GC28-1374-1
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Program Product

MVS/370 Message Library: System Messages Volume 1 AHL - IEA

IBM

Second Edition (January 1985)

This is a major revision of, and obsoletes, GC28-1374-0 and Technical Newsletter GN28-1009. See the Summary of Amendments following the Contents for a summary of the changes made to this manual. Technical changes or additions to the text are indicated by a vertical line to the left of the change.

This edition applies to Version 1 Release 3.4 of MVS/System Product and to all subsequent releases until otherwise indicated in new editions or technical newsletters. Changes are made periodically to the information herein; before using this publication in connection with the operation of IBM systems, consult the latest *IBM System/370 and 4300 Processors Bibliography*, GC20-0001, for the editions that are applicable and current.

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Preface

The messages issued by many MVS/370 operating system components are presented in two volumes:

Volume 1, GC28-1374
Contains:

- Preface
- Table of contents for the volume
- Summary of amendments
- Introduction
- Message library description
- Descriptions of messages with prefixes AHL through IEA

Volume 2, GC28-1375
Contains:

- Table of contents for the volume
- Descriptions of messages with prefixes IEC through ISG
- Problem determination tables
- Message-to-module table

Message Descriptions

The messages are grouped in sections by their three-letter prefixes, which identify the components producing the messages. The prefixes are in alphabetic order; note that the $ beginning $HASP messages is ignored in alphabetizing.

Each message section begins with a chart containing the component name, the audience for the messages and where they appear, the message format, publications related to or referenced by the messages, and other useful information.

The descriptions explain why the component issued the message, give the actions of the operating system, and suggest responses by the applications programmer, system programmer, and/or operator.

Problem Determination Tables

The description of most messages ends with a problem determination paragraph, which lists suggested actions as items in tables; the problem determination tables are near the back of Volume 2. You should perform the actions for the items listed in the message description before asking the IBM branch office serving your locality for programming or hardware support.

Message-to-Module Table

The message-to-module table at the back of Volume 2 lists the operating system modules that detect the need for the message, that issue the message, and that contain the message text.

Who Should Use These Volumes

These volumes are needed by applications programmers, system programmers, and operators.

Associated Publications

Figure 2 lists all books belonging to the message library and other books that contain additional messages and codes. Figure 3 lists the prefixes for IBM-supplied messages and the publications describing them.

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Virtual Fetch ——— CSV

Resource Measurement Facility (RMF) ——— ERB

JES2 ——— HASP

Power Warning Feature ——— ICF

Resource Access Control Facility (RACF) ——— ICH

Input/Output Configuration Program (IOCP) ——— ICP

Programmed Cryptographic Facility ——— ICT

Cryptographic Unit Support ——— ICU

Virtual Storage Access Method (VSAM) Control Block Expansion ——— IDA

Access Method Services ——— IDC

Supervisor, ABEND, IEAPRINT Program, Input/Output Supervisor (IOS), Nucleus Initialization Program (NIP) ——— IEA

Summary of Amendments

Summary of Amendments
for GC28-1374-1
as updated January 15, 1985

This revision contains new and changed messages for 3880 (Cache-Direct Access Storage or Cache-DASD) and the 3480 Magnetic Tape Subsystem.

- Message IDC01605I is added in support of Cache-DASD. In addition, the following messages have been changed in support of Cache-DASD: IDC2011I, IDC2375I, IDC3225I, IDC3226I, IDC3513I, IDC01551I, IDC01600I, IDC31550I and IDC31604I.

- The following messages are added in support of the 3480 Magnetic Tape Subsystem: IEA036E, IEA337I and IEA349I. In addition, the following messages have been changed in support of the 3480 Magnetic Tape Subsystem: AMD033I, IEA000A, IEA000I, IEA026I, IEA067A, IEA069A, IEA070A, IEA071E, IEA438A, IEA439D and IEA440A.

Summary of Amendments
for GC28-1374-0
as updated October 12, 1984
By TNL GN28-1009

This technical newsletter, which supports MVS/System Product Version 1 Release 3.4 -JES2 (5740-XYS), contains:

- Changed $HASP messages to support early authorization verification

- New and changed $HASP messages to support service updates to JES2

Summary of Amendments
for GC28-1374-0 and GC28-1375-0
as updated December 30, 1983

This revision contains:

- New and changed $HASP messages issued by JES2 to support MVS/System Product - JES2 Version 1 Release 3.4 program number 5740-XYS.

- To support MVS/370 Data Facility Product (DFP) Release 1.1, changes to the following messages:

  IDC3009I
  IEA450I-1 changed to IEA451I
  IEA450I-2 changed to IEA452I
  IEA450I-3 changed to IEA453I
  IEA450I-4 changed to IEA454I
  IEA450I-5 changed to IEA455I
  IEA450I-7 changed to IEA457I
  IEA450I-8 changed to IEA458I
  IEC120A through IEC126I
  IEC129D and IEC130I
  IEC141I
  IEC152I

  The following new messages are being added:

  IEA459I
  IEA466I
  IEA467E
  IEA468E
  IEA469I

- Changes to the messages-to-module table in the appendix for the $HASP messages and DFP messages.

- A new Introduction section, which contains the description of the hard-copy log formerly in *OS/VS Message Library: VS2 Routing and Descriptor Codes*, GC38-1102.
- ICH messages issued by the system whether the Resource Access Control Facility (RACF) is installed or not.
- Service updates.

Introduction

The MVS/370 operating system issues messages from the base control program, the job entry subsystems (JES2 and JES3), the data facility product (DFP), system programs and products, and application programs running under the system. The system issues messages in different ways and to different locations:

- Primarily, through the WTO and WTOR macros to operator consoles, the hard-copy log, a SYSOUT data set, or the job log for the job's system output message class.

  Routing codes determine where the messages are displayed or printed. The routing codes for messages issued by the operating system are listed and explained in the *VS2 Routing and Descriptor Codes* manual.

- Through the WTL macro or the operator LOG command to the system log.

- Through the access methods directly to an output data set or a display terminal.

System Log: The system log is a SYSOUT data set provided by the job entry subsystem (either JES2 or JES3). SYSOUT data sets are output spool data sets on direct access devices. The installation usually prints the system log periodically. The system log consists of:

- All messages from WTL macros.

- All messages entered by operator LOG commands.

- Usually the hard-copy log.

- Any messages routed to the system log from any system component or program.

Hard-Copy Log: The hard-copy log is a record of all system message traffic. In a JES3 system, the console's hard-copy log is always written on the system log. In a JES2 system, the hard-copy log usually is written on the system log but may be written on a console printer, if the installation chooses.

Message Format: A displayed or printed message can appear by itself or with other information, such as a time stamp. The format for the message itself is given in a chart at the beginning of each message section in this book and other message library books. Each message consists of:

- An identifier, which is a three-letter prefix to identify the component that produced the message and a message serial number to identify the individual message. The identifier may contain other information.

- A message text to provide information, describe an error, or request an operator action.

Messages Sent to Operator Consoles

Messages sent to operator consoles appear in the format:

```
From base control program, JES2, or DFP:
   f message
   hh.mm.ss jobident f message

From JES3:
   hhmmsst i f message
```

The fields in the operator console format are:

hh.mm.ss or hhmmsst
: Time stamp, given as the hour (00-23), minute (00-59), second (00-59), and, for JES3 messages, tenth of a second (0-9).

jobident
: Job identifier for the task that issued the message.

i
: Indicator from JSAM. See *JES3 Messages*.

f
: A screen character to indicate the status of certain messages, as follows:

  | : The operator can delete the message. The operator has performed the action required for the message.

  \- : The message is for information only; no operator action is required. The message was issued by the system or by a problem program.

  * : The message requires specific operator action and was issued by an authorized, system program with a descriptor code of 1, 2, or 11.

  @ : The message requires specific operator action and was issued by a problem program with a descriptor code of 1, 2, or 11.

  The message requires no specific operator action and was issued by a problem program via a WTO macro.

blank The message requires no specific operator action.

Note: Descriptor codes are listed and described in the *Routing and Descriptor Codes* manual.

message Message identifier and text.

In a JES2 system, the operator can issue a CONTROL S command to add the job identification or the time stamp and job identification to all console messages.

Messages Sent to Hard-Copy Log in JES2 System

Multiple console support (MCS) handles message processing in a JES2 system or in a JES3 system if JES3 has failed. MCS sends messages with routing codes 1, 2, 3, 4, 7, 8, and 10 to the hard-copy log when display consoles are used or more than one console is active. All other messages can be routed to the hard-copy log by a SYSGEN option or a VARY HARDCPY command.

Messages sent to the hard-copy log appear in the format shown in the box.

```
rrrr hh.mm.ss ident   message
```

The fields in the JES2 hard-copy log formats are:

rrrr Hexadecimal representation of the routing code field. Convert this hexadecimal number to binary; each binary one represents a routing code. For example, '420C'X represents routing codes 2, 7, 13, and 14 as shown here:

Hexadecimal	4	2	0	C
Binary	0 1 0 0	0 0 1 0	0 0 0 0	1 1 0 0
Routing Codes	1 2 3 4	5 6 7 8	9 10 11 12	13 14 15 16

hh.mm.ss Time stamp, given as the hour (00-23), minute (00-59), and second (00-59).

ident The job identifier for the task that issued the message.

message Message identifier and text. The message identifier appears only on the first line of a multiple-line message.

Messages Sent to Hard-Copy Log in JES3 System

Messages sent to the hard-copy log in a JES3 system appear in the format:

```
JESMSG log:
   hh:mm:sst message

MLOG/DLOG:
   ccc  nnnnnnnn  hhmmsst a text
```

The fields in the JES3 hard-copy log formats are:

ccc Console destination class.

nnnnnnnn Console name.

hh:mm:sst or hhmmsst
Time stamp, given as the hour (00-23), minute (00-59), second (00-59), and tenth of a second (0-9).

a One of the following:

blank
Normal message.
JES3 input command from a JES3 console.
\- MVS input command from a JES3 or MCS console.
* Operator action required.

message Message identifier and text.

text The message text without the identifier.

Messages Sent to the Job Log, to Other Data Sets, and to Display Terminals

Messages sent to the job log, to other data sets, and to display terminals appear in the format designed by the program that issued them. This format may include a message identifier, may consist of only a text, or may contain other information. See Figure 2 and Figure 3 for the books describing the messages.

Symbols Used for Variable Data

Variable data within message texts are indicated by a small letter representation of the item as follows:

Variable field	Explanation
accode	Volume accessibility code
adr	Address
adr-space	Address space
asid	Address space ID
bbbb	Address block
cbname	Control block
cccc	Fault symptom code
ccu	Path identifier
cde	Code
char	Character
cm or cmd	Command name
cua	Control unit address
ddd	Device address or number
ddn	ddname
ddnffl + xxx"	ddname, followed by a concatenation number, if it is part of a concatenation and not the first DD statement in the concatenation; +xxx gives the position of the concatenated DD statement relative to the first DD statement of the concatenation
devname	Device name
devtyp	Device type
dsn	Data set name
err	Error description
exitnm	Exit name
f	File identifier
func	Function name
hh.mm.ss.t or hhmmsst or hh:mm:ss.th	Time, given as the hour (00-23), minute (00-59), second (00-59), and tenth of a second (0-9) or hundredths of a second (00-99)
id	Identifier
init	Initiator name
jjj	Job name
j	Job ID (JES2)
keywd	Keyword name
lab	Label name
labid	Label identifier
labtyp	Label type
len	Length
lib	Library name
lna	Line address
mac	Macro name
mem	Member name
mmm	Number (appearing in the same message as nnn)
mod	Module name
nnn	Number
op	Operand name
opr	Operation name
opt	Option name
pgm	Program name
postn	Position of character
ppp	Procedure step name
prm	Parameter name
prob-id	Problem identifier
pth	Path
rc	Return code
routcd	Routing code
rsnc	Reason code
Scde	Three-digit hexadecimal system completion code, which is described in *System Codes*
sens	Sense information
ser	Serial number
sid	System identifier; session identifier
sss	Step name
ss-cc-dd	Physical identifier, where: ss Storage control unit cc Controller dd DASD device (A field that does not apply appears as XX in the message text.)
stat	Status
station	Station name
subcm	Subcommand name
text	Variable message text
text insert	Variable message text
ttt	Task name
Ucde	Four-digit decimal user completion code
userid	Userid name
uuuuuuuu	Unit (OLTEP)
val	Value
volser	Volume serial
xxx	Nonspecific data
yyy	Nonspecific data
yy.ddd	Julian date, given as the year (00-99) and day of the year (001-366)
zzz	Nonspecific data
ffl "	Optional field, which might not appear in the message text when printed
» Œ	Variable field; one of the items will appear in the message
|	Divider between choices within braces

Message Library

The message library is designed so that you can have the messages and codes documentation that fits your specific needs. Instead of maintaining an enormous manual, you can build your own message library containing the messages and codes you receive.

See Figure 1 for suggestions on customizing your message library. For example:

- If you are a system programmer or installation manager, you may want all the books in the message library in a consolidated document.
- If you are an operator, you may want *System Messages* and *System Codes* in your operator's library.
- If you are an assembler language programmer, you may want *System Messages*, *System Codes*, and the message section from the *Assembler Language Programmer's Guide* in a consolidated document.

For a list of all the books containing documentation of messages and codes, see Figure 2.

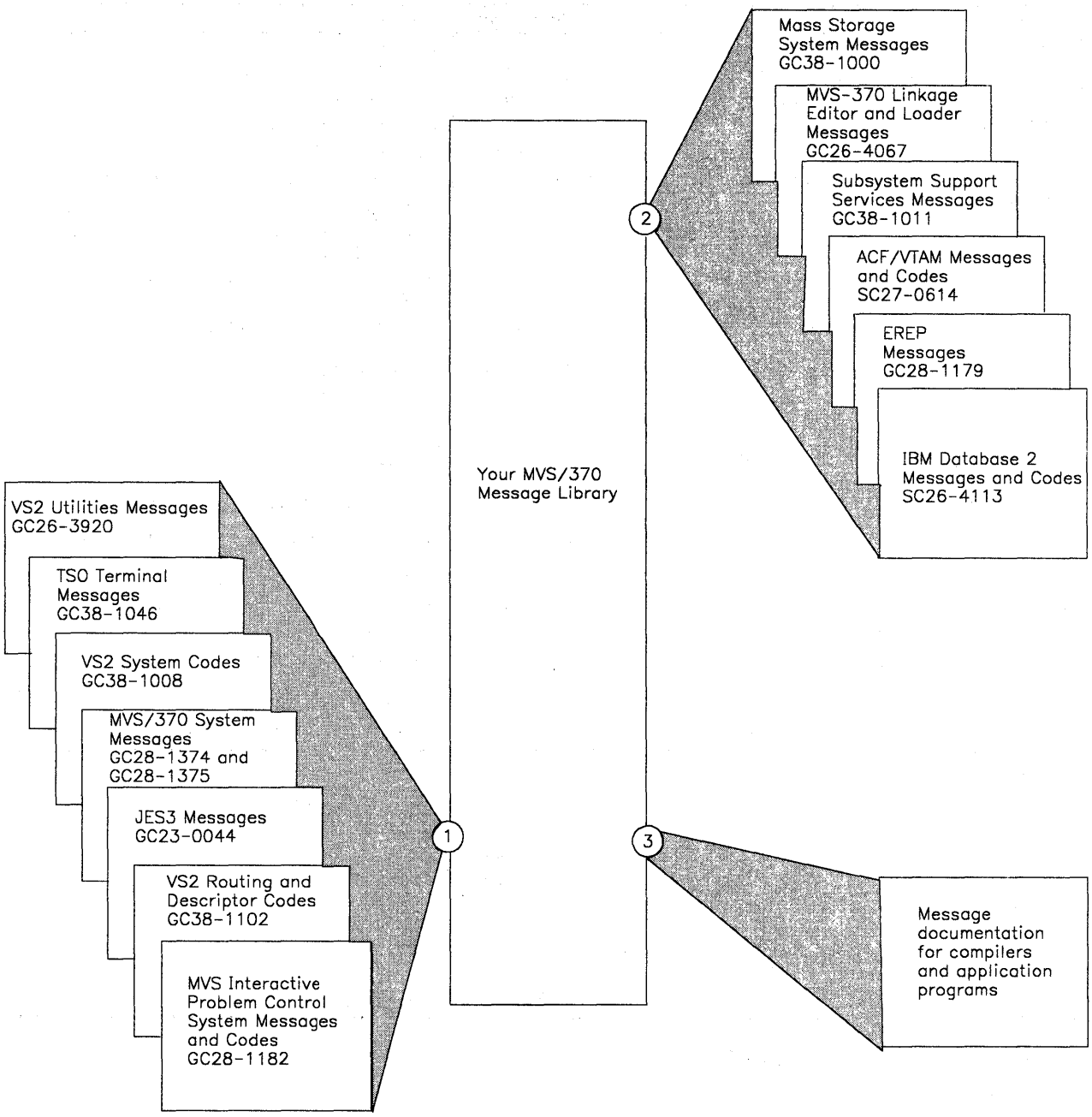
To locate the documentation for a specific message, use Figure 3.

Basic Books

Each installation will require at least one copy of *MVS/Extended Architecture Message Library: System Messages* or *MVS/370 Message Library: 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 are in your operating system. Each installation will also require at least one copy of *MVS/Extended Architecture Message Library: System Codes* or *OS/VS Message Library: VS2 System Codes*, which contains the system completion codes and wait state codes produced by all the components of the operating systems. All programming personnel, especially operations personnel, will need access to these books, although applications-oriented personnel may not need to have their own copies.

Optional Books

Your installation's system programmer will need *MVS/Extended Architecture Message Library: Routing and Descriptor Codes* or *OS/VS Message Library: VS2 Routing and Descriptor Codes*, especially if your operating systems have multiple console support (MCS). These books contain the routing and descriptor codes for all messages that have these codes.



(1) Select the MVS/370 publications that are compatible with your system.

(2) Select the supplementary messages publications that fit the needs of your installaiton.

(3) 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 located in the associated programmer's guides, user's guides, installation reference manuals, or messages books.

