failure responsibility.

Problem determination information is included for applicable messages and codes under the heading "Problem Determination." Standard problem determination actions are identified as items of Tables I and II. Unique actions are identified following the list of standard actions to be taken. In any case, it is intended that the specified actions be taken before calling IBM for support.

Table I

If the problem recurs, follow the problem determination aids specified by the associated message or code before calling IBM for support:	
1. Make sure that MSGLEVEL=(1,1) was specified in the JOB statement.	14. In the normal response to this message, the programmer/operator requested to execute a specific program. Save all output from program.
2. Save the console sheet from the primary console. In systems with Multiple Console Support (MCS), save a copy of the hard copy log.	15. Save the program listing associated with the job.
3. Save the job stream associated with the job.	16. Save the dump.
4. Save the system output (SYSOUT) associated with the job.	17. Have the system generation (SYSGEN) output available from a. Stage I b. Stage II
5. Make sure that the failing job step includes a: a. SYSABEND DD statement. b. SYSUDUMP DD statement. c. PLIDUMP DD statement.	18. Execute the IFCEREPO service aid program, specifying PARM to dump the SYS1.LOGREC data set. Save the resulting output.
6. Make sure that the PARM parameter of the EXEC statement specifies: a. MAP e. CORE, if applicable b. LIST f. XREF c. DIAG g. DUMP d. MSG=AP	19. Save the assembly listing associated with the job.
7. Execute the LISTIDR function of the AMBLIST service aid program to obtain a list of all members with a PTF or local fix, and save the output. Execute the program against the: a. SYS1.LINKLIB data set. b. SYS1.SVCLIB data set. c. library containing the program that issued the message.	20. Save the control cards associated with the job.
8. Execute the IMCJOBQD service aid program to obtain a formatted copy of the contents of the SYS1.SYSJOBQD data set.	21. Save the compiler output associated with the job.
9. Execute the IMCJOBQD service aid program to obtain a formatted a. an object module listing, specifying the LISTOBJ function. b. a load module map and cross-reference listing, specifying the OUTPUT=BOTH option of the LISTLOAD function.	22. Save the source input associated with the job.
10. Have a copy of the Message Control Program (MCP) available.	23. Save the source program listing associated with the job.
11. Execute the AMDSADMP service aid program to dump the contents of real storage and page data sets on magnetic tape. After restarting the system, execute the GO function of the AMDPRDMP service aid program to print the real storage portion of the dump tape produced by AMDSADMP. Save both the tape from AMDSADMP (should further information from the tape be required) and the listing from AMDPRDMP.	24. Run OLTEP diagnostics for the problem device and save the output.
12. Execute the SEREP program, and save the resulting output.	25. Execute the IEHLIST system utility program to obtain a list of a. volume table of contents of the associated volume, specifying the FORMAT option. b. volume table of contents of the associated volume, specifying the DUMP option. c. directory of the associated data set. d. the system catalog.
13. Save all the associated output.	26. Execute the IEBTPCH data set utility to a. print the directory of the applicable data set. b. print the applicable data set. c. print the applicable member. d. print the applicable procedure.
	27. Have the linkage editor/loader map available.
	28. Save the associated volume.
	29. Contact IBM for programming support.
	30. Contact IBM for hardware support.

Table I

If the problem recurs, follow the problem determination aids specified by the associated message or code before calling IBM for support:			
<ol style="list-style-type: none"> 1. Make sure that MSGLEVEL=(1,1) was specified in the JOB statement. 2. Save the console sheet from the primary console. In systems with Multiple Console Support (MCS), save a copy of the hard copy log. 3. Save the job stream associated with the job. 4. Save the system output (SYSOUT) associated with the job. 5. Make sure that the failing job step includes a: <ol style="list-style-type: none"> a. SYSABEND DD statement. b. SYSUDUMP DD statement. c. PLIDUMP DD statement. 6. Make sure that the PARM parameter of the EXEC statement specifies: <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <ol style="list-style-type: none"> a. MAP b. LIST c. DIAG d. MSG=AP </td> <td style="width: 50%; vertical-align: top;"> <ol style="list-style-type: none"> e. CORE, if applicable f. XREF g. DUMP </td> </tr> </table> 7. Execute the LISTDR function of the AMBLIST service aid program to obtain a list of all members with a PTF or local fix, and save the output. Execute the program against the: <ol style="list-style-type: none"> a. SYS1.LINKLIB data set. b. SYS1.SVCLIB data set. c. library containing the program that issued the message. 8. Execute the IMCJOBQD service aid program to obtain a formatted copy of the contents of the SYS1.SYSJOBQE data set. 9. Execute the IMCJOBQD service aid program to obtain a formatted <ol style="list-style-type: none"> a. an object module listing, specifying the LISTOBJ function. b. a load module map and cross-reference listing, specifying the OUTPUT=BOTH option of the LISTLOAD function. 10. Have a copy of the Message Control Program (MCP) available. 11. Execute the AMDSADMP service aid program to dump the contents of real storage and page data sets on magnetic tape. <p>After restarting the system, execute the GO function of the AMDPRDMP service aid program to print the real storage portion of the dump tape produced by AMDSADMP.</p> <p>Save both the tape from AMDSADMP (should further information from the tape be required) and the listing from AMDPRDMP.</p> 12. Execute the SEREP program, and save the resulting output. 13. Save all the associated output. 	<ol style="list-style-type: none"> a. MAP b. LIST c. DIAG d. MSG=AP 	<ol style="list-style-type: none"> e. CORE, if applicable f. XREF g. DUMP 	<ol style="list-style-type: none"> 14. In the normal response to this message, the programmer/operator was requested to execute a specific program. Save all output from that program. 15. Save the program listing associated with the job. 16. Save the dump. 17. Have the system generation (SYSGEN) output available from <ol style="list-style-type: none"> a. Stage I b. Stage II 18. Execute the IFCEREPO service aid program, specifying PARM=(N), to dump the SYS1.LOGREC data set. Save the resulting output. 19. Save the assembly listing associated with the job. 20. Save the control cards associated with the job. 21. Save the compiler output associated with the job. 22. Save the source input associated with the job. 23. Save the source program listing associated with the job. 24. Run OLTEP diagnostics for the problem device and save the output. 25. Execute the IEHLIST system utility program to obtain a list of the <ol style="list-style-type: none"> a. volume table of contents of the associated volume, specifying the FORMAT option. b. volume table of contents of the associated volume, specifying the DUMP option. c. directory of the associated data set. d. the system catalog. 26. Execute the IEBTPCH data set utility to <ol style="list-style-type: none"> a. print the directory of the applicable data set. b. print the applicable data set. c. print the applicable member. d. print the applicable procedure. 27. Have the linkage editor/loader map available. 28. Save the associated volume. 29. Contact IBM for programming support. 30. Contact IBM for hardware support.
<ol style="list-style-type: none"> a. MAP b. LIST c. DIAG d. MSG=AP 	<ol style="list-style-type: none"> e. CORE, if applicable f. XREF g. DUMP 		