Figure 1. Customizing Your Message Library

Publication	Order Number	Contents
JES3 Messages	GC23-0044	IAT messages
OS/VS Message Library: VS2 MVS Utilities Messages	GC26-3920	IBC, IEB, IEH messages
MVS/370 Linkage Editor and Loader Messages	GC26-4067	IEW messages
MVS/370 Utilities Messages	GC26-4068	IBC, IEB, IEH messages
MVS/Extended Architecture JES3 Messages	GC28-0062	IAT messages
MVS/Extended Architecture Message Library: System Messages	GC28-1376 and GC28-1377	ADY, AHL, AMx, BLS, CSV, ERB, HASP, IAR, IBC, ICH, ICP messages for operator, ICT, ICU, IDA, IDC, IEA, IEB, IEC, IEE, IEF, IEH, IEI, IEW, IFA, IFB, IFC, IFD, IGF, IHJ, IKJ, IKM, ILR, IOS, IPD, IRA, ISG messages
MVS/Extended Architecture Message Library: System Codes	GC28-1157	MVS/Extended Architecture completion and wait state codes
MVS Interactive Problem Control System Messages and Codes	GC28-1182	BLS messages and user completion codes
MVS/Extended Architecture Message Library: Routing and Descriptor Codes	GC28-1194	MVS/Extended Architecture routing and descriptor codes
OS/VS Display Exception Monitoring Facility User's Guide	GC34-2003	BNG messages
OS/VS Message Library: Mass Storage System (MSS) Messages	GC38-1000	ICB, ICG, ISDA messages
MVS/370 Message Library: System Messages	GC28-1374 and GC28-1375	AHL, AMx, CSV, ERB, HASP, ICF, ICH, ICP messages for operator, ICT, ICU, IDA, IDC, IEA, IEC, IED, IEE, IEF, IEI, IFA, IFB, IFC, IFD, IGF, IHJ, IKJ, IKM, ILR, IPD, IRA, IRB, ISG messages
OS/VS Message Library: VS2 System Codes	GC38-1008	MVS/370 completion and wait state codes
System/370 Subsystem Support Services Messages	GC38-1011	BQB messages
Environmental Recording Editing & Print Program (EREP) Messages	GC28-1179	IFC messages for IECEREP0 and IFCEREP1 only
OS/VS Message Library: TSO Terminal Messages	GC38-1046	IKJ and IKT messages
OS/VS Message Library: VS2 Routing and Descriptor Codes	GC38-1102	MVS/370 routing and descriptor codes
In other publications:		
Emulator publications	**See:** *IBM System/370 Bibliography*, GC20-0001	Emulator messages
IBM 3790 Communication System Messages	GA27-2789	BQI messages
OS/VS2 MVS Vector Processing Subsystem Installation and Operation Guide	GC24-5124	IGT messages
OS/VS1 and OS/VS2 MVS Vector Processing Subsystem Programmer's Guide	GC24-5125	IGT messages
OS Assembler H Messages	SC26-3770	IEV messages

Figure 2 (Part 1 of 3). Message Library

Publication	Order Number	Contents
OS/VS and DOS/VSE Analysis Program-1 (AP-1) User's Guide	GC26-3855	IAP messages
Data Facility Data Set Services: User's Guide and Reference	SC26-3949	ADR messages
VS FORTRAN Application Programming: Library Reference	SC26-3989	IFY messages
Assembler H Version 2 Application Programming: Guide	SC26-4036	IEV, IFO messages
Network Communications Control Facility Messages *Advanced Communications Function for VTAM* *Advanced Communications Function for VTAM Messages and Codes*	SC27-0431 SC27-0470 SC27-0614	DSI messages IKT, IST, ITA messages IKT, IST messages
OS/VS Problem Determination Aids and Messages and Codes for GPS and GSP	GC27-6974	IFF messages
DOS/VS and OS/VS TOLTEP for VTAM	GC28-0663	ITA messages
OS/VS System Modification Program (SMP) System Programmer's Guide	GC28-0673	HMA messages
OS/VS2 MVS TSO 3270 Extended Display Support — Session Manager Reference and User's Guide	SC28-0912	ADF messages
OS/VS2 MVS and Stand-Alone Versions: Input/Output Configuration Program User's Guide and Reference	GC28-1027	ICP messages
Environmental Recording Editing & Print Program (EREP) Messages	GC28-1179	IFC messages
OS Full American National Standard COBOL Compiler & Library, Version 4, Programmer's Guide	SC28-6456	IKF messages
OS/VS COBOL Compiler & Library Programmer's Guide	SC28-6483	IKF messages
OS FORTRAN IV (H Extended) Compiler and Library (MOD II) Messages	SC28-6865	IFE, IHO messages
3704 and 3705 Control Program Generation & Utilities Guide & Reference Manual	GC30-3008	IFL messages
IBM System/370 Subsystem Support Services User's Guide	GC30-3022	BQB messages
ACF/NCP/VS Generation and Utilities Reference	SC30-3116	IFL messages
OS PL/I Optimizing Compiler: Messages	SC33-0027	IBM, IEL, IKJ messages
OS PL/I Checkout Compiler: Messages Manual	SC33-0034	DMS, IEN, IKJ messages
CICS/VS Messages and Codes	SC33-0081	DFH messages
OS/VS — VM/370 Assembler Programmer's Guide	GC33-4021	IFO messages
OS/VS Sort/Merge Programmer's Guide	SC33-4035	ICE messages
IBM 3790 Communication System: Data Entry Configuration Batch Transfer Program OS/VS1 — OS/VS2 User's Guide	GC33-5901	BQM messages
Network Problem Determination Application: Messages and Codes	SC34-2012	BNH messages
Information/System Version 2 Messages and Codes	SC34-2106	BLG, BLM, BLX messages
Device Support Facilities User's Guide and Reference	GC35-0033	ICK messages

Figure 2 (Part 2 of 3). Message Library

Publication	Order Number	Contents
System/370 Subsystem Support Services Messages	GC38-1011	BQB messages
OS/VS2 MVS RACF Messages/Codes	SC38-1014	ICH messages
IMS/VS V1: Messages and Codes	SH20-9030	DBD, DBF, DFS messages
VSPC FORTRAN Terminal User's Guide	SH20-9062	AFP messages
VS APL Installation Reference	SH20-9065	APLL, APLP messages
VS APL CMS Terminal User's Guide	SH20-9067	APL messages
VS Personal Computing (VSPC): Installation Reference Material	SH20-9072	ASU messages
DB/DC Data Dictionary: Terminal User's Guide and Command Reference	SH20-9083	DBD messages
DB/DC Data Dictionary Installation Guide	SH20-9084	DBD messages
VS TSIO Guide and Reference	SH20-9107	DSGB messages
OS/MVT and OS/VS DASDR User's Guide *OS/VS2 MVS Hierarchical Storage Manager Messages*	SH20-9111 SH35-0025	DRU, DRW messages ARC messages
OS/VS Mass Storage System Extensions Messages	SH35-0041	ICB, ICG messages
Document Composition Facility Messages	LYB0-8070	DSM messages
Document Library Facility	LYB0-8071	DSM messages
IBM Tape Unit Cleaning Procedure	GY32-5034	IEC messages

Figure 2 (Part 3 of 3). Message Library

Prefix	Component	Publication Title	Order Number
ADF	Time Sharing Option (TSO) Session Manager	OS/VS2 MVS TSO 3270 Extended Display Support - Session Manager Reference and User's Guide	SC28-0912
ADR	Data Facility Data Set Services (DFDSS)	Data Facility Data Set Services: User's Guide and Reference	SC26-3949
ADY	Dump Analysis and Elimination (DAE)	MVS/XA System Messages	GC28-1376
AFP	VSPC FORTRAN	VSPC FORTRAN Terminal User's Guide	SH20-9062
AHL	Generalized Trace Facility	MVS/370 System Messages MVS/XA System Messages	GC28-1374 GC28-1376
AMA	Service Aids: AMAPTFLE, AMASPZAP	MVS/370 System Messages	GC28-1374
	Service Aids: AMASPZAP	MVS/XA System Messages	GC28-1376
AMB	Service Aids: AMBLIST	MVS/370 System Messages MVS/XA System Messages	GC28-1374 GC28-1376
AMD	Service Aids: AMDSADMP	MVS/370 System Messages	GC28-1374
	Service Aids: AMDPRDMP, AMDSADMP	MVS/XA System Messages	GC28-1376
APL	VS APL under CMS	VS APL CMS Terminal User's Guide	SH20-9067
APLL	VS APL Library Service Program	VS APL Installation Reference	SH20-9065
APLP	VS APL under VSPC	VS APL Installation Reference	SH20-9065
ARC	Hierarchical Storage Manager	OS/VS2 MVS Hierarchical Storage Manager Messages	SH35-0025
ASU	VS Personal Computing (VSPC)	VS Personal Computing (VSPC): Installation Reference Material	SH20-9072
BLG	Information System, Information Management	Information/System Version 2 Messages and Codes	SC34-2106
BLM	Information System, Information Management	Information/System Version 2 Messages and Codes	SC34-2106
BLS	Interactive Problem Control System (IPCS)	MVS Interactive Problem Control System Messages and Codes MVS/XA System Messages	GC28-1182 GC28-1376
BLX	Information System, Information Management	Information/System Version 2 Messages and Codes	SC34-2106
BNG	Display Exception Monitoring Facility (DEMF)	OS/VS Display Exception Monitoring Facility User's Guide	GC34-2003

Figure 3 (Part 1 of 6). Message Directory

Prefix	Component	Publication Title	Order Number
BNH	Network Problem Determination Application (NPDA)	Network Problem Determination Application: Messages and Codes	SC34-2012
BQB	Subsystem Support Services	System/370 Subsystem Support Services Messages IBM System/370 Subsystem Support Services User's Guide	GC38-1011 GC30-3022
BQI	3790 Communication System	IBM 3790 Communication System Messages	GA27-2789
BQM	Batch Transfer	IBM 3790 Communication System: Data Entry Configuration Batch Transfer Program OS/VS1 - OS/VS2 User's Guide	GC33-5901
CSV	Contents Supervision, Virtual Fetch, Fetch	MVS/XA System Messages	GC28-1376
	Virtual Fetch	MVS/370 System Messages	GC28-1374
DBD	DB/DC Data Dictionary	DB/DC Data Dictionary Installation Guide DB/DC Data Dictionary Terminal User's Guide and Command Reference IMS/VS V1: Messages and Codes	SH20-9084 SH20-9083 SH20-9030
DBF	Fastpath	IMS/VS V1: Messages and Codes	SH20-9030
DFH	Customer Information Control System/Virtual Storage (CICS/VS)	CICS/VS Messages and Codes	SC33-0081
DFS	Information Management System/ Virtual Storage (IMS/VS)	IMS/VS V1: Messages and Codes	SH20-9030
DMS	PL/I Checkout Compiler	OS PL/I Checkout Compiler: Messages Manual	SC33-0034
DRU/ DRW	DASDR	OS/MVT and OS/VS DASDR User's Guide	SH20-9111
DSGB	VS TSIO	VS TSIO Guide and Reference	SH20-9107
DSI	Network Communications Control Facility (NCCF)	Network Communications Control Facility: Messages	SC27-0431
DSM	Document Composition Facility	Document Composition Facility Messages	LYB0-8070
	Document Library Facility	Document Library Facility Messages	LYB0-8071
ERB	Resource Measurement Facility (RMF)	MVS/370 System Messages MVS/XA System Messages	GC28-1374 GC28-1376
HASP	JES2, Network Job Entry Facility for JES2	MVS/370 System Messages MVS/XA System Messages	GC28-1374 GC28-1376

Figure 3 (Part 2 of 6). Message Directory

Prefix	Component	Publication Title	Order Number
HMA	HMAPTFLE, HMASPZAP, HMASMP	OS/VS System Modification Program (SMP) System Programmer's Guide	GC28-0673
IAP	Analysis Program-1	OS/VS and DOS/VSE Analysis Program-1 (AP-1) User's Guide	GC26-3855
IAR	Real Storage Management (RSM)	MVS/XA System Messages	GC28-1376
IAT	JES3	JES3 Messages MVS/XA JES3 Messages	GC23-0044 GC28-0062
IBC	Independent Utility	VS2 MVS Utilities Messages MVS/370 Utilities Messages MVS/XA System Messages	GC26-3920 GC26-4068 GC28-1376
IBM	PL/I Transient Library	OS PL/I Optimizing Compiler: Messages	SC33-0027
ICB	Mass Storage System (MSS) Communicator	Mass Storage System (MSS) Messages Mass Storage System Extensions Messages	GC38-1000 SH35-0041
ICE	Sort/Merge	OS/VS Sort/Merge Programmer's Guide	SC33-4035
ICF	Power Warning Feature	MVS/370 System Messages	GC28-1374
ICG	Mass Storage Control Table Create and Trace Reports	Mass Storage System (MSS) Messages Mass Storage System Extensions Messages	GC38-1000 SH35-0041
ICH	Resource Access Control Facility (RACF)	OS/VS2 MVS RACF Messages/Codes Resource Access Control Facility Messages and Codes MVS/XA System Messages	SC38-1014 GC38-1014 GC28-1376
ICK	Device Support Facilities	Device Support Facilities User's Guide and Reference	GC35-0033
ICP	Input/Output Configuration Program (IOCP) (messages for operator)	MVS/370 System Messages MVS/XA System Messages	GC28-1374 GC28-1376
	Input/Output Configuration Program (IOCP) (messages for programmer)	Input/Output Configuration Program User's Guide and Reference	GC28-1027
ICT	Programmed Cryptographic Facility	MVS/370 System Messages MVS/XA System Messages	GC28-1374 GC28-1376
ICU	Cryptographic Unit Support	MVS/370 System Messages MVS/XA System Messages	GC28-1374 GC28-1376
IDA	Virtual Storage Access Method (VSAM) Control Block Expansion	MVS/370 System Messages MVS/XA System Messages	GC28-1374 GC28-1376
IDC	Access Method Services	MVS/370 System Messages MVS/XA System Messages	GC28-1374 GC28-1376
IEA	Supervisor, ABEND, IEAPRINT Program, Input/Output Supervisor (IOS), Nucleus Initialization Program (NIP)	MVS/370 System Messages MVS/XA System Messages	GC28-1374 GC28-1376

Figure 3 (Part 3 of 6). Message Directory

Prefix	Component	Publication Title	Order Number
IEB	Data Set Utility	VS2 MVS Utilities Messages MVS/370 Utilities Messages MVS/XA System Messages	GC26-3920 GC26-4068 GC28-1376
IEC	Data Management	MVS/370 System Messages MVS/XA System Messages IBM Tape Unit Cleaning Procedure	GC28-1375 GC28-1377 GY32-5034
IED	Telecommunications Access Method (TCAM) Level 9 and below	MVS/370 System Messages	GC28-1375
IEE	Master Scheduler	MVS/370 System Messages MVS/XA System Messages	GC28-1375 GC28-1377
IEF	Job Scheduler	MVS/370 System Messages MVS/XA System Messages	GC28-1375 GC28-1377
IEH	System Utility	VS2 MVS Utilities Messages MVS/370 Utilities Messages MVS/XA System Messages	GC26-3920 GC26-4068 GC28-1376
IEI	System Generation Macro Expansion	MVS/370 System Messages MVS/XA System Messages	GC28-1375 GC28-1377
IEL	PL/I Optimizing Compiler	OS PL/I Optimizing Compiler: Messages	SC33-0027
IEN	PL/I Checkout Compiler	OS PL/I Checkout Compiler: Messages Manual	SC33-0034
IEV	Assembler H	OS Assembler H Messages Assembler H Version 2 Application Programming: Guide	SC26-3770 SC26-4036
IEW	Linkage Editor and Loader	MVS/370 Linkage Editor and Loader Messages MVS/XA System Messages	GC26-4067 GC28-1376
IFA	SMF Dump Program: IFASMFDP	MVS/370 System Messages MVS/XA System Messages	GC28-1375 GC28-1377
IFB	Input/Output Environment Recording Routines: OBR and SVC 76	MVS/370 System Messages MVS/XA System Messages	GC28-1375 GC28-1377
IFC	Service Aids: IFCDIP00 (SYS1.LOGREC initialization)	MVS/370 System Messages MVS/XA System Messages	GC28-1375 GC28-1377
	Service Aids: IFCEREP0 and IFCEREP1	Environmental Recording Editing & Print Program (EREP) Messages	GC28-1179
IFD	Online Test Executive Program (OLTEP)	MVS/370 System Messages MVS/XA System Messages	GC28-1375 GC28-1377

Figure 3 (Part 4 of 6). Message Directory

Prefix	Component	Publication Title	Order Number
IFE	FORTRAN IV (H Extended)	OS FORTRAN IV (H Extended) Compiler and Library (Mod II) Messages	SC28-6865
IFF	Graphic Programming Services (GPS)	OS/VS Problem Determination Aids and Messages and Codes for GPS and GSP	GC27-6974
IFL	Network Control Program (NCP)	3704 and 3705 Control Program Generation & Utilities Guide & Reference Manual	GC30-3008
	Advanced Communications Function (ACF) for Network Control Program (NCP)	ACF/NCP/VS Generation and Utilities Reference	SC30-3116
IFO	Assembler	OS/VS - VM/370 Assembler Programmer's Guide Assembler H Version 2 Application Programming: Guide	GC33-4021 SC26-4036
IFY	FORTRAN	VS FORTRAN Application Programming: Library Reference	SC26-3989
IGF	Recovery Management	MVS/370 System Messages MVS/XA System Messages	GC28-1375 GC28-1377
IGT	Vector Processing Subsystem (VPSS)	OS/VS2 MVS Vector Processing Subsystem Installation and Operation Guide OS/VS1 and OS/VS2 MVS Vector Processing Subsystem Programmer's Guide	GC24-5124 GC24-5125
IHJ	Checkpoint/Restart	MVS/370 System Messages MVS/XA System Messages	GC28-1375 GC28-1377
IHO	FORTRAN IV Library (Mod II)	OS FORTRAN IV (H Extended) Compiler and Library (Mod II) Messages	SC28-6865
IKF	Full American National Standard COBOL	OS Full American National Standard COBOL Compiler & Library, Version 4, Programmer's Guide OS/VS COBOL Compiler & Library Programmer's Guide	SC28-6456 SC28-6483
IKJ	Time Sharing Option (TSO)	MVS/370 System Messages MVS/XA System Messages TSO Terminal Messages TSO Extensions Terminal Messages	GC28-1375 GC28-1377 GC38-1046 with GD23-0264 GC38-1046 with GD23-0269
	PL/I Prompter	OS PL/I Optimizing Compiler: Messages OS PL/I Checkout Compiler: Messages Manual	SC33-0027 SC33-0034

Figure 3 (Part 5 of 6). Message Directory

Prefix	Component	Publication Title	Order Number
IKM	PL/I Syntax Checker	MVS/370 System Messages MVS/XA System Messages	GC28-1375 GC28-1377
IKT	Time Sharing Option (TSO)	TSO Terminal Messages TSO Extensions Terminal Messages	GC38-1046 with GD23-0264 GC38-1046 with GD23-0629
	Advanced Communications Function for Virtual Telecommunications Access Method (ACF/VTAM)	Advanced Communications Function for VTAM Messages and Codes Advanced Communications Function for VTAM Messages and Codes	SC27-0614 SC27-0470
ILR	Auxiliary Storage Management (ASM)	MVS/370 System Messages MVS/XA System Messages	GC28-1375 GC28-1377
IOS	Input/Output Supervisor (IOS)	MVS/XA System Messages	GC28-1377
IPD	FORTRAN Syntax Checker	MVS/370 System Messages MVS/XA System Messages	GC28-1375 GC28-1377
IRA	System Resources Manager (SRM)	MVS/370 System Messages MVS/XA System Messages	GC28-1375 GC28-1377
IRB	MF/1	MVS/370 System Messages	GC28-1375
ISDA	ISDASDAO	Mass Storage System (MSS) Messages Mass Storage System Extensions Messages	GC38-1000 SH35-0041
ISG	Global Resource Serialization (GRS)	MVS/370 System Messages MVS/XA System Messages	GC28-1375 GC28-1377
IST	Advanced Communications Function for Virtual Telecommunications Access Method (ACF/VTAM)	Advanced Communications Function for VTAM Messages and Codes Advanced Communications Function for VTAM Messages and Codes	SC27-0614 SC27-0470
ITA	TOLTEP for Virtual Telecommunications Access Method (VTAM)	DOS/VS and OS/VS TOLTEP for VTAM	GC28-0663
	TOLTEP for Advanced Communications Function for Virtual Telecommunications Access Method (ACF/VTAM)	Advanced Communications Function for VTAM Messages and Codes	SC27-0470

Figure 3 (Part 6 of 6). Message Directory

Generalized Trace Facility Messages (AHL)

Component Name	AHL
Program Producing Message	Generalized Trace Facility
Audience and Where Produced	For the programmer: in the system output listing. For the operator: on the system console
Message Format	AHLnnns text (in listings) xxAHLnnns text Pnn (on console) xx Message reply identification (absent, if operator reply not required). nnn Message serial number. text Message text. s Type code: A Action: the operator must perform a specific action. D Decision: the operator must choose an alternative. E Eventual action: the 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. Pnn Partition issuing the message.
Associated and Referenced Publication	*OS/VS2 MVS System Programming Library: Service Aids*, GC28-0674

AHL001A INVALID KEYWORD. RESPECIFY PARAMETERS OR REPLY U

Explanation: A keyword specified on the START command for the Generalized Trace Facility (GTF) is not correct.

System Action: GTF initialization will not continue until the operator responds to this message.

Operator Response: Probable user error. Respecify all parameters, or reply 'U' to request default values.

Problem Determination: Table I, items 2, 7a, 29.

AHL002A INVALID DELIMITER. RESPECIFY PARAMETERS OR REPLY U

Explanation: The START command parameters for the Generalized Trace Facility (GTF) have been punctuated incorrectly.

System Action: GTF initialization will not continue until the operator responds to this message.

Operator Response: Probable user error. Respecify all parameters, or reply 'U' to request default values.

Problem Determination: Table I, items 2, 7a, 29.

AHL003A INVALID OPERAND. RESPECIFY PARAMETERS OR REPLY U

Explanation: An operand in the START command for the Generalized Trace Facility (GTF) was specified incorrectly.

System Action: GTF initialization will not continue until the operator responds to this message.

Operator Response: Probable user error. Respecify all parameters, or reply 'U' to request default values.

Problem Determination: Table I, items 2, 7a, 29.

AHL004A KEYWORD(S) REPEATED. RESPECIFY PARAMETERS OR REPLY U

Explanation: In the START command for the Generalized Trace Facility (GTF), a keyword is repeated.

System Action: GTF initialization will not continue until the operator responds to this message.

Operator Response: Probable user error. Respecify all 'U' to request default values.

Problem Determination: Table I, items 2, 7a, 29.

AHL005I GTF TERMINATING. MUST RUN AS SYS TASK FROM CONSOLE

Explanation: GTF must run as a system task. The program properties table indicated that GTF was started as a problem program. This situation was probably caused by starting GTF from the card reader.

System Action: GTF terminates.

Operator Response: Restart GTF from the system console as described in *OS/VS2 SPL: Service Aids*.

Problem Determination: Table I, items 2, 4, 7a, 29.

AHL006I GTF ACKNOWLEDGES STOP COMMAND

Explanation: The operator issued the STOP command for GTF.

System Action: GTF terminates.

Operator Response: None.

AHL007I GTF TERMINATING ON ERROR CONDITION

Explanation: The Generalized Trace Facility is terminating because it has detected an error condition. If GTF has not completed initialization (message AHL031I has not been issued), then the terminating condition is usually a programming logic error and a dump may accompany AHL007I. If GTF has completed initialization (message AHL031I has been issued), then either a message with additional information on the error precedes AHL007I or a dump is provided.

System Action: GTF terminates.

Operator Response: Restart GTF.

Problem Determination: Table I, items 2, 7a, 7d, 16, 29.

AHL008A INCORRECT BUF VALUE. RESPECIFY PARAMETERS OR REPLY U

Explanation: The value specified for the BUF keyword on the START GTF command is not correct.

System Action: GTF initialization will not continue until the operator responds to the message.

Operator Response: Probable user error. Respecify all parameters, or reply 'U' to request default values. The allowable value range for the BUF keyword is 10 to 225 (decimal).

Problem Determination: Table I, items 2, 7a, 29.

AHL013I GTF ACTIVE FROM A PREVIOUS START COMMAND

Explanation: The operator entered a START command for the Generalized Trace Facility (GTF), but GTF is already active.

System Action: The second request for GTF is ignored. The GTF that was previously started remains active.

Operator Response: Probable user error. The active GTF must be stopped before another GTF procedure can be started.

Problem Determination: Table I, items 2, 7a, 29.

AHL015I { STAE / ESTAE } REQUEST UNSUCCESSFUL

Explanation: The STAE or ESTAE request for the Generalized Trace Facility was not performed.

System Action: GTF terminates.

Operator Response: Probable user error. Ensure that the region size is adequate for executing GTF.

Problem Determination: Table I, items 2, 4, 7a, 29.

AHL016I GTF INITIALIZATION UNSUCCESSFUL

Explanation: The initialization of the Generalized Trace Facility (GTF) was not successful. The exact cause of termination is given in a previous message.

System Action: GTF terminates.

Operator Response: Take the action required by the message indicating the cause of termination.

Problem Determination: If there is no preceding message, see Table I, items 2, 4, 7a, 7d, 29.

AHL018A GTF UNABLE TO INITIALIZE ALL CPUs, REPLY U OR END

Explanation: The SETEVENT service called by GTF initialization has failed to initialize the control register, register 8, of one or more active CPUs. Tracing if continued, may result in incomplete trace information being collected. It is possible that the SETEVENT service was unable to initialize a control register because the CPU was stopped. Refer to message AHL133I for CPU address(es) which were not initialized.

System Action: GTF initialization or termination will not continue until the operator responds to this message.

Operator Response: Reply U to continue GTF initialization or END to begin GTF termination.

Problem Determination: Table I, items 2, 7a, 7d, 9a, 13, 29.

AHL019I SETEVENT SERVICE FAILED, RETURN CODE=rc

Explanation: The SETEVENT service called by GTF initialization has failed for one of the following reasons:

- Return code= 18X - SETEVENT request not satisfied; MC handling facility currently undergoing termination.
- Return code= 20X - SETEVENT request not satisfied; the MC routine code was not found at IPL, refer to IPL message IEA950I.

System Action: GTF terminates.

Operator Response: If the return code, rc, is 18X and GTF is active and does not terminate, the operator should stop GTF.

Problem Determination: Table I, items 2, 7a, 7d, 9a, 13, 29.

AHL024I UNALLOWABLE BUF VALUE. MINIMAL DEFAULT 10 IS ASSIGNED

Explanation: The BUF= parameter on the START command for GTF was given a buffer value less than the minimum allowed.

System Action: GTF initialization continues with a default value of 10 buffers.

Operator Response: None.

AHL025I UNALLOWABLE BUF VALUE. MAXIMUM DEFAULT 255 IS ASSIGNED

Explanation: The BUF= parameter on the START command for GTF was given a value greater than 255.

System Action: GTF initialization continues with a default value of 255 buffers.

Operator Response: None.

AHL026I ESTAE REQUEST FOR AHLWTASK UNSUCCESSFUL

Explanation: The ESTAE request for the AHLWTASK function of GTF was unsuccessful.

System Action: GTF terminates.

Operator Response: None.

Problem Determination: Table I, items 1, 2, 4, 7a, 7d, 29.

AHL027I INSUFFICIENT STORAGE FOR AHLWTASK INITIALIZATION

Explanation: There is not enough SQA for GTF initialization to continue.

System Action: GTF terminates.

Operator Response: Probable user error. Ensure that there is sufficient SQA for GTF and restart.

Problem Determination: Table I, items 2, 4, 7a, 7d, 29.

AHL031I GTF INITIALIZATION COMPLETE

Explanation: Initialization of the Generalized Trace Facility completed successfully.

System Action: GTF continues processing.

Operator Response: None.

AHL032I INSUFFICIENT ADDRESS SPACE FOR GTF WRITER

Explanation: A GETMAIN in the GTF trace writer for SP0-127 failed.

System Action: GTF terminates.

Programmer Response: Make the necessary address space available to GTF and restart.

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

AHL033I INSUFFICIENT SQA FOR GTF WRITER

Explanation: A GETMAIN in the GTF trace writer for SQA failed.

System Action: GTF terminates.

Programmer Response: Make the necessary address space available to GTF and restart.

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

AHL034I GTF WRITER TERMINATING ON ERROR CONDITION

Explanation: The GTF trace writer ESTAE routine entered for other than ACR.

System Action: GTF terminates.

Programmer Response: Examine SVC dumps provided by GTF and other problem determination information to determine the reason why the ESTAE routine was entered.

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

AHL035I GTF TRACE WRITER UNABLE TO LOAD nnnnnnnn

Explanation: LOAD failed in the GTF trace writer for AHLSBLOK, AHLSFEOB, or AHLSBUF.

System Action: GTF terminates.

Programmer Response: Determine why the item named in the message text (nnnnnnnn) could not be loaded and correct the condition.

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

AHL036I GTF WRITER DATA FLOW BLOCKED. FIX { FAILED / ATTEMPTED }

Explanation: The GTF trace writer has detected a GTFBLOK with a BLOKUSE that probably will not return to zero, and has attempted to replace it or decided it cannot be replaced.

System Action: GTF terminates.

Programmer Response: A single occurrence of this message needs no action; however, repeated occurrences indicates a problem. Examine the SVC dumps provided and determine why the use count of the GTFBLOKs is not going to zero. Note: GTF termination may be delayed indefinitely waiting for control to be returned to the SETEVENT routing service from an FGBR. In this condition, the GTF impact to the system will be minimal.

Problem Determination: If FAILED appeared in the message, see Table I, items 1, 13, 16, 29.

AHL037I GTF WRITER UNABLE TO ESTABLISH ESTAE

Explanation: ESTAE in the GTF trace writer failed.

System Action: GTF terminates.

Programmer Response: Restart GTF and if the problem recurs, examine the SVC dump and determine why the ESTAE request failed.

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

AHL038I GTF WRITER UNABLE TO OPEN IEFRDER

Explanation: OPEN failed in the GTF trace writer.

System Action: GTF terminates.

Programmer Response: Verify that a valid trace data set was specified and restart GTF. If the problem recurs, determine why the data set cannot be opened or try another trace data set.

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

AHL039I IEFRDER DD STATEMENT MISSING

Explanation: The DEVTYPE in the GTF trace writer failed.

System Action: GTF terminates.

Programmer Response: Ensure that a valid IEFRDER DD statement was specified in the GTF procedure when starting GTF.

Problem Determination: Table I, items 1, 29.

AHL040 NOT A LEGAL FORM OF THE MACRO. CHECK THE MF= KEYWORD

Explanation: A parameter other than L (for the LIST format) or E (for the EXECUTE format) is specified in the MF= keyword of the GTRACE macro instruction. L and E are the only valid parameters.

System Action: The macro is not expanded (severity code - 8).

Programmer Response: Probable user error. Correct the MF= keyword, specifying a valid parameter (L or E). Rerun the job.

Problem Determination: Table I, items 4, 19, 29.

AHL041 LNG= KEYWORD MISSING

Explanation: The LNG= keyword is not specified in the GTRACE macro instruction. If the standard form of the GTRACE macro instruction is being used, the LNG= keyword must be specified with a valid parameter.

System Action: The macro is partially expanded; expansion stops following detection of the omission (severity code - 12).

Programmer Response: Probable user error. Correct the GTRACE macro instruction, specifying the LNG= keyword with a valid parameter. A valid parameter is any decimal integer in the range 1 to 256. Rerun the job.

Problem Determination: Table I, items 4, 19, 29.

AHL042 PAGEIN= KEYWORD MISSPECIFIED

Explanation: The PAGEIN= keyword on the GTRACE macro instruction was specified incorrectly. Valid values are YES and NO.

System Action: None.

Programmer Response: Probable user error. Change the PAGEIN= parameter on the GTRACE macro to a valid value.

Problem Determination: Table I, items 4, 19, 29.

AHL044 DATA= KEYWORD MISSING

Explanation: The DATA= keyword is not specified in the GTRACE macro instruction. If the standard form of the GTRACE macro is being used, the DATA= keyword must be specified with a valid parameter.

System Action: The macro is partially expanded; expansion stops following detection of the error (severity code - 12).

Programmer Response: Probable user error. Correct the GTRACE macro instruction, specifying the DATA= keyword with a valid parameter. Valid parameters are a register number in parentheses or an A-type address constant. Rerun the job.

Problem Determination: Table I, items 4, 19, 29.

AHL045 MF= E, PARAMETER SPECIFICATION MISSING

Explanation: In the GTRACE macro instruction, the parameter specification for the MF= keyword is incomplete. If the EXECUTE form of the GTRACE macro is being used, the address of the parameter list must be included as part of the MF= operand.

System Action: The macro is not expanded (severity code - 12).

Programmer Response: Probable user error. Correct the GTRACE macro instruction, specifying the address of the parameter list as part of the MF= operand. Specify the address observing the syntax rules governing address specification for an RX-type instruction, or one of the general registers 1-12, previously loaded with the address. For example, if the address of the parameter list is in register 1, MF= (E,(1)) should be specified. Rerun the job.

Problem Determination: Table I, items 4, 19, 29.

AHL048 ID= KEYWORD MISSING

Explanation: The ID= keyword is not specified in the GTRACE macro instruction. The ID= keyword must be specified for either form (standard or EXECUTE) of the GTRACE macro.

System Action: The macro is partially expanded; expansion stops following detection of the error (severity code - 12).

Programmer Response: Probable user error. Correct the GTRACE macro instruction, specifying the ID= keyword with the appropriate parameter. Rerun the job.

Problem Determination: Table I, items 4, 19, 29.

AHL052 INSUFFICIENT KEYWORD PARAMETERS

Explanation: The EID keyword is not specified in the HOOK macro instruction. This keyword must be included in the HOOK macro.

System Action: The macro is not expanded (severity code - 8).

Programmer Response: Probable user error. Correct the HOOK macro instruction, specifying the EID= keyword with a valid symbolic parameter. Rerun the job.

Problem Determination: Table I, items 4, 19, 29.

AHL053 INVALID TYPE= KEYWORD

Explanation: An invalid parameter is specified for the TYPE= keyword of the HOOK macro instruction. A parameter other than P, BP, BPN, T, or BT is specified.

System Action: The macro is not expanded (severity code - 8).

Programmer Response: Probable user error. Correct the TYPE= keyword, specifying a valid parameter. Rerun the job.

Problem Determination: Table I, items 4, 19, 29.

AHL055 INVALID EID= KEYWORD

Explanation: An invalid parameter is specified for the EID= keyword of the HOOK macro instruction.

System Action: The macro is not expanded (severity code - 8).

Programmer Response: Probable user error. Correct the EID= keyword, specifying a valid symbolic parameter. Rerun the job.

Problem Determination: Table I, items 4, 19, 29.

AHL057 ECB KEYWORD MISSING

Explanation: The AHLREAD macro ECB keyword is missing.

System Action: None.

Programmer Response: Probable user error. Code the missing keyword on the macro and recompile.

Problem Determination: Table I, items 19, 29.

AHL058 DATA AREA KEYWORD MISSING

Explanation: The AHLREAD macro instruction DATAAREA keyword is missing.

System Action: None.

Programmer Response: Probable user error. Code the missing keyword on the macro and recompile.

Problem Determination: Table I, items 19, 29.

AHL060 NO NAME OPTION SPECIFIED ON STANDARD FORM

Explanation: On the SETEVENT macro, a full set of options must be specified on standard form of the macro. The name field is missing on this invocation.

System Action: None.

Programmer Response: Correct and recompile. The macro generates no code.

Problem Determination: Table I, items 4, 19, 29.

AHL061 NO MCQE ADDRESS SPECIFIED

Explanation: The MCQE address returned by SETEVENT service on the first invocation of the SETEVENT macro must be specified on all later invocations of this macro. If this is the first invocation, this address must be zero.

System Action: None.

Programmer Response: Correct and recompile. The macro generates no code.

Problem Determination: Table I, items 4, 19, 29.

AHL062 SOME EID TYPE SPECIFIED WITH FREE OR ACTIVAT

Explanation: On the SETEVENT macro, FREE and ACTIVAT are related on the entire MCQE chain. Therefore, single EIDs or classes of EIDs may be specified with these two actions.

System Action: None.

Programmer Response: Correct and recompile. The macro generates no code.

Problem Determination: Table I, items 4, 19, 29.

AHL063 NO ACTION SPECIFIED WITH STANDARD FORM

Explanation: On the SETEVENT macro, a full set of options must be specified on the STANDARD form. The ACTION option is missing.

System Action: None.

Programmer Response: Correct and recompile. The macro generates no code.

Problem Determination: Table I, items 4, 19, 29.

AHL064 NO EIDAD OR CLASSAD SPECIFIED ON STANDARD FORM

Explanation: On the SETEVENT macro, a full set of options must be specified on the STANDARD form. Both EIDAD and CLASSAD are missing. At least one of these must be specified.

System Action: None.

Programmer Response: Correct and recompile. The macro generates no code.

Problem Determination: Table I, items 4, 19, 29.

AHL065 ACTION OPTION INVALID

Explanation: On the SETEVENT macro, the contents of the ACTION field is not one of the valid options.

System Action: None.

Programmer Response: Correct and recompile. The macro generates no code.

Problem Determination: Table I, items 4, 19, 29.

AHL066 NO ADDRESS SPECIFIED WITH MF (E)

Explanation: When the EXECUTE form of the SETEVENT macro is used, the address of the parameter list to be filled in must be provided. This is missing on this invocation.

System Action: None.

Programmer Response: Correct and recompile. The macro generates no code.

Problem Determination: Table I, items 4, 19, 29.

AHL067 NO PARAMETER LIST NAME SPECIFIED

Explanation: When the LIST form of the SETEVENT macro is used, a name must be included, which the macro uses to name the parameter list. This name was not specified in this case.

System Action: None.

Programmer Response: Correct this condition and recompile. This macro generates no code.

Problem Determination: Table I, items 4, 19, 29.

AHL068 INVALID MACRO FORM SPECIFIED WITH MF KEYWORD

Explanation: The invocation of the SETEVENT macro specified a character other than E (for execute), L (for list), or M (for modify) on the MF keyword.

System Action: The macro is not expanded and the compilation fails with a severity code of 12.

Programmer Response: Recode the macro instruction with the proper form on the MF keyword and recompile.

Problem Determination: Table I, items 4, 19, 29.

AHL070I INVALID DEVICE TYPE FOR TRACE DATA SET

Explanation: The trace data set defined by the IEFRDER DD statement in the GTF procedure is allocated with an invalid device type. It must be allocated to a tape or direct access device.

System Action: GTF terminates.

Programmer Response: Insure that the trace data set, as defined by the IEFRDER DD statement in the GTF procedure, is allocated to a tape or direct access device.

Problem Determination: Table I, items 2, 4, 7a, 29.

AHL071I LOAD FAILED FOR MODULE mod, yyy rc

Explanation: The LOAD of the specified module failed. Refer to the *VS2 System Codes* publication for an explanation of the abend code, yyy, and the return code, rc, that are specified in this message.

System Action: GTF terminates.

Operator Response: Restart GTF.

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

AHL100A SPECIFY TRACE OPTIONS

Explanation: The trace options for the Generalized Trace Facility (GTF) are to be entered in response to this message.

System Action: GTF initialization will not continue until the operator responds to this message.

Operator Response: Enter REPLY xx,'TRACE=option, option,...,option' for the desired trace options.

AHL101A SPECIFY TRACE EVENT KEYWORDS-keywd=,...,keywd=

Explanation: The event keywords for the Generalized Trace Facility (GTF) which correspond to the trace options specified in response to message AHL100A are to be entered in response to this message. Only those event keywords appearing in the message text (keywd=,...,keywd=) may be specified in the response. The keyword(s) and their corresponding trace options (as specified in the reply to message AHL100A) are as follows:

- keyword IO= for option IOP
- keyword SIO= for option SIOP
- keyword SVC= for option SVCP
- keywords PI= for option PIP
- keyword IO= ,SIO= ,PI= ,SVC= for option SYSP
- keyword CCW= for option CCWP
- keyword ASID= for option ASIDP
- keyword JOBNAME= for option JOBNAMEP

System Action: GTF initialization will not continue until the operator responds to this message.

Operator Response: Enter REPLY xx,'keyword=(value,...,value), keyword=(value,...,value),...' for those keywords allowed.

AHL102A CONTINUE TRACE DEFINITION OR REPLY END

Explanation: Event keywords for the Generalized Trace Facility (GTF) may be entered in response to this message to continue the trace definition. END may be entered to terminate the definition.

System Action: GTF initialization will not continue until the operator responds to this message.

Operator Response: Enter REPLY xx,'keyword=(value,...,value),keyword=(value,...,value),...' for those keywords allowed.

AHL103I TRACE OPTIONS SELECTED -

$$\left\{\begin{array}{l}\textbf{keywd=(value),...,keywd=(value)}\\ \textbf{keywd,keywd,...,keywd}\end{array}\right\}$$

Explanation: The trace options specified for the Generalized Trace Facility (GTF) are noted by keywd,keywd,...,keywd. The keywd(s) correspond to those options specified in the response to message AHL100A or in the control statements provided by the SYS1.PARMLIB data set. If prompting was requested, the keywords also indicate values provided by the SYS1.PARMLIB data set or in response to messages AHL101A and AHL102A.

System Action: GTF initialization continues.

Operator Response: If the values do not indicate the desired trace options, the options may be respecified in the response to message AHL125A.

AHL104A TRACE= KEYWORD NOT SPECIFIED

Explanation: The TRACE= keyword was not specified in the response to message AHL100A or in the control statements provided by the SYS1.PARMLIB data set.

System Action: The control statement is not accepted. GTF initialization will not continue until the operator responds to this message.

Operator Response: Probable user error. If control statements are being entered by way of the master console, enter the response again.

Programmer Response: If control statements are being supplied by the SYS1.PARMLIB data set, correct the statement in error and rerun the job.

Problem Determination: Table I, items 2, 4, 29.

AHL105A SYNTAX ERROR. IMPROPER DELIMITER

Explanation: The response to message AHL100A, AHL101A, AHL102A, or the control statement provided by the SYS1.PARMLIB data set is punctuated incorrectly.

System Action: The control statement is not accepted. GTF initialization will not continue until the operator responds to this message.

Operator Response: Probable user error. If the control statements are being entered by way of the system console, enter the response again.

Programmer Response: If control statements are being supplied by the SYS1.PARMLIB data set, correct the statement in error and rerun the job.

Problem Determination: Table I, items 2, 4, 29.

AHL106A NO OPTIONS SPECIFIED

Explanation: In the response to message AHL100A or in the control statement provided by the SYS1.PARMLIB data set, the TRACE= keyword is either followed by a blank, which precedes the options, or is not followed by options.

System Action: The control statement is not accepted. GTF initialization will not continue until the operator responds to this message.

Operator Response: Probable user error. If the control statements are being entered by way of the system console, enter the response again.

Programmer Response: If control statements are being supplied by the SYS1.PARMLIB data set, correct the statement in error and rerun the job.

Problem Determination: Table I, items 2, 4, 29.

AHL107A SYNTAX ERROR. MISSING COMMA

Explanation: In response to message AHL100A, AHL101A, or AHL102A, or in the control statements provided by the SYS1.PARMLIB data set, a comma that should appear is missing.

System Action: The control statement is not accepted. GTF initialization will not continue until the operator responds to this message.

Operator Response: Probable user error. If the control statements are being entered by way of the system console, enter the response again.

Programmer Response: If control statements are being supplied by the SYS1.PARMLIB data set, correct the statement in error and rerun the job.

Problem Determination: Table I, items 2, 4, 29.

AHL108A INVALID OPTION SPECIFIED -- opt

Explanation: In the response to message AHL100A or in the control statements provided by the SYS1.PARMLIB data set, an invalid Generalized Trace Facility option (opt) was specified.

System Action: The control statement is not accepted. GTF initialization will not continue until the operator responds to this message.

Operator Response: Probable user error. If the control statements are being entered by way of the system console, enter the response again.

Programmer Response: If control statements are being supplied by the SYS1.PARMLIB data set, correct the statement in error and rerun the job.

Problem Determination: Table I, items 2, 4, 29.

AHL109A INVALID DEVICE SPECIFIED -- ddd

Explanation: In the response to message AHL101A or AHL102A or in the control statements provided by the SYS1.PARMLIB data set, a device address (ddd) was specified in the IO=, SIO=, or IO=SIO= parameter that contains an invalid hexadecimal character.

System Action: The control statement is not accepted. All options on the line in error are disregarded and must be respecified.

Operator Response: Probable user error. If the control statements are being entered by way of the system console, reenter the corrected line.