Table II

GTF FOR PROBLEM DETERMINATION
<p>Format 1: Tracing without prompting for event keywords.</p> <p>Before reproducing the problem, have the system operator issue a START GTF command specifying tape output, MODE=EXT and TIME=YES. In response to message AHL100A, he should type TRACE=opt, where opt is the trace option keyword indicated for the particular message or code, within the text of his reply.</p> <p>When data for the problem has been recorded, run the AMDPRDMP service aid program using the EDIT statement to format the trace output, specifying DDNAME=(ddname of the trace data set).</p>
<p>Format 2: Tracing with prompting for event keywords.</p> <p>Before reproducing the problem, have the system operator issue a START GTF command specifying tape output, MODE=EXT and TIME=YES. In response to the message AHL100A, he should specify the trace option keywords indicated for the associated message or code within the text of his reply. Then, in response to the message AHL101A, he should specify the event keywords also indicated with the associated message or code.</p> <p>When data for the problem has been recorded, run the AMDPRDMP service aid program using the EDIT statement to format the trace output, specifying DDNAME=(ddname of the trace data set).</p>
<p>Format 3: Specialized tracing action.</p> <p>Before reproducing the problem, have the system operator issue a START GTF command specifying tape output, MODE=EXT and TIME=YES. In response to message AHL100A, he should type 'TRACE=SYS,USR'. The DD statement for a data set in error should specify DCB=DIAGNS=TRACE.</p> <p>When data for the problem has been recorded, execute the EDIT function of AMDPRDMP specifying the options SYS and USR=FFF.</p>

Figure 3. Problem Determination



International Business Machines Corporation
Data Processing Division
1133 Westchester Avenue, White Plains, New York 10604
(U.S.A. only)

IBM World Trade Corporation
821 United Nations Plaza, New York, New York 10017
(International)

Your views about this publication may help improve its usefulness; this form will be sent to the author's department for appropriate action. Using this form to request system assistance or additional publications will delay response, however. For more direct handling of such requests, please contact your IBM representative or the IBM Branch Office serving your locality.

Possible topics for comment are:

Clarity Accuracy Completeness Organization Index Figures Examples Legibility

Cut or Fold Along Line

What is your occupation? _____
Number of latest Technical Newsletter (if any) concerning this publication: _____
Please indicate in the space below if you wish a reply.

Thank you for your cooperation. No postage stamp necessary if mailed in the U.S.A. (Elsewhere, an IBM office or representative will be happy to forward your comments.)

Cut or Fold Along Line

Your comments, please . . .

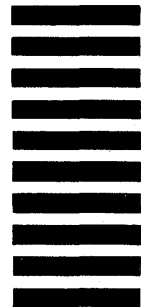
This manual is part of a library that serves as a reference source for system analysts, programmers, and operators of IBM systems. Your comments on the other side of this form will be carefully reviewed by the persons responsible for writing and publishing this material. All comments and suggestions become the property of IBM.

Fold

Fold

First Class
Permit 81
Poughkeepsie
New York

Business Reply Mail
No postage stamp necessary if mailed in the U.S.A.



Postage will be paid by:

International Business Machines Corporation
Department D58, Building 706-2
PO Box 390
Poughkeepsie, New York 12602

Fold

Fold

OS/VS Message Library: VS2 System Printed in U.S.A. GC38-1002-1



International Business Machines Corporation
Data Processing Division
1133 Westchester Avenue, White Plains, New York 10604
(U.S.A. only)

IBM World Trade Corporation
821 United Nations Plaza, New York, New York 10017
(International)