Programmer Response: If control statements are being supplied by the SYS1.PARMLIB data set, correct the statement in error and rerun the job.

Problem Determination: Table I, items 1, 2, 4, 29.

AHL110A INVALID EVENT KEYWORD SPECIFIED

Explanation: A keyword was specified incorrectly in the response to message AHL101A, AHL102A, or in the control statements provided by the SYS1.PARMLIB data set.

System Action: The response is not accepted. All options on the line in error are disregarded and must be respecified.

Operator Response: Probable user error. If the control statements are being entered by way of the system console, reenter the corrected line.

Programmer Response: If control statements are being supplied by the SYS1.PARMLIB data set, correct the statement in error and rerun the job.

Problem Determination: Table I, items 2, 4, 29.

AHL111A UNBALANCED PARENTHESIS IN KEYWORD keywd

Explanation: A parenthesis is missing for the keyword (keywd) in the response to message AHL101A, in the response to message AHL102A, or in the control statements provided by the SYS1.PARMLIB data set.

System Action: The response is not accepted. All options on the line in error are disregarded and must be respecified.

Operator Response: Probable user error. If the control statements are being entered by way of the system console, reenter the corrected line.

Programmer Response: If control statements are being supplied by the SYS1.PARMLIB data set, correct the statement in error and rerun the job.

Problem Determination: Table I, items 2, 4, 29.

AHL112A UNALLOWABLE KEYWORD FOR THE PROMPTING SEQUENCE -- keywd

Explanation: In the response to message AHL101A, AHL102A, or in the control statements provided by the SYS1.PARMLIB data set, a keyword (keywd) was used that was not specified in the TRACE= options when starting the Generalized Trace Facility (GTF).

System Action: The response is not accepted. All options on the line in error are disregarded and must be respecified.

Operator Response: Probable user error. If the control statements are being entered by way of the system console, enter the response again using only those keywords noted in message AHL101A.

Programmer Response: If control statements are being supplied by the SYS1.PARMLIB data set, correct the statement in error and rerun the job.

Problem Determination: Table I, items 2, 4, 29.

AHL113A LMT ERROR. EXCEEDED 50 DEVICES FOR IO=

Explanation: In the response to message AHL101A, AHL102A or in the control statements provided by the SYS1.PARMLIB data set, more than 50 device addresses were specified for the IO= keyword.

System Action: The response is not accepted. All options on the line in error are disregarded and must be respecified.

Operator Response: Probable user error. If the control statements are being entered by way of the system console, reenter the corrected line.

Programmer Response: If control statements are being supplied by the SYS1.PARMLIB data set, correct the statement in error and rerun the job.

Problem Determination: Table I, items 2, 4, 29.

AHL114A LMT ERROR. EXCEEDED 50 DEVICES FOR SIO=

Explanation: In response to message AHL101A, AHL102A, or in the control statements provided by the SYS1.PARMLIB data set, more than 50 device addresses were specified for the SIO= keyword.

System Action: The response is not accepted. All options on the line in error are disregarded and must be respecified.

Operator Response: Probable user error. If the control statements are being entered by way of the system console, reenter the corrected line.

Programmer Response: If control statements are being supplied by the SYS1.PARMLIB data set, correct the statement in error and rerun the job.

Problem Determination: Table I, items 2, 4, 29.

AHL115A INVALID INTERRUPT CODE SPECIFIED

Explanation: In the response to message AHL101A, AHL102A or in the control statements being provided through the system console, an invalid interruption code was specified for the PI= keyword.

System Action: The response is not accepted. All options on the line in error are disregarded and must be respecified.

Operator Response: Probable user error. If the control statements are being entered by way of the system console, reenter the corrected line.

Programmer Response: If control statements are being supplied by the SYS1.PARMLIB data set, correct the statement in error and rerun the job.

Problem Determination: Table I, items 2, 4, 29.

AHL116A INVALID SVC NUMBER SPECIFIED

Explanation: In the response to message AHL101A, AHL102A, or in the control statements provided by the SYS1.PARMLIB data set, an SVC number greater than 255 was specified in the SVC= keyword.

System Action: The response is not accepted. All options on the line in error are disregarded and must be respecified.

Operator Response: Probable user error. If the control statements are being entered by way of the system console, reenter the corrected line.

Programmer Response: If control statements are being supplied by the SYS1.PARMLIB data set, correct the statement in error and rerun the job.

Problem Determination: Table I, items 2, 4, 29.

AHL117A LMT ERROR. EXCEEDED 50 SVC NUMBERS

Explanation: In the response to message AHL101A, AHL102A, or in the control statements being provided by the SYS1.PARMLIB dat set, more than 50 SVC numbers were specified for the SVC= keyword.

System Action: The response is not accepted. All options on the line in error are disregarded and must be respecified.

Operator Response: Probable user error. If the control statements are being entered by way of the system console, reenter the corrected line.

Programmer Response: If control statements are being supplied by the SYS1.PARMLIB data set, correct the statement in error and rerun the job.

Problem Determination: Table I, items 2, 4, 29.

AHL118I ERROR IN AHLTxxxx.yyy [zzzzzzING] DISABLED. TIME = hh.mm.ss

[DUMP ATTEMPT { SUCCESSFUL / UNSUCCESSFUL }]

Explanation: An error has occurred in the Generalized Trace Facility (GTF) module AHLTxxxx while attempting to gather data for event yyy. zzzzzzING specifies whether it is the tracing or the filtering which has been disabled. If filtering has been disabled, all events of type yyy will be traced. For module name AHLTDIR, the error occurred while attempting to save trace data for ABDUMP/SNAP or SVCDUMP. zzzzzzING will indicate ABDUMPING for ABDUMP/SNAP or SDUMPING for SVCDUMP. yyy will indicate TRT. This message will also indicate whether or not GTF's attempt to take an SVCDUMP to record the error was successful.

Operator Response: None.

Problem Determination: Table I, items 2, 4, 13, 16, 29. Stop GTF. Specify EXT mode, DEBUG=YES, and the same trace options specified for GTF. Execute the AMDPRDMP service aid, specifying the EDIT verb. The input for the AMDPRDMP service aid is the trace data set.

AHL119I ERROR IN GTF MODULE AHLWTASK

Explanation: An unrecoverable error was encountered by AHLWASK, the WTO function of GTF.

System Action: GTF terminates.

Operator Response: None.

Problem Determination: Table I, items 1, 2, 7a, 7d, 13, 16, 18, 29.

AHL121I SYS1.PARMLIB INPUT INDICATED

Explanation: The user has indicated that the trace options for the Generalized Trace Facility (GTF) are to be provided by a member of the SYS1.PARMLIB data set.

System Action: GTF will receive trace options from the SYS1.PARMLIB data set and not from the system console.

Operator Response: None.

AHL122I MEMBER NOT SPECIFIED. PARMLIB IGNORED

Explanation: A member name was not found on the SYS1.PARMLIB DD statement.

System Action: The SYS1.PARMLIB data set will not be used to supply trace options to the Generalized Trace Facility.

Operator Response: Trace options must be entered by way of the master console.

Programmer Response: Probable user error. Include a valid member name in the SYS1.PARMLIB DD statement.

Problem Determination: Table I, items 2, 4, 29.

AHL123I MEMBER mem NOT FOUND. PARMLIB IGNORED

Explanation: The member (mem) indicated on the SYS1.PARMLIB DD statement was not found in the SYS1.PARMLIB data set.

System Action: The SYS1.PARMLIB data set will not be used to supply trace options to the Generalized Trace Facility.

Operator Response: Trace options must be entered by way of the master console.

Programmer Response: Probable user error. Include a valid member name on the SYS1.PARMLIB DD statement.

Problem Determination: Table I, items 2, 4, 25c, 29.

AHL124I GTF PARMLIB INPUT ERROR

Explanation: An error has been found in the trace option parameters specified by the SYS1.PARMLIB data set.

System Action: The trace options specified on the SYS1.PARMLIB data set will be disregarded.

Operator Response: Trace options must be entered by way of the master console.

Programmer Response: Probable user error. A message indicating the exact error is in the job stream list.

Problem Determination: Table I, items 2, 4, 26c, 29.

AHL125A RESPECIFY TRACE OPTIONS OR REPLY U

Explanation: In response to this message, trace options for the Generalized Trace Facility (GTF) may be respecified or a reply of U may be entered to continue initialization.

System Action: GTF initialization will not continue until the operator responds to this message.

Operator Response: If message AHL103I does not indicate the trace options you desire, respecify the desired options, beginning with TRACE=. To continue initialization, reply U.

AHL126A ILLEGAL SPECIFICATION OF TRACE OPTIONS

Explanation: ASIDP, CCW, CCWP, JOBNAMEP, PCI, or TRC are specified, but no other trace options are specified. ASIDP, CCW, CCWP, JOBNAMEP, PCI, and TRC are only qualifiers for other trace options.

System Action: The trace options specified have not been accepted.

Operator Response: Probable user error. Reenter the trace options qualifying the options previously specified.

Problem Determination: Table I, items 2, 4, 29.

AHL127I GTF PARMLIB I/O ERROR text

Explanation: GTF detected an input/output error while reading the SYS1.PARMLIB data set. The text of the message describes the error: device address, I/O operation, error condition, and access method, used.

System Action: The trace options specified in the SYS1.PARMLIB data set are disregarded.

Operator Response: Enter the trace options from the master console.

Problem Determination: Table I, item 29. Have a listing of the SYS1.PARMLIB data set available.

AHL128I GTF MODULE mod NOT FOUND

Explanation: The GTF module (mod) was not found.

System Action: GTF terminates.

Programmer Response: Use the linkage editor to put the missing GTF module (mod) into the system, and restart GTF.

Problem Determination: Table I, items 2, 13, 25c (SYS1.LINKLIB), 29.

AHL129I BLDL I/O ERROR LOADING GTF MODULE mod

Explanation: An I/O error occurred during a BLDL for the module (mod).

System Action: GTF terminates.

Programmer Response: Correct the I/O error and restart GTF.

Problem Determination: Table I, items 2, 13, 25c (SYS1.LINKLIB), 29.

AHL130I INSUFFICIENT CORE FOR TRACE INITIALIZATION

Explanation: There is not enough virtual storage space for GTF to continue initialization.

System Action: GTF terminates.

Operator Response: Probable user error. Increase the region size and restart GTF. Note: Make sure that the buffer space is not too large.

Problem Determination: Table I, items 2, 4, 7a, 7d, 29.

AHL131I GTF PARMLIB ERROR DURING OPEN -- nnn

Explanation: An error occurred while the SYS1.PARMLIB data set was being opened. The system completion code is given by nnn.

System Action: Trace options will not be supplied to GTF by the SYS1.PARMLIB data set.

Operator Response: All options must be specified from the master console.

Programmer Response: Follow the directions for the system completion code nnn.

Problem Determination: Table I, item 29. Have a listing of the SYS1.PARMLIB data set available.

AHL132I MC ROUTING FACILITY TERMINATING ON ERROR CONDITION

Explanation: The monitor call routing facility encountered an unrecoverable error while attempting to handle monitor call processing.

System Action: The MC routing facility will attempt to terminate the Generalized Trace Facility (GTF).

Operator Response: If GTF is active, and does not terminate, the operator should stop it.

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

AHL133I SETEVENT UNABLE TO INITIALIZE CPU xxx FOR yyyyyyyy

Explanation: The SETEVENT service, operating on behalf of component yyyyyyyy, was not able to set control register 8 to the correct mask for current monitor call activity on the CPU at address xxx.

System Action: All other alive CPUs are initialized.

Operator Response: None.

Problem Determination: Table I, items 2, 7a, 7d, 9a, 13, 29.

AHL135A INVALID EVENT SPECIFIED FOR KEYWORD keywd

Explanation: In response to message AHL101A, AHL102A or in the control statements being provided by the SYS1.PARMLIB data set, the keyword, keywd, had an invalid event associated with it.

System Action: The response is not accepted. All options on the line in error are disregarded and must be respecified.

Operator Response: Probable user error. If control statements are being entered by way of the system console, reenter the corrected line.

Programmer Response: If control statements are being supplied by the SYS1.PARMLIB data set, correct the statement in error and rerun the job.

Problem Determination: Table I, items 2, 4, 29.

AHL136I INVALID RESPONSE TO MSG AHL125A

Explanation: A reply of TRACE=option,option,... or U was not given in response to message AHL125A.

System Action: Message AHL125A will be reissued.

Operator Response: Issue correct reply to message AHL125A.

Programmer Response: None.

AHL137I GTF CANNOT CHANGE STATUS OF SYSTEM TRACE

Explanation: During GTF initialization, GTF saves the status of system trace and then sets system trace off. During GTF termination, GTF restores the status of system trace. This messages appears when GTF is unable to change the status of system trace; that is, when GTF cannot set system trace off during initialization and when GTF cannot restore the status of system trace during GTF termination.

System Action: If the error occurs during GTF initialization, the system issues messages AHL016I and AHL007I, abnormally terminates GTF, and takes a dump. If the error occurred during GTF termination, the system does not take a dump.

Operator Response: Notify the system programmer.

Programmer Response: Determine why GTF was unable to change the status of system trace and correct the problem.

Problem Determination: Table I, items 2, 4, 13, 16, and 29.

AHL140D RESPECIFY VALUE FOR INVALID PARAMETER parm

Explanation: The parameter parm has an invalid value.

- If parm is CCWN (number of CCWs traced), the value of CCWN is greater than 512.
- If parm is DATA (number of data bytes traced), the value of DATA is greater than 32767.
- If parm is PCITAB (size of program controlled interrupt table), the value of PCITAB is 0 or greater than 9.

System Action: The system ignores all keywords and values in the control statement.

Operator Response: Probable user error. If you are entering the control statements via the system console, respecify the value of the invalid parameter.

Programmer Response: If the SYS1.PARMLIB data set is supplying the control statements, respecify the value of the invalid parameter and restart the GTF (generalized trace facility).

Problem Determination: Table I, items 2, 4, and 29.

AHL141D INVALID VALUE SPECIFIED FOR CCW KEYWORD, RESPECIFY PARAMETERS

Explanation: An invalid value was specified in the response to message AHL101A or message AHL102A or in the control statements that the SYS1.PARMLIB data set supplies. The system issues this message for misspellings, missing commas, duplicate entries, invalid parameter values, and the like.

System Action: The system ignores all keywords and values in the control statement.

Operator Response: Probable user error. If you are entering the control statements via the system console, respecify the value of the invalid parameter.

Programmer Response: If the SYS1.PARMLIB data set is supplying the control statements, respecify the value of the invalid parameter and restart the GTF (generalized trace facility).

Problem Determination: Table I, items 2, 4, and 29.

AHL142D A SPECIFIED JOBNAME IS INVALID, RESPECIFY PARAMETERS

Explanation: In response to message AHL101A or message AHL102A or in the control statements that the SYS1.PARMLIB data set supplies, an invalid jobname is specified for the JOBNAME= parameter. The jobname is invalid because it contains an invalid character or too many characters. A valid jobname is 1 to 8 characters. The characters must be alphabetic (A to Z), numeric (1 to 9 and 0), or national (#, @, and $). The first character of the jobname must be alphabetic or national.

System Action: The GTF(generalized trace facility) ignores all the jobnames that the operator specified in response to message AHL101A.

Operator Response: Probable user error. If you are entering the control statements via the system console, respecify the value of the invalid parameter.

Programmer Response: If the SYS1.PARMLIB data set is supplying the control statements, respecify the value of the invalid parameter and restart the GTF (generalized trace facility).

Problem Determination: Table I, items 2, 4, and 29.

AHL143D MORE THAN FIVE {ASIDS|JOBNAMES} SPECIFIED, RESPECIFY PARAMETERS

Explanation: In response to message AHL101A or message AHL102A or in the control statements that the SYS1.PARMLIB data set supplies, more than 5 jobnames are specified for the JOBNAME= parameter or more than 5 address spaces are specified for the ASID= parameter.

System Action: The GTF ignores all ASIDs and JOBNAMEs that the operator specified in response to AHL101A.

Operator Response: Probable user error. If you are entering the control statements via the system console, respecify the value of the invalid parameter.

Programmer Response: If the SYS1.PARMLIB data set is supplying the control statements, respecify the value of the invalid parameter and restart the GTF (generalized trace facility).

Problem Determination: Table I, items 2, 4, and 29.

AHL144D A SPECIFIED ASID IS INVALID, RESPECIFY PARAMETERS

Explanation: In response to message AHL101A or message AHL102A or in the control statements that SYS1.PARMLIB supplies, an ASID (address space identifier) specified for the ASID= parameter is invalid. The ASID is invalid because of one of the following:

- The ASID value contains a character that is not a valid hexadecimal character.
- The value of the ASID is greater than the largest valid ASID value. The system initialization parameter, MAXUSER, defines the largest valid ASID value.
- The ASID is 0.

System Action: The GTF (generalized trace facility) ignores all ASIDs.

Operator Response: Probable user error. If you are entering the control statements via the system console, respecify the value of the invalid parameter.

Programmer Response: If the SYS1.PARMLIB data set is supplying the control statements, respecify the value of the invalid parameter and restart the GTF (generalized trace facility).

Problem Determination: Table I, items 2, 4, and 29.

AHL145I ERROR IN JOBNAME OR ASID FILTERING, GTF TERMINATED

Explanation: An unrecoverable error occurred in module AHLTSELF. AHLTSELF is trying to filter the GTF (generalized trace facility) data by JOBNAME or ASID.

System Action: The GTF terminates and attempts to take an SVC dump.

Operator Response: If you wish, start the GTF again without JOBNAME filtering or ASID filtering.

Programmer Response: None.

Problem Determination: Table I, items 2, 4, 16, and 29.

AHL146I THE EXPECTED CCW AT CSW-8 WAS NOT FOUND DURING THE CCW SCAN, TRACING WAS FORCED

Explanation: On an I/O interrupt, the GTF (generalized trace facility) traced from the beginning of the channel program to find the CCW (channel command word) pointed to by CSW-8 (channel status word). The GTF could not find the CCW. This may happen if:

- A PCI (program controlled interrupt) DIE (disabled interrupt exit) modified the channel program.
- The GTF traced the number of CCWs that CCWN (number of CCWs traced) specified before finding CSW-8.

System Action: The GTF traces the CCW pointed to by CSW-8. The GTF also traces the data that certain fields of the CCW pointed to by CSW-8 reference. These fields are the data address and count fields. For further information on these fields and the data they reference, see *IBM System/370 Principles of Operation*, GA22-7000, the CCW section. Usually, when the GTF issues this message, the GTF cannot trace the entire channel program. The GTF cannot tell if the traced CCW (the one pointed to by CSW-8), is using the command code of a previous CCW. In other words, the GTF cannot tell if the CCW is part of a data chain. Thus, the CCW command code may be invalid. Because the GTF cannot check the CCW command code, the I/O operation may not transfer data.

Operator Response: None.

Programmer Response: None.

Problem Determination: Table I, items 2, 4, and 29.

AHL147I ERROR IN RECORD COUNT, THERE MAY BE LOST EVENTS

Explanation: The system places all CCW (channel command word) trace records into sequence. Module AMDPRAPP issues this message when module AMDSYS07 detects an out of sequence record while AMDPRDMP EDIT is formatting the records. The user should scan the GTF (generalized trace facility) output for a GTF lost event record.

System Action: AMDPRDMP continues processing.

Operator Response: None.

Programmer Response: None.

Problem Determination: Table I, items 4, 29, and 31.

AHL148I THE ADDRESS OF THE CHANNEL PROGRAM IS NOT VALID. THE CHANNEL PROGRAM CANNOT BE TRACED.

Explanation: One of the following is true about the real address of the beginning of the channel program:

- The GTF (generalized trace facility) could not translate the real address into a valid virtual address.

- The GTF translated the real address into a virtual address but could not translate the virtual address back to the same real address.
- The real address is not the address of a doubleword boundary.
- On an end-of-sense-information interrupt, the CCW (channel command word) address (the real address) in the CSW (channel status word) is zero.

You can find the real address of the beginning of the channel program in either the CAW (channel address word), the PCI (program controlled interrupt) table, the CSW, or the IOSB (input/output supervisor block).

Module AHLTCCWG issues this message to the GTF trace data set as a GTF trace record.

System Action: The GTF writes the contents of the IOSB to the GTF trace data set. If an ERP (error recovery program) workarea is present, the system writes the ERP workarea to the GTF trace data set. The GTF continues processing.

Operator Response: None.

Programmer Response: If the condition persists:

- Examine the SIO (start input/output) record associated with the missing CCW chain for an invalid CCW.
- Examine the IOSB that the GTF wrote to the GTF trace data set.
- Examine the SYS1.LOGREC data set for errors in GTF modules.

Problem Determination: Table I, items 2, 4, and 29.

AHL149I CHANNEL PROGRAM NOT COMPLETED WITHIN SPECIFIED nnn CCWS

Explanation: The GTF (generalized trace facility) could not trace the entire channel program. nnn is the value of the CCWN (number of CCWs traced) keyword specified at GTF initialization time. If CCWN is not specified at GTF initialization time, nnn is 50, the default value.

Module AHLTCCWG issues this message to the trace data set as a trace record.

System Action: The GTF continues processing. The GTF has traced nnn CCWs, which it writes to the GTF output data set. The GTF also writes the IOSB (input/output supervisor block) to the GTF output data set. If an ERP (error recovery program) workarea is present, the GTF writes the ERP workarea to the GTF output data set.

Operator Response: None.

Programmer Response: Increase the value of the CCWN keyword if you want to see more of the channel program.

Problem Determination: Table I, items 2, 4, and 29.

AHL150I THE PCI TABLE IS FULL. TRACE USES THE ADDRESS IN THE IOSB AS THE CHANNEL PROGRAM START.

Explanation: A PCI (program controlled interrupt) occurred. There is no entry in the PCI table for this interrupt and there is no empty slot to make an entry for this interrupt. Module AHLTCCWG issues this message to the GTF (generalized trace facility) output data set as a trace record.

System Action: The GTF considers the address in the IOSRST field of the IOSB (input/output supervisor block) to be the start of the channel program. Subsequent resumptions and I/O interrupts also consider the address in the IOSRST to be the start of the channel program until a slot frees up. (A new PCI table is created each time the GTF is started.) The channel program that the GTF traced may be misleading.

Operator Response: None.

Programmer Response: Increase the size of the PCI table by increasing the value of PCITAB=, a CCW keyword.

Problem Determination: Table I, items 2, 4, and 29.

AHL151I THE ADDRESS OF THE CCW IS NOT VALID. THERE IS A BREAK IN THE CCW CHAIN.

Explanation: The GTF (generalized trace facility) attempted to trace a CCW (channel command word). One of the following is true about the real address of the CCW:

- The GTF could not translate the real address into a valid virtual address.
- The GTF translated the real address into a virtual address but then could not translate the virtual address back to the same real address.
- The boundary of the storage location containing the real address is not a double word boundary.

Module AHLTCCWG issues this message to the GTF output data set as a trace record.

System Action: The GTF places 8 bytes (a double word) of zeroes in the slot reserved for the CCW. The GTF places the invalid real address in the field that normally contains the CCW address. The GTF writes the IOSB (input/output supervisor block) to the GTF output data set. If an ERP (error recovery program) is present, the GTF writes the ERP to the GTF output data set. The GTF continues processing.

Operator Response: None.

Programmer Response: None.

Problem Determination: Table I, items 2, 4, and 29.

AHL152I DATA COULD NOT BE TRACED

Explanation: The GTF (generalized trace facility) could not trace the data associated with the current CCW (channel command word). This is because the GTF could not translate the real address of the data to a virtual address or translate the virtual address back to a real address. Module AHLTCCWG issues this message to the GTF output data set as a trace record.

System Action: The GTF writes the IOSB (input/output supervisor block) to the GTF output data set. If an ERP (error recovery program) workarea is present, the GTF writes the ERP workarea to the GTF output data set. The GTF continues processing.

Operator Response: None.

Programmer Response: This message may occur frequently while the GTF traces the I/O activity of a paging data set. If this message occurs frequently for I/O that is not paging I/O, check SYS1.LOGREC for GTF errors.

Problem Determination: Table I, items 2, 4, and 29.

AHL153I UNABLE TO OBTAIN SENSE INFORMATION ON AN END-OF-SENSE I/O INTERRUPT

Explanation: The GTF (generalized trace facility) cannot trace the sense information because of one of the following:

- The address of the sense bytes is zero.
- CSW-8 (channel status word) does not point to a sense CCW (channel command word).

Module AHLTCCWG issues this message to the GTF output data set as a trace record.

System Action: The GTF traces the CCW and writes the IOSB (input/output supervisor block) to the GTF output data set. If an ERP (error recovery program) is present, the GTF writes it to the GTF output data set. The GTF continues processing, but terminates this channel program trace.

Operator Response: None.

Programmer Response: None.

Problem Determination: Table I, items 2, 4, and 29.

AHL154I ON AN I/O INTERRUPT, THE CSW CONTAINS AN INVALID ADDRESS. TRACING CONTINUES AS FAR AS POSSIBLE.

Explanation: The CCW (channel command word) address in the CSW (channel status word) is invalid because of one of the following:

- The GTF (generalized trace facility) could not translate the real address of the last CCW into a valid virtual address.
- GTF translated the real address of the last CCW into a virtual address but could not translate the virtual address back to the same real address.
- The CCW address is not the address of a double word.
- The CCW address is zero. This occurs when there is a simulated interrupt after a missing interrupt is detected.

Module AHLTCCWG issues this message to the GTF output data set as a trace record.

System Action: The GTF traces the channel program, as long as it finds valid CCWs or until it traces the maximum number of CCWs as specified by the CCWN parameter. The GTF writes the IOSB to the GTF output data set. If an ERP (error recovery program) work area is present, the GTF writes it to the GTF output data set.

Operator Response: None.

Programmer Response: None.

Problem Determination: Table I, items 2, 4, and 29.

Service Aids Messages (AMx)

Component Name	AMx
Program Producing Message	Service Aids: AMAPTFLE, AMASPZAP, AMBLIST, AMDPRDMP, AMDSADMP
Audience and Where Produced	For the programmer: SYSPRINT data set. For the operator: console.
Message Format	AMxnnnl text (in SYSPRINT) id AMxnnns text (on console) id Message reply identification (absent, if operator reply not required). nnn Message serial number, which is coded to indicate the service aid program. s Type code: A Action: the operator must perform a specific action. D Decision: the operator must choose an alternative. I Information: no operator action is required. text Message text.
Associated and Referenced Publication	*OS/VS2 MVS System Programming Library: Service Aids*, GC28-0674

AMAPTFLE Messages

AMA000I THE FOLLOWING MODULE(S) DID NOT FIND A MATCH

Explanation: The AMAPTFLE program could not find a match for the input module name on the Stage 1 output tape for SYSGEN, or a module name has been specified more than once (for example, two input statements contained the same module name).

System Action: If AMAPTFLE could not find a match, all module names for which no JCL was produced will be listed following this message. If duplicate module names were encountered, AMAPTFLE will list the JCL for the module the first time it processes the name. All subsequent encounters with the same module name will cause AMAPTFLE to flag the name as an error (return code--4).

Programmer Response: Probable user error. If the module name was in error, correct the name and rerun the job. For duplicate names, no action is required.

Problem Determination: Table I, items 3, 13, 17a, 29. Have the MODF input available.

AMA001I INPUT MODULE TABLE HAS OVERFLOWED BREAK INPUT INTO TWO JOBS AND RERUN

Explanation: The number of input module names has exceeded the limit of 150 allowed in the input module table.

System Action: AMAPTFLE stops processing the input, and issues this message (return code--16).

Programmer Response: Probable user error. Break the input data into groups of no more than 150 module names per execution of AMAPTFLE, and execute the program as many times as needed to create JCL for all the modules.

Problem Determination: Table I, items 13, 29. Have the MODF input available.

AMA002I DATA SET ASSOCIATED WITH THE //ddn DD CARD CANNOT BE OPENED

Explanation: The DCB associated with DD statement ddn cannot be opened. The data set cannot be read.

System Action: AMAPTFLE processing is terminated (return code--16).

Programmer Response: Probable user error. Check for errors in the DD statements named in the message. Correct the errors.

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

AMA003I UNCORRECTABLE I/O ERROR OCCURRED jjj,sss,ddd,devtyp,ddn,opr,err

Explanation: An uncorrectable I/O error was detected during the execution of an I/O operation. The fields in the message text are:

jjj The name of the job within which the error occurred.

sss The name of the step within which the error occurred.

ddd The unit address of the device on which the error occurred.

devtyp The device-type of the failing device.

ddn The name of the DD statement defining the associated data set.

opr The type I/O operation being performed at the time of the error.

err The type error that occurred.

System Action: AMAPTFLE terminates (return code--16).

Programmer Response: Rerun the job specifying MSGLEVEL=(1,1) on the JOB statement.

Problem Determination: Table I, items 13, 29.

AMA004I UNIDENTIFIED FORMAT ON SYSGEN STAGE 1 TAPE

Explanation: AMAPTFLE has determined that the Stage 1 output tape was from a SYSGEN earlier than OS/360, release 19. The format of this level Stage 1 output tape is not supported by AMAPTFLE.

System Action: AMAPTFLE processing terminates (return code--16).

Programmer Response: Probable user error. Verify that the:

- Stage 1 output tape is from a SYSGEN earlier than OS/360, release 19.
- System to be updated with the PTF is of an OS/360, release 19 level or later.

If both of these conditions are true, rerun the job using the correct Stage 1 output tape.

Problem Determination: Table I, items 1, 13, 17a, 29.

AMA005I INVALID PARAMETER SPECIFIED ON EXEC STATEMENT

Explanation: An invalid parameter was specified in the PARM field of the EXEC statement.

System Action: AMAPTFLE terminates (return code--16).

Programmer Response: Probable user error. Check for an error in the PARM field of the EXEC statement. Correct any error.

Problem Determination: Table I, items 1, 13, 15, 29.

AMA006I LOAD MODULE mod NOT UPDATED WITH PTF - nn

Explanation: AMAPTFLE was unable to update load module (mod) with the program temporary fix (PTF). If nn=01, the directory entry for load module (mod) in the data set described by the SYSLMOD DD statement could not be located. If nn=02, the PTF was not successfully link-edited into the module.

System Action: AMAPTFLE does not attempt to update load module (mod) with the PTF. Processing continues (return code--8).

Programmer Response: Probable user error. If nn=01, verify that the DSNAME parameter on the SYSLMOD DD statement identifies the data set that contains load module (mod), and that the STAGE 1 output tape from SYSGEN corresponds to the system that is currently running. Correct any errors.

Problem Determination: Table I, items 1, 13, 17a, 29. If nn=02, respond as indicated to the linkage editor messages (beginning with IEW) that accompany this message.

AMA007I LOAD MODULE mod UPDATED WITH PTF - NEW SSI IS ssi

Explanation: Load module (mod) has been successfully updated with the program temporary fix (PTF). The system status index (SSI) for the updated load module is ssi.

System Action: AMAPTFLE processing continues (return code--0).

Programmer Response: None.

AMA008I THE PRECEDING STATEMENT IS INVALID

Explanation: While scanning input defined by the MODF DD statement, AMAPTFLE found a statement that was neither an IDENTIFY statement or an AMAPTFLE control statement. The control statement in error is printed above the message. The statement probably has one of the following errors:

- The name on the module name control statement did not begin in column one.
- The word IDENTIFY was misspelled.
- The MODF input is out of order.

System Action: AMAPTFLE terminates (return code--16).

Programmer Response: Probable user error. Correct the error and rerun the job.

Problem Determination: Table I, item 29. Have the MODF input and the PRINT output available.

AMA009I AMAPTFLE TERMINATED; NO BLOCKSIZE ON THE PCHF DD STATEMENT

Explanation: The BLKSIZE parameter is missing from the PCHF DD statement that describes a non-labeled tape.

System Action: AMAPTFLE terminates (return code--16).

Programmer Response: Probable user error. Include the blocksize of the tape's records in the BLKSIZE parameter of the PCHF DD statement.

Problem Determination: Table I, items 1, 3, 15, 29.

AMA010I AMAPTFLE TERMINATED; AN IDENTIFY STATEMENT IS MISSING

Explanation: During the application function, AMAPTFLE did not find an IDENTIFY statement following a PTF object module; an IDENTIFY statement must follow each PTF object module.

System Action: AMAPTFLE terminates (return code--16).

Programmer Response: Probable user error. Insert an IDENTIFY statement after each PTF object module.

Problem Determination: Table I, items 1, 15, 29. Have the MODF input available.

AMA011I NUMBER OF IDENTIFY CARDS IN INPUT STREAM EXCEEDS 150

Explanation: The generate function of AMAPTFLE is being executed. There are more than 150 IDENTIFY statements and continuations.

System Action: AMAPTFLE terminates (return code--16).

Programmer Response: Probable user error. Process the input with more than one step, each step having fewer than 150 IDENTIFY statements and continuations.

Problem Determination: Table I, items 1, 15, 29. Have the MODF input available.

AMA012I OVERLAY STRUCTURE FOR MODULE mod EXCEEDS LIMIT

Explanation: The number of statements in the Stage 1 output required to define an overlay for module (mod) exceeds 185.

System Action: AMAPTFLE terminates (return code--16).

Programmer Response: Probable user error. Do not use the Stage 1 output again with AMAPTFLE unless the step defining the module (mod) has been removed.

Problem Determination: Table I, items 17a, 29.

AMA013I THE FOLLOWING IS IDENTIFY INFORMATION FOR MODULE mod

Explanation: The IDENTIFY information to be included in the CSECT IDENTIFY records for module (mod) is listed following this message.

System Action: AMAPTFLE processing continues (return code--0).

Programmer Response: None.

AMA014I INSUFFICIENT VIRTUAL STORAGE FOR PROCESSING, AMAPTFLE TERMINATED

Explanation: AMAPTFLE was unable to continue processing because the virtual storage required for necessary tables and buffers was not available in the AMAPTFLE partition.

System Action: AMAPTFLE processing terminates (return code--16).

Programmer Response: Increase the partition size available to AMAPTFLE as recommended in the publication *OS/VS2 MVS SPL: Service Aids*.

Problem Determination: Table I, items 15, 29. Have the MODF input available.

AMA015I MODULE mod FOUND MATCH ON ASSEMBLY STEP ONLY

Explanation: While executing the generate function for a module (mod) assembled during system generation, AMAPTFLE found the module in the State 1 assembly step, but not in the Stage 1 link edit step (which should follow the assembly).

System Action: AMAPTFLE will continue to process other PTFLE control cards and list the JCL for those module names that have a match in the SYSGEN Stage 1 output (return code--4).

Programmer Response: Probable user error. It is possible that the SYSGEN Stage 1 output data set did not contain the link edit step, or the link edit step preceded the assembly step. If the link edit step was properly included in the SYSGEN, rerun the AMAPTFLE job.

Problem Determination: Table I, items 1, 17a, 29. Have the MODF input available.

AMA016I AMAPTFLE TERMINATED, PARMLIB DD STATEMENT IS MISSING

Explanation: AMAPTFLE did not find a DD statement for SYS1.PARMLIB when the nucleus was being updated during execution of the application function. The DD statement is necessary to insure that swap space for DSS is available in the nucleus.

System Action: AMAPTFLE terminates with a return code of 16.

Programmer Response: Probable user error. Ensure that a //PARMLIB DD statement was included in the PTFLE JCL and that it was properly specified.

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

AMASPZAP Messages

AMA100I AMASPZAP PROCESSING COMPLETED

Explanation: This message occurs when AMASPZAP terminates normally. It should be noted, however, that normal termination can occur despite prior failure in the processing of control statements.

System Action: The job step terminates.

Programmer Response: Check the SYSPRINT output to ensure that all control statement operations completed successfully.

AMA101I SYSLIB I/O ERROR ddd, opr, err, access method

Explanation: An I/O error occurred when the data set defined in the SYSLIB DD statement was being accessed. The device address, the operation in process, the type of the error, and the access method in use are provided in the error message.

System Action: The job step terminates.

Programmer Response: If VERIFY and REP control statements were part of the input stream for AMASPZAP, bypass either the record or control section being inspected and/or modified, and carefully check the printed output to ensure that any modifications were performed correctly. If all the modifications requested have not been performed, rerun AMASPZAP to make the necessary modifications.

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

AMA102I SYSLIB DD SPECIFICATION ERROR

Explanation: The data set defined in the SYSLIB DD statement does not contain the member name or physical record defined in a control statement, or the NAME statement identifies a member of a partitioned data set that is not a load module created by the linkage editor.

System Action: Subsequent VERIFY, REP, and SETSSI statements are ignored until a successful NAME or CCHHR operation is performed.

Programmer Response: Probable user error. Correct the member name or address in the invalid control statement or correct the DSNAME in the SYSLIB DD statement, and rerun the job. If the CONSOLE option is being utilized, the job need not be rerun; the corrected statement can be reentered in response to message AMA116A. If the VTOC is being opened for update, make sure that AMASPZAP resides in SYS.LINKLIB or SYS1.LPALIB with an access code of 1.

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

AMA103I CSECT ABSENT - ALL CSECTS FOLLOW

Explanation: A control section name defined in a control statement cannot be found in the specified member.

System Action: All control sections of the load module are dumped. Subsequent VERIFY or REP statements are ignored until a NAME or CCHHR statement is read.

Programmer Response: Probable user error. Correct the control section parameter in the invalid control statement, and rerun the job. If the CONSOLE option is being utilized, the job need not be rerun; the corrected statement can be reentered in response to message AMA116A.

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

AMA104I VERIFY REJECT - SET NO GO SWITCH

Explanation: The data contained in the VERIFY statement did not agree with the data at the specified location.

System Action: A dump of the text portion of the control section or the entire data record is printed in SYSPRINT listing. Processing continues, but all REP and SETSSI statements that follow the rejected VERIFY statement are ignored until another NAME or CCHHR statement is encountered. However, any VERIFY statements that are detected will be executed.

Programmer Response: Probable user error. Check the dump output and correct either the data or offset parameter (whichever was in error in the VERIFY statement), and rerun the job.

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

AMA105I INVALID CARD OR NO GO SWITCH SET

Explanation: This message indicates that the requested operation cannot be performed. Either:

1. The operation name or one (or more) of the parameters is not valid. For example, a parameter value might contain characters other than valid hexadecimal characters.

2. An error occurred on a previous operation preventing the current operation.

System Action: If an error occurred processing a NAME or CCHHR statement in an earlier operation, no VERIFY or REP operations will be performed until a NAME, CCHHR, DUMP, DUMPT, ABSDUMP, or ABSDUMPT statement is processed successfully. If the error occurred in a previous VERIFY or REP statement, only REP statements will be bypassed until a NAME or CCHHR statement is performed successfully.

Programmer Response: Probable user error. Correct the control statement in error, then rerun the job.

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

AMA106I PATCH OVERLAPS - CHECK DUMP

Explanation: One of the following conditions occurred while a VERIFY or REP operation was being performed:

For a data record - the offset specified in the control statement is beyond the end of the record containing the data to be inspected or modified. For example, OFFSET > (KEYLEN + record length).

For a control section - the offset value plus the number of bytes of data specified in the control statement denotes a location that is beyond the limits of the control section. For example: (offset value + number of bytes of data) > displacement of last byte of control section.

System Action: AMASPZAP dumps the data in the control section or data record being modified or inspected, and continues processing subsequent control statements. However, any REP statements pertaining to the same NAME or CCHHR statement will be ignored.

Programmer Response: Probable user error. If a REP operation was being performed on a control section when the error occurred, check the offset and data parameters. If the offset is within the limits of the control section, but the number of bytes specified exceeds the end of the control section, the portion of data that fell within the control section will have been modified before the error was detected. Restore the data to its original form, correct the number of bytes specified in the REP statement, and perform the REP operation again. If the offset in the REP statement exceeded the limits of the control section, then no data will have been modified. In this case, correct the offset specified in the REP statement and perform the REP operation again. If a VERIFY operation was being performed on a control section or data record, or if a REP operation was being performed on a data record at the time the error was detected, no data will have been modified. Correct the offset or number of bytes specified in the control statement (whichever was in error), and perform the operation again.

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

AMA107I DS AREA NOT INCLUDED IN TEXT

Explanation: A VERIFY or REP operation was attempted, and the base value specified in a BASE statement was greater than the offset value specified in a corresponding VERIFY or REP statement.

System Action: AMASPZAP dumps the data in the control section being modified or inspected and continues processing. Any subsequent REP statements pertaining to the same NAME statement will be ignored.

Programmer Response: Probable user error. Correct either the value in the invalid BASE statement or the invalid offset value given in the VERIFY or REP statement, then rerun the job.

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

AMA108I SYSIN SPECIFICATION ERROR

Explanation: The SYSIN DD statement is not included in the execution JCL.

System Action: The job step terminates.

Programmer Response: Probable user error. Include a SYSIN DD statement in the JCL, then rerun the job.

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

AMA109I ERROR - ODD NUMBER DIGITS - IGNORED

Explanation: This message occurs if the patch data, verify data or data offset specified in a VERIFY or REP control statement is not represented as an even number of hexadecimal digits.

System Action: If the error results from an invalid VERIFY statement, any REP statements that follow are ignored until a subsequent NAME, CCHHR, DUMP, DUMPT, ABSDUMP, or ABSDUMPT command is entered. If the error is detected in a REP statement, only that particular statement is ignored.

Programmer Response: Probable user error. Make sure that an even number of hexadecimal digits is specified in the offset and data parameters in the VERIFY or REP statement, and rerun the job.

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

AMA110I NO DIRECTORY SSI - SETSSI IGNORED

Explanation: A SETSSI statement has been entered for a member which does not contain SSI information in its directory entry.

System Action: No SSI information is stored; processing continues with the next control statement.

Programmer Response: To create the SSI in the directory entry for the member:

- If a member of a load module library, re-link edit the load module, including a SETSSI control statement.
- If a member of a macro or symbolic library, use the IEBUPDTE utility program, specifying SSI information in the ADD, REPL, CHANGE or REPRO control statement.

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

AMA111I PREVIOUS ERROR - SETSSI IGNORED

Explanation: Due to an error detected in a previous operation, the SETSSI operation cannot be performed.

System Action: The SETSSI operation is not performed, and AMASPZAP continues processing subsequent control statements.

Programmer Response: Probable user error. Correct the previously detected error, and rerun the job.

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

AMA112I MEMBER NOT FOUND - SETSSI IGNORED

Explanation: The member to which the SETTSSI operation was directed could not be found in the directory of the data set specified by the SYSLIB DD statement.

System Action: AMASPZAP continues processing subsequent control statements.

Programmer Response: Probable user error. Correct the member name in the NAME statement associated with the SETSSI command, or correct the data set name defined in the SYSLIB DD statement, and rerun the job.

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

AMA113I COMPLETED DUMP REQUIREMENTS

Explanation: This message is written to the SYSPRINT device following the successful completion of a DUMP, DUMPT, ABSDUMP or ABSDUMPT operation.

System Action: AMASPZAP continues processing remaining sequential control statements.

Programmer Response: None.

AMA114I PERMISSION TO UPDATE VTOC DENIED

Explanation: When AMASPZAP requested permission to update the VTOC, the operator replied 'N'.

System Action: No modification to the VTOC will be performed. Processing continues with the next control statement, but any subsequent VERIFY or REP operations will be ignored.

Programmer Response: If you intend to modify the VTOC, instruct the operator to reply 'Y' when AMASPZAP requests permission to do so. (See message AMA117D.)

AMA115I SYSIN I/O ERROR ddd,opr,err, access method

Explanation: An uncorrectable I/O error occurred when AMASPZAP was attempting to read a control statement from the SYSIN data set. The device address, the operation in process, the type of error, and the access method in use are provided in the error message.

System Action: Processing terminates immediately. Control statements read from the SYSIN data set before the error was encountered will have been processed.

Programmer Response: Probable user error. If the error condition is a wrong length record, check the blocksize specified for the SYSIN data set to be sure that it is equal to the actual size of the records in the SYSIN data set. For other error conditions, check the SYSIN DD statement for correct specifications.

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

AMA116A ENTER AMASPZAP CONTROL STATEMENT OR END

Explanation: When the console option is being used, this message is issued to the console each time input is required. If any errors occur in the control statements entered, the error message is printed on both SYSPRINT and the console. However, information messages and dumps are printed only on SYSPRINT.

System Action: Processing continues.

Operator Response: If the programmer wishes to continue processing, enter a valid control statement; if the programmer wishes to terminate the job, enter REPLY xx,'END'.

AMA117D REPLY Y OR N TO UPDATE VTOC ser ddd xxxxxxxx

Explanation: AMASPZAP is being executed by xxxxxxxx for the purpose of modifying or inspecting the VTOC on volume ser, device ddd. As a precautionary measure, the program requests permission for this operation.

System Action: The program stops processing until the operator enters a response.

Operator Response: If the programmer submitting this job is not authorized to perform such an operation, enter REPLY xx'N'. As a result of this negative response, AMASPZAP will issue message AMA114I and all subsequent VERIFY and REP statements will be ignored. The response REPLY xx, 'Y' will, however, allow AMASPZAP to inspect and modify the VTOC.

AMA118I SYSPRINT DD NOT IN INPUT

Explanation: A SYSPRINT DD statement was not included in the AMASPZAP JCL statements.

System Action: AMASPZAP terminates immediately.

Programmer Response: Probable user error. Include a SYSPRINT DD statement in the AMASPZAP JCL, then rerun the job.

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

AMA119I NO IDR FOR MODULE mod

Explanation: AMASPZAP found that the load module (mod) does not include CSECT identification records (IDRs); it has not been processed by a linkage editor containing IDR support.

System Action: AMASPZAP continues with normal processing.

Programmer Response: If IDR maintenance data in the load module is desired, reprocess the module with the linkage editor that has IDR support, then rerun the AMASPZAP job.

AMA120I mod NO IDR SPACE -- RE-LINK

Explanation: A REP operation was to be performed on the module (mod), but AMASPZAP found that no space is available in the AMASPZAP IDR for maintenance information.

System Action: Message will be followed by either AMA127I or AMA128I.

Programmer Response: The indicated module must be reprocessed by the linkage editor so that the module will contain an additional AMASPZAP IDR; then rerun the AMASPZAP job.

AMA121I CCHHR UPDATE BY jjj ON ser,cchhr,dsn

Explanation: AMASPZAP has modified a data set on a direct access device by use of the CCHHR and REP statements. This message is automatically given as security audit information. Variables in the message are as follows:

jjj The name of the job which performed the CCHHR update.

ser The volume serial number of the direct access device containing the modified data set.

cchhr The device record address of the record that was modified.

dsn The name of the modified data set.

If AMASPZAP input is from the system console and both CCHHR and REP statements have been processed, then this message will appear immediately after the next CCHHR, NAME, DUMP, AESDUMP, END, or invalid statement entered.

System Action: Normal processing continues.

Operator Response: Save the information as recommended by your installation.

AMA122I OLD DATA WAS hhh

Explanation: A REP or SETSSI operation was performed. In the message text, hhh represents the data or system status index (SSI), in hex, prior to the operation.

System Action: AMASPZAP will process the next control statement.

Programmer Response: If a VERIFY control statement was not used prior to the REP operation, ensure that this is the data to be replaced. Should it become necessary to restore the data or SSI to its former value, this message indicates that value.

AMA123I SYSPRINT I/O ERROR ddd,opr,err, access method

Explanation: An I/O error occurred while AMASPZAP was writing in the data set defined by the SYSPRINT DD statement. The device address, the operation, the error type, and the access method are provided in the message text.

System Action: The job step terminates.

Programmer Response: If the REP operation was successful, rerun the job step after making sure that the associated REP and VERIFY control statements have been removed.

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

AMA124I INVALID SYSLIB DCB BLOCKSIZE

Explanation: After an OPEN, the SYSLIB DCB contained zero or a value less then the size of the block just read, in the DCBBLKSZ field.

System Action: AMASPZAP terminates.

Programmer Response: Probable user error. Ensure that the SYSLIB DSCB contains the correct blocksize, or specify the blocksize in the DCB parameter of the SYSLIB DD statement.

Problem Determination: Table I, items 2, 4, 25ab, 26b, 29.

AMA125I mod IDR COUNT = nn (MAX = mm)

Explanation: The IDR record(s) for module mod, which was just updated, contains nn valid entries and mm-nn empty entries.

System Action: None.

Programmer Response: If nn = mm, module mod must be reprocessed by the linkage editor before any further updates. If mm = 19 and nn = 19, additional IDR space (19 entries) can be created by link editing the load module again using the INCLUDE control statement.

AMA126I mod (IDRs) FILLED -- RE-LINK

Explanation: Appears after AMA125I when nn = mm.

System Action: None.

Programmer Response: Module (mod) must be reprocessed by the linkage editor before any further updates with IDR maintenance. Additional IDR space can be created by re-link editing the load module (using INCLUDE).

AMA127I UPDATES INHIBITED (NO OVERRIDE)

Explanation: Follows AMA120I to indicate inhibition of updates to the module because all IDR entries for that module have been filled.

System Action: The return code is set to 8, and processing continues except for rejection of REP and IDR statements for this module.

Programmer Response: Relinkedit the module to create a new IDR, or rerun the job with IGNIDRFULL option specified.

AMA128I UPDATES ENABLED BY OVERRIDE PARM

Explanation: Follows AMA120I to indicate that the normal inhibition on CSECT updates when all IDR entries are filled has been overridden by specification of the IGNIDRFULL parameter.

System Action: Normal processing continues, except for omission of IDR maintenance. If no errors are encountered, the return code will be set to 4.

Programmer Response: Relinkedit the module to create an empty IDR for resumption of IDR maintenance.

AMA129I INVALID PARAMETER SPECIFICATION

Explanation: AMASPZAP was invoked with an invalid PARM/PARAM specification. At present, the only valid parameter string is IGNIDRFULL.

System Action: AMASPZAP is terminated with a return code of 12.

Programmer Response: Collect or delete the parameter specification and rerun the job.

AMA130I SYSLIB DATA SET NOT OPENED

Explanation: SPZAP was unable to open the SYSLIB data set (case formerly included in AMA102I).

System Action: SPZAP terminates with a return code of 12.

Programmer Response: Check for absence of SYSLIB DD statement, or other cause of failure to open SYSLIB.

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

AMA131I xxxxxxxx INVALID RECORD TYPE ID

Explanation: While searching for a control record, SPZAP has encountered a record whose ID byte consists of two hexadecimal digits which are both zero or both non-zero.

System Action: The erroneous record is dumped and SPZAP is terminated with a return code of 16.

Programmer Response: Correct or regenerate the bad records.

AMA132I CHECKSUM WAS { hhhhhhhh / CORRECT } , IS NOW 0

Explanation: A CHECKSUM statement has been executed. The appearance of CORRECT in the text indicates that the checksum was found to be equal to the value specified in the CHECKSUM statement. The message with hhhhhhhh appears after a CHECKSUM statement with a blank operand field or after message AMA133I or AMA134I.

System Action: The CHECKSUM accumulator is set zero and the next control statement is read.

Programmer Response: None for the correct case. For the no-operand case, the printed value can be inserted into the CHECKSUM statement for future runs of the same input sequence.

AMA133I CHECKSUM ERROR. NO-GO SWITCH SET

Explanation: The operand of a CHECKSUM statement was valid but was not equal to the checksum. (Always followed by message AMA132I.)

System Action: Message AMA132I is issued and the next control statement is read. REPs and SETSSIs are inhibited until the next NAME or CCHHR statement.

Programmer Response: Locate and correct the errors in the preceding control statements or in the computation of the value specified on the CHECKSUM statement. Note that checksumming excludes invalid hexadecimal data and control statements.

AMA134I OPERAND ERROR. NO-GO SWITCH SET

Explanation: The operand of a CHECKSUM statement had more than or less than the required eight characters, or contained non-hexadecimal characters. (Always followed by message AMA132I.)

System Action: Message AMA132I is issued and the next control statement is read. REPs and SETSSIs are inhibited until the next NAME or CCHHR statement.

Programmer Response: Correct the operand in the CHECKSUM statement.

AMA135I NO CORE TO DUMP ALL OF member

Explanation: AMASPZAP processing tried to dump all of the load modules identified in the message text, but there was not enough storage available to build an internal CSECT table. AMASPZAP tries to dump an entire load module in response to one of the following:

- A DUMP control statement that specifies ALL for the CSECT parameter.
- A DUMP control statement that specifies an invalid CSECT name.
- A NAME control statement that specifies an invalid CSECT name.

System Action: AMASPZAP ignores the control statement that caused the dump request. If the control statement was a NAME statement, AMASPZAP ignores any associated VER or REP statements. AMASPZAP continues processing any subsequent control statements.

Programmer Response: Probable user error. Correct any invalid CSECT names on the AMASPZAP control statements and rerun the job, specifying a larger region size.

AMA136I FIRST 32K BYTES OF RECORD DUMPED

Explanation: During ABSDUMP processing, AMASPZAP encountered a record that is at least 32,767 bytes long. AMASPZAP cannot determine whether the record is exactly 32,767 bytes long or if the record exceeds that length. The dump displays the first 32,767 bytes of the record.

System Action: ABSDUMP processing continues.

Programmer Response: If you want a dump of the entire record, enter a CCHHR statement for the address of the record and then intentionally fail a VERIFY request on some data in the first 32K of the record. The system will issue message AMA104I and dump the entire record.

AMBLIST Messages

AMB101I ESD CONTAINS INVALID DATA

Explanation: The AMBLIST program encountered either an invalid ESD type or an incorrect ESDID.

System Action: If the LISTOBJ function of AMBLIST is being used, the invalid control statement is printed and processing continues. Otherwise, processing terminates. (Return code--8.)

Programmer Response: Recompile the modules, and rerun the job.

Problem Determination: Table I, items 1, 13, 29. If the problem occurred during execution of LISTOBJ, execute the LISTIDR function of AMBLIST to determine which compiler processed the module. If the problem occurred during execution of LISTLOAD, execute the LISTIDR function of AMBLIST to determine which linkage editor produced the load module.

AMB102I INVALID [LOAD/OBJECT] RECORD

Explanation: AMBLIST detected an undefined record type in the load/object records. For object records, byte positions do not contain any of the following types: ESD, SYM, TXT, RLD, or END. For load module records, the hexadecimal code in the first byte of the record is invalid or undefined.

System Action: If the record in question is from an object module, it will be printed and execution will continue. If the record in question is from a load module, processing will terminate for the current control statement and resume with the next. (Return code--8.)

Programmer Response: List the load module using the IEBPTPCH data utility specifying PRINT TOTCONV=XE to determine the nature of the faulty record. If it has been incorrectly modified, restore it to its correct format.

Problem Determination: Table I, items 1, 2, 13, 29. Execute the AMBLIST service aid program to obtain IDR listings for the module and for all programs which may have modified it.

AMB103I RLD POINTER INVALID

Explanation: The AMBLIST program encountered an incorrect R or P pointer in the relocation dictionary (RLD).

System Action: Processing terminates for this operation and continues with the next control statement. (Return code--8.)

Programmer Response: Re-link edit the program and rerun the job.

Problem Determination: Table I, items 1, 2, 13, 29. Execute the LISTOBJ function of AMBLIST to determine which linkage editor or language translator produced the bad R or P pointer. Execute LISTIDR for IDR data, showing if AMASPZAP has been executed for the module, when and what translators were used, and other user supplied data.

AMB104I TABLE OVERFLOW, ENLARGE REGION SIZE AND RERUN

Explanation: The AMBLIST table capacities were exceeded because the partition size was insufficient.

System Action: The operation is terminated; processing continues with the next control statement. (Return code--8.)

Programmer Response: Enlarge the partition size, and rerun the job.

Problem Determination: Table I, items 1, 2, 13, 29. Execute the IEBPTPCH utility program specifying PRINT TOTCONV = XE to list the module being processed by AMBLIST.

AMB105I ddn DOES NOT DEFINE LOAD MODULE LIBRARY

Explanation: The name specified by the DDN parameter on the AMBLIST control statement or by the default ddname on the SYSLIB DD statement is not the name of a load module library.

System Action: Processing terminates for this operation and continues with the next control statement. (Return code--8.)

Programmer Response: Make sure that the library referenced by the AMBLIST control statement or by the SYSLIB DD statement contains load modules, or change the control statements indicating the proper library type. Rerun the job.

AMB106I MODULE IS NOT EDITABLE, NO XREF PROVIDED

Explanation: When the associated module was link edited, the not editable attribute of the linkage editor was specified. The module, therefore, does not contain the CESD, and no XREF can be provided.

System Action: Processing terminates for this operation and continues with the next control statement. (Return code--4.)

Programmer Response: Recreate the load module from its associated object module. Do not specify the not editable attribute. Rerun the job.

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

AMB107I I/O ERROR ON READ

Explanation: An uncorrectable input/output error was encountered while AMBLIST was reading input.

System Action: Processing terminates for this operation and continues with the next control statement. (Return code--8.)

Programmer Response: Be sure the data set is defined correctly in the control statement.

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

AMB108I MEMBER NOT FOUND

Explanation: The member name or alias name specified by the MEMBER parameter on the AMBLIST control statement was not found in the indicated library.

System Action: Processing terminates for this operation and continues with the next control statement. (Return code--8.)

Programmer Response: List the directory of the referenced library using the LISTPDS function of the IEHLIST utility. Rerun the job.

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

AMB109I I/O ERROR READING PDS DIRECTORY

Explanation: An uncorrectable I/O error occurred while AMBLIST was reading the directory of a partitioned data set.

System Action: Processing terminates for this operation and continues with the next control statement. (Return code--8.)

Programmer Response: None.

Problem Determination: Table I, items 1, 2, 13, 25ac, 29.

AMB110I DDNAME DOES NOT DEFINE OBJECT MODULE DATA SET

Explanation: The AMBLIST program attempted to process as an object module, a data set or member defined by the DDN parameter or by the operands on the LISTOBJ control statement. However, the data set or member is not an object module.

System Action: The operation terminates; processing continues with the next operation. (Return code--8.)

Programmer Response: Make sure that the module to be processed is an object module. Rerun the job.

Problem Determination: Table I, items 1, 2, 13, 25ac, 29.

AMB111I ddn CANNOT BE OPENED

Explanation: The specified data set cannot be opened. The DD statement defining that data set may be missing.

System Action: Processing terminates if ddn is SYSIN or SYSOUT; otherwise, processing continues with the next control statement. (Return code--12.)

Programmer Response: Make sure that the job control language for the step includes a DD statement that properly defines the

data set. Execute the LISTVTOC function of the IEHLIST utility to obtain a list of the volume table of contents of the volume containing the data set.

AMB112I LOAD MODULE DOES NOT CONTAIN CSECT IDENTIFICATION

Explanation: The load module specified on the LISTIDR control section does not contain any CSECT identification records.

System Action: No IDR listings are produced. Processing continues with the next operation. (Return code--4.)

Programmer Response: Re-link edit the load module using a linkage editor which contains IDR support, and rerun the job.

AMB113I IDR INFORMATION IS INCOMPLETE

Explanation: The last CSECT identification record found in this load module is not marked with an "end of IDR data" flag.

System Action: Processing continues. (Return code--8.)

Programmer Response: Make sure that no IDR data has been lost. Re-link edit the module using a linkage editor which contains IDR support, and rerun the job.

AMB114I THE CSECT NAME ASSOCIATED WITH AN IDR ENTRY CANNOT BE FOUND

Explanation: The ESD ID on an IDR data entry did not match any ID in the CESD of the load module being processed.

System Action: Processing of this operation terminates. Processing continues with the next operation. (Return code--8.)

Programmer Response: Make sure that the IDR data for this load module has not been altered. If it has been altered, correct it and rerun the job.

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

AMB115I BUFFER SPACE NOT AVAILABLE - INCREASE REGION SIZE

Explanation: The AMBLIST buffer space was exceeded because the region size was insufficient.

System Action: Processing terminates for this operation and continues with the next control statement. (Return code--8.)

Programmer Response: Enlarge the partition size and rerun the job.

AMB117I INVALID DIRECTORY BLOCK

Explanation: AMBLIST encountered a directory block that was not 256 bytes long.

System Action: The operation is terminated; processing continues with the next control statement. (Return code -- 8.)

Programmer Response: Examine the DD statement for the data set currently being processed and make certain that a member name was not specified in the DD statement. If one was, correct the DD statement and resubmit the job.

Problem Determination: Table I, items 1, 13, 25ac, 29.

AMB120I EXPECTED CONTINUATION CARD NOT FOUND

Explanation: The AMBLIST control statement indicated continuation (a comma was found after the last operand); however, it is not followed with proper continuation.

System Action: Processing terminates. (Return code--12.)

Programmer Response: Check all AMBLIST control cards for valid continuation cards. Rerun the job.

AMB121I INVALID CONTROL STATEMENT

Explanation: An AMBLIST control statement is invalid because it contains an invalid operation, an embedded blank, or it begins in column 1.

System Action: Processing terminates for this operation and continues with the next control statement. (Return--8.)

Programmer Response: Make sure the AMBLIST control statements are specified correctly. Then rerun the job.

AMB122I INVALID OPERAND NEAR CARD COLUMN INDICATED BY $

Explanation: An error has occurred in the AMBLIST control statement near the card column location indicated by the $.

System Action: Processing terminates for this operation and continues with the next control statement. (Return code--8.)

Programmer Response: Make sure the AMBLIST control statements are specified correctly. Then rerun the job.

AMB123I CLOSE QUOTE OR PAREN NOT FOUND, OR KEYWORD VALUE EXCEEDS COL 71

Explanation: Quotation mark or closing parenthesis is missing on AMBLIST control statement, or the value for a keyword runs past column 71.

System Action: Processing terminates for this operation and continues with next control statement. (Return code--8.)

Programmer Response: Check the AMBLIST control statements for unbalanced quotation marks and parentheses or for operands that run past column 71. Resubmit the job.

AMB124I NUMBER OF MEMBER NAMES EXCEEDS 32 NEAR COLUMN INDICATED BY $

Explanation: The number of member names specified on an AMBLIST control statement exceeds the limit, 32. The card column where this error was detected is flagged by a $.

System Action: The extra member names are ignored, and processing continues. (Return code--8.)

Programmer Response: Use two or more AMBLIST control statements to list the member names.

AMB125I IMPROPER OPERAND NEAR COLUMN INDICATED BY $

Explanation: An incorrect or invalid operand has been detected in the AMBLIST control statement. Its location is indicated by $.

System Action: The operand is ignored. Processing continues. (Return code--8.)

Programmer Response: Make sure the AMBLIST control statements are specified correctly; then rerun the job.

AMB126I IMPROPER OPTION NEAR COLUMN INDICATED BY $ LOCATION

Explanation: An option specified in the AMBLIST control statement is invalid; its location is indicated by $.

System Action: The default value was assumed; processing continues. (Return code--4.)

Programmer Response: Check the validity of the options specified on the AMBLIST control statement. Correct the errors and rerun the job.

AMB127I RELOC OPERAND INVALID WHEN MAPPING NUCLEUS - OPERAND IGNORED

Explanation: The RELOC operand is not compatible with mapping of a nucleus.

System Action: Processing continues without relocation. (Return code--4.)

Programmer Response: None.

AMB128I NUCLEUS NOT MARKED SCTR - STANDARD XREF PROVIDED

Explanation: The nucleus is not marked SCTR.

System Action: Processing continues as if the nucleus was not intended for use as a nucleus. (Return code--4.)

Programmer Response: If the program being mapped is not intended for use as a nucleus, no programmer response is necessary. If the program is intended for use as a nucleus, the program must be reprocessed by the linkage editor using the SCTR option. Then rerun the AMBLIST program to obtain the correct nucleus map.

AMB129I IMPROPER CESD SEQUENCE IN NUCLEUS - STANDARD XREF PROVIDED

Explanation: IEAANIPO and IEAQFX00 are not the first two CSECTs in the CESD respectively.

System Action: The nucleus is processed as if it were not a nucleus. (Return code--4.)

Programmer Response: If the program being mapped is not intended for use as a nucleus, no programmer response is necessary. If the program is intended for use as a nucleus, the program must be reprocessed by the linkage editor using the SCTR option, and specifying the following control statements as the first items in the input to the linkage editor: INSERT IEAANIPO and INSERT IEAQFX00. Rerun the AMBLIST program to obtain the correct nucleus map.

AMB130I NUCLEUS REQUESTED FOR OUTPUT=XREF IS NOT THE NUCLEUS THAT WAS IPL'

Explanation: The nucleus is not the nucleus that was loaded.

System Action: Processing continues. (Return code--4.)

Programmer Response: None.

AMDSADMP Dump Program Messages

AMD001A { **PTR** / **TAPE** } **=**

Explanation: Message AMD001A is issued when the dump program is loaded for execution. It requests the operator to enter a 3 character output device address.

System Action: The console proceed indicator is turned on, allowing the operator to enter the output device address.

Operator Response: Ready the desired output device of the type indicated in the message text. Enter one of the following responses, to assign the device address for the dump:

- Following PTR=, enter the device address of the printer on which the output is to be written.
- Following TAPE=, enter the device address of the magnetic tape unit on which the output is to be written.
- Depress the END key on the console (EOB) to select the default output device address.

AMD002I { **CMD** / **LBL** } **ERR**

Explanation: There is an error in the device address entered in response to message AMD001A, or the volume mounted on that device is not acceptable for AMDSADMP output.

System Action: AMDSADMP reissues message AMD001A so that the device address may be re-entered (entered correctly). However, if the message indicates LBL ERR and the error occurred following an attempt to satisfy an end-of-reel condition, no additional message will be issued. In any case, AMDSADMP will wait until the operator has mounted the non-label (NL) tape on the output device.

Operator Response: Probable user error. Depending on the text of the message, the operator should do one of the following:

- CMD ERR - reenter the correct output device address in response to message AMD001A.
- LBL ERR - mount a non-label tape on a magnetic tape device and enter the address of that device in response to message AMD001A. If this message was issued after mounting a tape in response to an end-of-reel condition, mount a NL tape on the device being used for AMDSADMP output.

Problem Determination: Table I, items 2, 28, 29.

AMD003I I/O ERR ON ddd CSW=xxxxxxxxxxxxxxxx

Explanation: During execution of the dump program for real storage, an uncorrectable input/output error occurred.

System Action: If the error occurs during initialization, message AMD001A is reissued. Otherwise, AMDSADMP terminates, and the system enters a wait state.

Operator Response: If message AMD005I has not been issued, and the I/O error appears to have been caused by the tape, mount a new tape and rerun the dump program. If the tape drive appears to be failing, rerun AMDSADMP, selecting an alternate tape drive. If the printer appears to be failing, rerun AMDSADMP, selecting an alternate printer. If message AMD005I has been issued, do not rerun the AMDSADMP program.

Note: If AMDSADMP is rerun, certain locations, depending on whether a tape or direct access device is being used, may not reflect the original contents of real storage. These storage locations may have been altered during the initial AMDSADMP execution. A store status operation should not be performed before an attempt is made to rerun AMDSADMP. (See *OS/VS2 MVS System Programming Library: Service Aids* for more specific information.)

Problem Determination: Table I, items 13, 28, 30, 45-50. Record the contents of register 11 at the time of the message.

AMD004A EOR

Explanation: While writing on magnetic tape, AMDSADMP detected end-of-reel condition.

System Action: The tape volume is tape-marked and unloaded. AMDSADMP stops processing until a non-label (NL) tape volume is mounted.

Operator Response: Mount another NL tape volume in place of the full output tape, and save the full volume.

AMD005I REAL DUMP DONE

Explanation: The AMDSADMP storage dump is complete.

System Action: If this is the low speed to tape version of the dump program, the tape volume will be unloaded, and the program will enter a wait state. If this is the low speed to printer version of the dump program, the system will enter a wait. If this is high speed version of the dump program, the program will continue.

Operator Response: No response is required for either low or high speed dump programs.

AMD008A ADDR=

Explanation: The low speed dump program is requesting an address range to dump.

System Action: The console proceed indicator is turned on allowing the operator to enter an address range. Address translation, if requested, is done by using the value in control register 1 if a store-status operation was performed, or the master segment table whose address is at PSASTOR in the PSA at absolute 0 if the control register 1 segment table is invalid. This address range is printed after rounding has occurred and, therefore, includes page boundaries.

Operator Response: Do one of the following:

- Enter an address range of the form Rxxxxxx,yyyyyy for a real address and Vxxxxxx,yyyyyy for a virtual address translation. xxxxxx is a six digit starting address and yyyyyy is a six digit ending address equal to or greater than the starting address.
- Press the end key (EOB) for a default dump of all of storage in either real or virtual mode dependent upon the defaults specified at initialization time. If message AMD009I has been issued, only the R form may be used or defaulted.

AMD009I CR1 INVALID

Explanation: A low speed dump of virtual addresses has been attempted but address translation cannot be performed due to a bad segment table address. The master segment table whose address is at PSASTOR in the PSA at absolute 0 was used as was the value of control register 1 if a store-status operation was not performed.

System Action: Message AMD008A will be reissued allowing the operator to enter a new address range.

Operator Response: Reply to message AMD008A.

AMD010I PROCESSING ASID=asid ASCB=aaaaaa JOBNAME=jjj

Explanation: AMDSADMP will attempt to dump selected paged out data for the memory with ASID (asid), jobname (jjj), and ASCB (aaaaaa). If both ASCB fields (ASCBJBNI and ASCBJBNS) are zero or the first character of the jobname is not A through Z, [, $, #, or *, a jobname of *UNKNOWN is used. This message is issued for each memory which is dumped.

System Action: AMDSADMP processing continues to dump the specified ASID.

Operator Response: Since the jobname specified has been terminated by AMDSADMP, it may be necessary to re-run the job after a system re-IPL.

AMD011A TITLE=

Explanation: Message AMD011A is issued to request a dump title.

System Action: The console proceed indicator is turned on, allowing the operator to enter a dump title.

Operator Response: Enter a dump title of up to 100 characters, or press the END key (EOB) on the system console to indicate no dump title.

AMD012D REPLY I(IGNORE), or READY ddd AND REPLY G(GO), REPLY =

Explanation: AMDSADMP has attempted to obtain paged out data from device ddd but found the device in a not ready state.

System Action: The console proceed indicator is turned on, allowing the operator to enter a reply.

Operator Response: If the specified device does not exist or is not attached to the system, reply I and processing will continue ignoring data indicated to exist on that device. If the specified device is attached to the system, verify that the volume mounted is the same volume which was mounted at the time of the system failure. Then ready the device and reply G. Processing will continue using selected data from the specified device.

AMD013I ERR LOADING PRECURSOR

Explanation: A permanent I/O error occurred while attempting to load the precursor routine which obtains the page dumping program.

System Action: The dump program terminates and enters a wait state.

Operator Response: None. Probable hardware error.

Problem Determination: Table I, items 30, 45-50.

AMD014A INTV REQ { **ddd** / **IPL DEV** }

Explanation: The device indicated in the message text is not ready.

System Action: The dump program waits for the device to be made ready.

Operator Response: Ready the indicated unit. If the unit cannot be readied, rerun the AMDSADMP program and, if possible, specify another address of the same device type.

If the unit is a 2305 direct access device, make sure that the intervention required condition has been satisfied by readying the device and then pressing the STOP key and then the START key on the CPU panel. If the message reads INTV REQ IPL DEV, ready the device from which the dump program was loaded.

Note: If AMDSADMP is rerun, certain locations, depending on whether a tape or direct access device is being used, may not reflect the original contents of real storage. These storage locations may have been altered during the initial AMDSADMP execution. (See *OS/VS2 MVS System Programming Library: Service Aids* for more specific information.)

Do not attempt a store status operation before an attempt to rerun AMDSADMP.

AMD015I ddd NOT OPERATIONAL

Explanation: The device indicated in the message text was not operational when an I/O operation to the device was attempted.

System Action: The dump program does not use the device for I/O.

Operator Response: None.

AMD016I NO PATH TO ddd { **DEFINED** / **AVAILABLE** }

Explanation: AMDSADMP is unable to initiate the I/O to the page data set on device ddd. DEFINED indicates that the system control blocks indicated that no CPU path to device ddd was defined. This could be due to an error in one of the following system control blocks:

CAT, CSD, LCH, PCCA, or UCB.

AVAILABLE indicates that the SIGP instruction failed to start the CPU for which an I/O path to device ddd has been defined.

System Action: Processing continues. The dump program does not use device ddd for I/O.

Operator Response: None.

AMD017I AMDSADMP ERROR IN MODULE mod, [DUMP ASID = asid]

Explanation: An error occurred in module mod during virtual dump processing. If the module name is not available, UNKNOWN is printed. The error may be due to an invalid control block address in the system. If a dump ASID is provided, then either a dump of all storage used by AMDSADMP has been written to the output tape and assigned an ASID of asid, or a dump of storage used by AMDSADMP was attempted but could not be completed due to an unrecoverable error or failure to handle an end-of-reel condition on the output tape. The dump has been assigned an ASID of asid.

System Action: Processing continues unless the ASID has reached X'FFFF', in which case, AMDSADMP is terminated with a wait state of X'2F'.

Problem Determination: Table I, items 2, 29, 45-50. Execute the AMDPRDMP service aid program, requesting a PRINT STORAGE of ASID (asid).

AMD018I CONTROL BLOCK ERROR--ADDR = adr, xxx yyy

Explanation: Control block yyy at virtual address (adr) was found to be in error or was unavailable. (adr is a real address for an invalid segment table.)

- If xxx is INVALID, than one of the following conditions exists:

  1. The control block did not pass a check for validity, or the pointer to it was zero.

  2. The control block could not be obtained from the AMDSADMP workfile or the system paging devices.

     This may be due to one of the following:

     - An I/O error on the device, in which case message AMD033I will have been issued.

- Failure to initiate I/O.
- Operator replied I to message AMDO12D for a device on which intervention was required.
- The virtual address is not defined on external storage.
- Invalid or unavailable control block required to page in the control block named, in which case, message AMD018I should precede this message.

- If xxx is LOOP IN, then the control block named is on a chain which is in a probable loop. Either the system count, if one exists, or the AMDSADMP default of the number of control blocks on the chain has been exceeded before the end of the chain was reached. The AMDSADMP defaults are:

  1. 256 for TCB, SPQE, GTFBCB chains.
  2. 1024 for DQE chain.
  3. 15 for MCQE chain.

The control blocks which are checked for validity are:

AMB, ASCB, ASXB, ASVT, CVT, EDB header, DQE, GTFBCB, MCCE, MCQE, SPQE, ASPCT, segment table, RSM header LPMB, UCB, ASMVT, LGVT, PVT, TCB, PART, SART, and SPCT.

System Action: Record the message for use by the system programmer.

Programmer Response: The message may contain diagnostic information useful in determining the cause of the operating system failure.

AMD019A FILE PROTECTED

Explanation: The tape mounted does not have a file-protect ring.

System Action: AMDSADMP unloads the tape and, if message AMD005I has already been issued, issues message AMD020A.

Operator Response: Probable user error. Make sure that the tape mounted has a file protect ring.

AMD020A MOUNT NL TAPE ON ddd

Explanation: AMDSADMP is requesting a non-label (NL) dump tape on the magnetic tape unit indicated by ddd.

System Action: AMDSADMP waits for the operator to mount the tape and ready the device.

Operator Response: Mount the tape, with a file protect ring, on the magnetic tape unit address, ddd.

AMD022I ERROR DUMPING { **PAGE=xxx** / **CSA** / **LSQA** / **SWA FOR TCB=aaa** / **LOCAL SUBPOOLS FOR TCB=aaa** / **LOCAL MEMORY** / **GTF** / **PAGE TABLE, ADDR=adr** }

Explanation: An error occurred during an attempt to write a record to the output device.

- PAGE=xxx: Either I/O could not be initiated for the specified address, a program failure occurred as noted by message AMD017I, or the page containing the specified address could not be brought in from a system paging device.
- CSA, LSQA, SWA, LOCAL SUBPOOLS: Either a program failure occurred as noted by message AMD171I, an invalid SPQE was found on a single SPQE chain, or an invalid DQE was found on a single DQE chain.
- LOCAL MEMORY: Either a program failure, as noted by message AMD017I, or a paging failure occurred while trying to find the TCB chain for a memory.
- GTF: A program failure, as noted by message AMD017I, or a paging failure occurred while trying to dump the GTF virtual buffers on the GTF history queue.
- PAGE TABLE, ADDR=adr: Either no buffers were available into which the page table specified could be read, I/O could not be initiated to read in the page or write it to the output tape, an error occurred reading or writing the record containing the page table, or the page table does not exist on external storage.

System Action: Processing continues with the next logical function.

Programmer Response: The message may contain useful diagnostic information.

Operator Response: None.

Problem Determination: Table I, items 2, 29, 45-50, if there seems to be an error in AMDSADMP logic.

AMD023I VIRTUAL DUMP COMPLETE { **-nn** / **FOR CSA** / **FOR GTF** }

Explanation: This message indicates completion of the specified subfunction of the virtual dump, or of the entire virtual dump process with code specified by nn. The meanings of nn are as follows:

- X'00': normal completion.
- X'01'-X'27': message is of last message which could not be issued to the console prior to terminating (this code must be converted to decimal in order to obtain the proper message id).

- X'28': CVT cannot be brought in from workfile.
- X'29': CVT invalid.
- X'2A': LPA address is 0 (no LPA).
- X'2B': master memory invalid.
- X'2C': recursion through termination, possibly because of multiple external interrupts.
- X'2D': Auxiliary Storage Management (ASM) function cannot be initialized.
- X'2E': operator cancelled virtual dump with external interrupt.
- X'2F': maximum number of AMDSADMP internal errors occurred.
- X'30': terminal I/O error on output device.
- X'31': Page Vector Table is invalid.

System Action: If the virtual dump process is complete, a wait state PSW is loaded with nn as the instruction counter.

Otherwise, processing continues with the next function or local memory.

Programmer Response: The final wait state code may contain useful diagnostic information.

Operator Response: If the message contains the code nn, AMDSADMP is complete. Save the output tape and notify the system programmer that a dump has been taken.

Problem Determination: Table I, items 2, 29, 45-50, if there seems to be an error in AMDSADMP logic.

AMD025I GTF DUMP BYPASSED

Explanation: One of the following conditions exists:

1. A program failure as indicated by message AMD017I.
2. The current MCCE is invalid or unavailable as noted by message AMD018I.
3. An MCQE on the MCQE chain is invalid or unavailable as indicated by message AMD018I.
4. There is no GTFPCT pointed to by the MCQE for GTF.
5. There is no history queue to be dumped.

System Action: Processing continues with the next memory. No GTF virtual buffers are dumped.

Operator Response: None.

Programmer Response: If (1), see message AMD017I. If (2) or (3), message AMD018I may contain useful diagnostic information.

Problem Determination: Table I, items 2, 29, 45-50, if there seems to be an error in AMDSADMP logic.

AMD026I ERR LOADING PAGEDUMP [CC=cc]

Explanation: An error occurred while obtaining the AMDSAPGE program from the SYS1.PAGEDUMP data set.

System Action: The dump program will terminate without dumping any records from the SYS1.PAGE data set to tape. The output tape will be tape-marked, rewound, and unloaded, and the system will enter a wait state.

Operator Response: None.

Problem Determination: Table I, items 2, 29, 45-50. Record the device type and save the AMDSADMP console output.

AMD029D REPLY W TO WAIT AFTER NEXT FULL SCREEN, ELSE REPLY N; REPLY=

Explanation: This message is issued when the system console is a graphic display device, and the screen has been filled with messages. The message causes a break in execution of the program and allows the operator time to read and record any necessary messages.

System Action: Processing stops until the operator replies to the message. If he replies W or end-of-block, (EOB or END key), the screen is cleared, and processing continues until the screen is filled again. This message is then reissued and processing again stops until the operator makes a response. If the operator replies N to this message, the screen is cleared and processing continues uninterrupted from that point on no matter how many times the screen is filled. Once N has been entered as a response, this message is never reissued.

Operator Response: Read all messages currently on the screen and record, for the system programmer, any messages which indicate errors. If it is necessary to know which jobs were running when the dump was taken, the job names can also be recorded. Reply W or end-of-block (EOB or END key), if it is felt that these messages are useful. Reply N in order to take the dump as quickly as possible. Note, however, that when you reply N, the messages put out by AMDSADMP may be issued too fast to be read.

Programmer Response: In order to have the full benefit of the AMDSADMP messages prior to running AMDPRDMP, request the operator to reply W and copy all error messages. If possible, the AMDSADMP macro can be recoded with a non-graphic device specified for the system console.

AMD030I WARNING--AMDSADMP WORKFILE INCOMPLETE DUE TO { INSUFFICIENT SPACE / AN I/O ERROR }

Explanation: An error occurred while writing storage to the work data set which is used during virtual dumping. The work data set contains a copy of the storage which is overlaid by the virtual dump program. Due to the error, storage may be overlaid and available from the work data set, causing page data set records to not be dumped.

- INSUFFICIENT SPACE - For tape IPL, an end-of-reel condition was encountered on the IPL tape. For direct access IPL, the size of the primary extent of SYS1.PAGEDUMP was inadequate.

- AN I/O ERROR - An uncorrectable I/O error occurred while writing the work data set.

System Action: Processing continues. However, if data required for performing the virtual dump has been overlaid, subsequent AMDSADMP error messages may be issued.

Operator Response: Bring this message to the attention of the system programmer.

Programmer Response: The AMDSADMP program should be reinitialized by executing the card deck which was produced when the AMDSADMP macro was assembled. This will enable the proper amount of space to be allocated for SYS1.PAGEDUMP or for initialization on a new tape volume. Reinitialization is recommended because the same problem will otherwise occur each time AMDSADMP is executed.

AMD031I TERMINAL ERROR ON OUTPUT DEVICE

Explanation: The error condition described by message AMD033I is terminal.

System Action: AMDSADMP processing terminates with a wait state code of X'30'.

Operator Response: If the output tape is not rewound, no tape mark has been written. Tape mark the tape, if possible.

Problem Determination: Table I, items 2, 29, 30, 45-50.

AMD032I UNCORRECTABLE ERROR ON OUTPUT VOLUME--TAPE MARK NOT WRITTEN

Explanation: AMDSADMP attempted to write a tape mark on the dump output tape volume, but was unable to do so due to an I/O error.

System Action: If this is due to an end-of-reel condition, message AMD004A will also be issued. Otherwise, AMDSADMP will be terminated and message AMD023I will be issued.

Operator Response: Indicate on the tape volume external label that the ending tape mark is missing.

AMD033I I/O ERROR ON ddd CMD=cm STATUS=stat COND=err

Explanation: A permanent I/O error occurred while AMDSADMP was trying to read from a page data set or from the AMDSADMP work file, or trying to write on the output tape. The address of the device on which the error occurred is indicated by ddd. The channel command being executed is indicated by cm. The CSW status bits, if applicable, are indicated by stat. If not applicable, STATUS=NONE is printed.

The type of error for which AMDSADMP was attempting recovery is indicated by err which may be any of the following:

- For channel errors:
  - CHAINING CK
  - CHAN CTL CK
  - CHAN DATA CK
  - INCORRECT LENGTH
  - INTERFACE CTL CK
  - PCI
  - PGM CK
  - PROTECTION CK
- For device or control unit errors:
  - ATTENTION
  - BUSY
  - CU END
  - STATUS MODIFIER
  - UNIT EXCEPTION
- For direct access device errors:
  - BUFFERED LOG FULL
  - BUS OUT PARITY
  - CMD REJECT
  - DATA CK
  - END OF CYLINDER
  - ENVIRONMENTAL DATA
  - EQU CK
  - FILE PROTECTED
  - INTV REQ
  - INVALID TRACK FORMAT
  - MISSING ADDR MARKER
  - NO RECORD FOUND
  - OPERATION INCOMPLETE
  - OVERRUN
  - PERM ERROR
  - SEEK CK
  - TRACK COND CK
- For type device errors:
  - BUS OUT PARITY
  - CMD REJECT
  - DATA CHK
  - DATA CONVERTER CK
  - EQU CK
  - FILE PROTECTED
  - INTV REQ
  - LOAD POINT
  - NOT CAPABLE
  - OVERRUN
  - PE ID BURST CK
- For paging storage device errors:
  - BASE DEVICE UNAVAILABLE
  - STORAGE DIRECTOR COMMUNICATION FAILED
  - SUBSYSTEM STORAGE AVAILABILITY THRESHOLD CROSSED
  - SUBSYSTEM STORAGE IS UNUSABLE
  - SUBSYSTEM STORAGE MUST BE INITIALIZED
  - TRACK FORMAT NOT SUPPORTED FOR PAGING
  - DISABLED INTERFACE
  - MICROCODE LOGIC ERROR
  - SUBSYSTEM STORAGE EQUIPMENT CHECK
  - WRITE INHIBITED
- For the 3480 Magnetic Tape Subsystem
  - BACKWARD AT BEGINNING OF TAPE
  - BLOCK ID SEQUENCING
  - CONTROL UNIT ERP FAILED
  - CONTROL UNIT ERROR
  - DATA CHECK READ
  - DATA CHECK (READ OPPOSITE)
  - DATA SECURITY ERASE FAILURE
  - DEGRADED MODE ERRORS
  - DEMARK DATA BUFFER
  - DRIVE ASSIGNED ELSEWHERE
  - DRIVE EQUIPMENT CHECK
  - DRIVE NOT ONLINE
  - DRIVE PATCH LOAD FAILURE
  - DRIVE RESET BY OPERATOR
  - LOAD ASSISTANCE

LOAD DISPLAY TIMEOUT
LOAD FAILURE
LOCATE BLOCK UNSUCCESSFUL
LOG AND RETRY
PATH EQUIPMENT CHECK
PERMANENT EQUIPMENT CHECK
PHYSICAL END OF TAPE
MANUAL UNLOAD
NO DRIVE MICROCODE PATCHES AVAILABLE
NOT READY
SUBSYSTEM MICROCODE NEEDED
TAPE VOID
TAPE LENGTH ERROR
VOLUME REMOVED BY OPERATOR
WRITE DATA CHECK
WRITE ID MARK CHECK

- For special errors:
  ERROR IN ERROR RECOVERY - During recovery from the error indicated by the status and sense bytes, a second error occurred from which recovery was impossible.
  ERROR IN SENSE CMD - An error occurred while attempting to read the sense bytes.
  UNKNOWN - The error indicated by the status and sense bytes is unexpected and no recovery exists.
  UNUSED - AMDSADMP has generated an invalid message condition.

System Action: The I/O operation is not performed. Message AMD034I may also be issued.

Operator Response: If err is WRITE INHIBITED and message AMD014A follows, turn the write-inhibit switch on the device to the write position.

Problem Determination: Table I, items 2, 29, 30, 45-50.

AMD034I SENSE=sens

Explanation: This message always follows message AMD033I. It shows 24 bytes of sense information associated with the error described in message AMD033I. If the sense bytes are not applicable to the error or are all zero, this message is not issued. If the device in error has less than 24 bytes of sense information, the extra bytes will be zero.

System Action: The I/O operation is not performed.

Operator Response: None.

AMDSADMP Initialization Messages

AMD035I FILE ddname CANNOT BE OPENED

Explanation: The AMDSALDR program could not open the data set specified on the DD statement indicated by ddname.

System Action: AMDSALDR cannot prepare the AMDSADMP program for initialization of the IPL volume (return code--4).

Programmer Response: Rerun the job.

Problem Determination: Save the initialization input and output for the AMDSADMP macro and the output from the execution of the AMDSADM2 macro and AMDSALDR steps. Table I, items 47,48.

AMD036I ERROR--INVALID OBJECT INPUT FROM SYSUT1 FILE

{CSECT csect NOT FOUND
EXT RECORDS OUT OF SEQUENCE
NO END STATEMENT FOLLOWING TXT
UNIDENTIFIABLE RECORD ENCOUNTERED}

Explanation: An uncorrectable error occurred initializing the SYSUT1 data set.

- CSECT (csect) NOT FOUND: CSECT (csect) could not be found. The CSECTs AMDSAPRO and AMDSAPGE should reside in SYS1.LINKLIB.
- TXT RECORDS OUT OF SEQUENCE: The input object module has a misplaced text record.
- NO END STATEMENT FOLLOWING TXT: The input object module does not have an END statement.
- UNIDENTIFIABLE RECORD ENCOUNTERED: The input object module has an extraneous input record.

System Action: The AMDSALDR program will not prepare the AMDSADMP program for initialization of the IPL volume (return code--4.)

Programmer Response: Rerun the job.

Problem Determination: Table I, items 9a, 29, 47, 48. Save the AMDSADMP macro input and output. Save the execution step listings.

AMD037I ERROR - SYSUT2 FILE DOES NOT CONTAIN MODULE mod

Explanation: The input received from SYSUT2 was not in object or load module format. Note that modules which are not on the first data set of a concatenated data set will not be found. In effect, concatenated data sets are not valid for SYSUT2.

System Action: AMSALDR will not prepare the AMDSADMP program for initialization of the IPL volume (return code--4).

Programmer Response: Make sure that the module in question is an object module or load module.

Problem Determination: Table I, items 3, 9a, 13, 29, 47, 48.

AMD038I INVALID PARM=PARAMETER ON EXEC STATEMENT

Explanation: The parameter input to AMDSADMP is in error. The parameter input must be either:

```
TYPE2=HI,IPL2=(T or D)
     or
TYPE2=LO,IPL2=D
```

System Action: AMDSALDR will not prepare the AMDSADMP program for initialization of the IPL volume (return code--4).

Programmer Response: Correct the parameter input, and rerun the job.

Problem Determination: Table I, items 29, 47, 48. Save the AMDSADMP macro input and output.

AMD039I ERROR - MODULE mod DOES NOT CONTAIN CSECT csect

Explanation: Module (mod) does not have a section definition for CSECT (csect).

System Action: AMDSADMP initialization terminates (return code--4).

Programmer Response: Rerun the job.

Problem Determination: Save the Stage 1 AMDSADMP macro input and output. Execute the AMBLIST service aid program to list the module with a cross reference table. Table I, items 47,48.

AMD040I {BLDL/FIND} I/O ERROR SEARCHING SYSUT2 FILE FOR MODULE mod

Explanation: An I/O error occurred while searching for the indicated module.

System Action: AMDSADMP terminates (return code--4).

Programmer Response: Rerun the job.

Problem Determination: Table I, items 2, 29, 30, 47, 48. Save the AMDSADMP macro output.

AMD041I UNCORRECTABLE I/O ERROR OCCURRED

Explanation: An uncorrectable input/output error occurred during AMDSADMP initialization.

System Action: AMDSADMP initialization terminates (return code--4).

Programmer Response: Rerun the job.

Problem Determination: Table I, items 2, 29, 30, 47, 48. Save the AMDSADM2 macro output.

AMD042I GETMAIN FAILED - INSUFFICIENT STORAGE

Explanation: There is not enough storage to initialize AMDSADMP.

System Action: AMDSADMP terminates (return code--4).

Operator Response: Rerun the AMDSADMP job in a larger region.

AMD043I AMDSALDR PROCESSING SUCCESSFULLY COMPLETED

Explanation: If the IPL2 = T option was specified in the AMDSALDR step, the IPL tape has been successfully initialized with the AMDSADMP program. If IPL2 = D was specified, loader-maker input for IEHDASDR has been successfully prepared.

System Action: A condition code of zero is returned to the system.

Operator Response: None.

AMD044I INVALID LOAD MODULE mod - RLD ERROR/ENTRY POINT NOT ZERO

Explanation: Load module (mod) was invalid.

- RLD ERROR: Unresolved external references or pseudo-register items exist in an RLD record of the load module.
- ENTRY POINT NOT ZERO: The entry point of the load module (mod) is not at offset zero into the load module.

System Action: AMDSADMP initialization terminates (return code--4).

Programmer Response: Rerun the job.

Problem Determination: Table I, items 26c, 29, 47, 48. Execute the AMBLIST service aid program to list the module with a cross reference table.

AMDPRDMP Messages

AMD150I FILE ddname CANNOT BE OPENED

Explanation: The data set associated with the indicated ddname could not be opened, or the required PRINTER DD statement is missing.

System Action: AMDPRDMP execution terminates.

Programmer Response: Probable user error. Ensure that a PRINTER DD statement is present and verify that all DD statements are correct.

Problem Determination: Table I, items 1, 2, 15, 29.

AMD151I INSUFFICIENT STORAGE - EXECUTION TERMINATED

Explanation: The region size was less than the minimum 128K required for execution or else storage for buffer space was not available.

System Action: AMDPRDMP processing terminates.

Programmer Response: If the region size was less than 128K, rerun the job in region of at least 128K.

Operator Response: None.

Problem Determination: Table I, items 1, 2, 3, 4, 29. Save a listing of the control statements for AMDPRDMP in the order the control statements were executed.

AMD153I PERMANENT I/O ERROR ON ddname - EXECUTION TERMINATED

Explanation: An I/O error has occurred on the device assigned to the data set specified in the statement indicated by ddname, and the associated DCB SYNAD routine has been entered.

System Action: AMDPRDMP execution terminates.

Programmer Response: Check the indicated DD statement to ensure that the proper device is specified.

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

AMD154D REPLY TITLE, 'SAME' OR 'END'

Explanation: This message appears on the console prior to the execution of each user control statement requesting that the operator specify a dump title to be applied to the dump listing. This message is issued if a T has been included in the PARM= option of the EXEC statement.

System Action: AMDPRDMP waits pending the operator's reply.

Operator Response: Enter one of the following responses:

- If a new title is to be applied to each page of the AMDPRDMP output listing, enter REPLY id,ccccc...cc, ccccc...cc being any character string of up to 64 characters.
- If the previous title is to be used, enter REPLY id,SAME.
- If execution of the AMDPRDMP program is to terminate, enter REPLY id,'END'.

AMD155D REPLY WITH GO, DESIRED FUNCTION, OR END

Explanation: Either no SYSIN data set was supplied (see next paragraph) or all user control statements in the SYSIN data set have been processed without encountering an END control statement. This message, issued to the console, requests additional control statements.

If the SYSIN data set omitted, this message is issued as soon as execution of the AMDPRDMP program begins. The program enters conversational control mode in which control statements are entered from the console. This message is reissued after the processing for each set of specified functions has completed.

System Action: The AMDPRDMP program enters a wait state until the operator's response has been entered.

Operator Response: Any sequence of user control statements may be entered. If GO is entered, the set of user control statements specified by a preceding ONGO statement will be used. If no ONGO has been specified, the ONGO default values will be used. A reply of END will cause AMDPRDMP program execution to terminate.

AMD156I REPLY WITH STOP TO TERMINATE CURRENT FUNCTION

Explanation: This message allows the operator to stop the execution of a function control statement at any time. This message is issued to the console only if 'S' is included in the PARM= option list of the EXEC statement.

System Action: AMDPRDMP execution continues. This message remains outstanding until a STOP command is entered or until the program terminates.

Operator Response: If you want to halt execution of the active function control statement, enter REPLY xx,'STOP'. This will cause the AMDPRDMP program to stop processing the current function control statement and either read the next control card from the SYSIN data set or issue message AMD155D to request more control statements from the operator. If you do not reply to this message, execution will proceed normally and at termination the outstanding reply will be deleted.

AMD158I I/O ERROR ON DUMP

Explanation: An I/O error occurred while AMDPRDMP was attempting to read a block from the input dump data set.

System Action: The system does not dump any more of the storage area named on the control statement it was processing when the I/O error occurred. AMDPRDMP checks the syntax of any remaining control statements but does not execute any until it encounters a valid NEWDUMP, NEWTAPE, or END control statement.

Operator Response: None.

Programmer Response: None.

AMD162I JOB jobname NOT FOUND

Explanation: The indicated job was specified in a PRINT JOBNAME=jobname user control statement. The job could not be found in the storage dump.

System Action: AMDPRDMP execution continues with the next user control statement.

Programmer Response: None.

AMD163I GO FUNCTIONS TO BE PERFORMED [ONGO operands]

Explanation: On execution of a GO control statement, this message lists the functions to be performed.

System Action: The indicated GO functions are performed. If the ONGO control statement has been previously issued by the user, the specified functions appear in this message. If no ONGO control statement was specified, the default functions, EDIT, SUMMARY, and PRINT CURRENT are indicated and will be performed.

Programmer Response: None.

AMD164I TAPE IS PRE-FORMATTED DUMP REMAINING PARAMETERS IGNORED

Explanation: AMDPRDMP has determined that the input tape data set is not an AMDSADMP high-speed or system produced dump. The input block size is less than 134 characters.

System Action: AMDPRDMP prints the contents of the input tape with no formatting. The current user control statement is ignored and the next control statement is obtained.

Programmer Response: Probable user error. If user control statements are being entered from the system console, the current tape volume should be demounted by entering the NEWDUMP or NEWTAPE control statement. Otherwise AMDPRDMP should be rerun using the correct dump tape.

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

AMD165I ERROR IN PRECEDING CONTROL STATEMENT
[error description]

Explanation: A syntax error was detected during the scan of an AMDPRDMP control statement. If the control statement error cannot be diagnosed by the AMDPRDMP program, an error description cannot and will not be issued with the message. Otherwise, the error description on the second line identifies the error as one of the following:

- ASID OMITTED FROM LIST
  An operand was missing from the ASID subfield of the PRINT STORAGE statement.
- ASID 0 OR FFFF IS NOT ALLOWED
  ASIDs of 0 and FFFF are not valid ASIDs (they could not have been created by the operating system) and have special internal meanings to AMDPRDMP.
- DELIMITER ERROR IN JOBNAME OPERAND LIST
  The job names specified by the JOBNAME keyword must be separated by commas.
- DELIMITER ERROR IN OPERAND FIELD OF aaaaaaaa
  A delimiter error was encountered by an AMDPRDMP exit module in the operand field of its own verb; aaaaaaaa is replaced by that verb.
- DELIMITER ERROR IN REAL OPERAND
  Parameters of the REAL keyword of the PRINT verb must be separated by commas. During the scan, an invalid delimiter was found; or parentheses were found to have been omitted or incorrectly used.
- DELIMITER ERROR IN STORAGE OPERAND
  Parameters of the STORAGE keyword for the PRINT verb are not separated by commas; or parentheses are omitted or incorrectly used.
- FILE OPERATION CANNOT BE PERFORMED ON D/A INPUT
  The FILESEQ keyword parameter was used in the NEWDUMP control statement, but the corresponding dump data set was on a direct access device.
- GO PARAMETER ENCOUNTERED IN ONGO OPERAND
  The GO verb may not be specified as a verb in the ONGO list.
- INVALID CVT ADDRESS SPECIFIED
  The value specified for the CVT verb is invalid. This value must be specified as a 1 to 6 digit hexadecimal address.
- INVALID DELIMITER FOLLOWING KEYWORD
  A keyword is followed by an invalid delimiter.
- INVALID DELIMITER FOLLOWING VERB
  The delimiter separating two verbs or a verb and a keyword is invalid.
- INVALID KEYWORD
  A keyword is invalid.
- INVALID KEYWORD IN OPERAND FIELD OF aaaaaaaa
  An invalid keyword was encountered by AMDPRDMP exit module in the operand field of its own verb; aaaaaaaa is replaced by that verb.
- INVALID NUMERIC IN REAL OPERAND
  One of the digits in a real storage address did not fall within the range 0-9 or A-F.
- INVALID NUMERIC IN STORAGE OPERAND
  One of the digits in either an ASID or a storage address did not fall within the range 0-9 or A-F.
- INVALID SEGTAB ADDRESS SPECIFIED
  The value specified for the SEGTAB verb is invalid. This value must be specified as a 1 to 6 digit hexadecimal address.
- INVALID VERB
  The verb of a control statement is not known to AMDPRDMP.
- JOBNAME LENGTH GREATER THAN 8
  A job name specified in the JOBNAME operand has a length greater than 8 characters.
- KEYWORD LENGTH GREATER THAN 8
  A keyword was found that has more than 8 characters.
- LENGTH OF ASID IS GREATER THAN 4
  The ASID specified in the storage operand list is longer than 4 hexadecimal digits.
- LENGTH OF REAL ADDRESS GREATER THAN 8
  A storage address in the REAL operand list was specified with more than 8 hexadecimal digits.
- LENGTH OF STORAGE ADDRESS GREATER THAN 8
  A virtual storage address, in the STORAGE operand list, is specified with more than 8 hexadecimal digits.
- NAME MISSING FROM JOBNAME OPERAND LIST
  No job name is specified for the JOBNAME keyword of the PRINT verb.
- NEWDUMP KEYWORD VALUE ERROR
  There is syntax error in the keyword parameters of the NEWDUMP control statement.
- NO INPUT DD CARD
  The value of the DDNAME keyword of the NEWDUMP control statement specified a DD statement which is not included with the JCL statements used to execute the AMDPRDMP service aid program.
- OPERAND MISSING
  The value for a keyword parameter is not specified.
- POSITION 72 MUST BE BLANK
  Control statements are coming from the reader and column 72 is not blank. Verbs must be entered in columns 1-71 only. After processing this message, AMDPRDMP will blank position 72 and attempt to process the statement.
- STARTING ADDRESS IS NOT LESS THAN ENDING ADDRESS
  An address pair was specified in which the first address was larger than the second.
- STARTING ASID IS NOT LESS THAN OR EQUAL TO ENDING ASID
  On a PRINT STORAGE request, an ASID range was specified in which the second ASID is less than the first ASID.
- STARTING OMITTED IN PAGE OPERAND
  TTR or SGG values in the operand of the PAGE keyword must appear in pairs. The first address of a pair was omitted.
- STARTING OMITTED IN REAL STORAGE OPERAND
  Values in the operand of the REAL keyword must appear in pairs. An odd number of addresses was specified in this list.
- STARTING OMITTED IN STORAGE OPERAND
  A virtual storage address in the STORAGE keyword must appear in pairs. The first address of a pair was omitted.
- SYNTAX ERROR IN OPERAND FIELD OF aaaaaaaa
  A syntax error was encountered by an AMDPRDMP exit module in the operand field of its own verb; aaaaaaaa is replaced by that verb.
- TOO MANY JOBNAMES IN LIST
  More than ten job names were specified for the JOBNAME keyword of the PRINT verb.
- VERB LENGTH GREATER THAN 8.
  The verb is longer than 8 characters.

System Action: AMDPRDMP ignores the verb or keyword it was scanning and looks for the next verb or keyword. If there are no more verbs on the control statement to be examined and the control statements are being provided by the SYSIN data set, the next control statement is read. If the error occurred on a NEWDUMP control statement, the remaining statements will be scanned for SYNTAX errors, but no execution will take place until a correct NEWDUMP, NEWTAPE or END control statement is encountered. If user control statements are are being entered from the system console, AMDPRDMP issues either message AMD155D or AMD283D to allow the operator to enter a new control statement.

Programmer Response: Probable user error. If the control statements entered by way of the card reader, rerun the job specifying the control statements in the proper syntax.

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

AMD166I FORMAT ERROR DURING JOBNAME SEARCH

Explanation: AMDPRDMP encountered a format error while attempting to locate the virtual storage assigned to a specified job.

System Action: AMDPRDMP execution continues and, if possible, the search is continued.

Operator Response: None.

AMD168I DUMP DATA SET EMPTY - DD ddname

Explanation: The dump data set described by DD statement ddname does not contain a core image dump or a preformatted dump.

System Action: If the user control statements are being entered from the SYSIN data set, AMDPRDMP will scan the remaining control statements for syntax errors. No control statements will be executed until a correct NEWDUMP or NEWTAPE statement is encountered. If user control statements are being entered from the console, message AMD283D will be issued to allow the user to enter a new AMDPRDMP control statement.

Operator Response: Probable user error. The current input data set can not be processed by AMDPRDMP. If additional dumps are to be processed by AMDPRDMP, the NEWDUMP or NEW TAPE control statements may be used to specify a different input data set. Otherwise, execution of AMDPRDMP can be terminated by replying 'END' to message AMD283D.

AMD170I END OF FILE ON SYSIN - CONTROL PASSED TO OPERATOR

Explanation: All user control statements in the SYSIN data set have been processed without encountering an END control statement.

System Action: AMDPRDMP issues message AMD155D to the system console.

Programmer Response: None.

AMD171I PROCESSING FOR CURRENT DUMP DISCONTINUED

Explanation: An error occurred that prevents further processing on the current dump.

System Action: All remaining user control statements in the SYSIN data set are scanned, but none are executed until a valid NEWDUMP, NEWTAPE, or END verb is encountered.

Programmer Response: None.

AMD172I FUNCTION TERMINATED BY OPERATOR

Explanation: STOP has been entered in reply to message AMD156I.

System Action: AMDPRDMP ceases processing the current function statement and obtains the next user control statement.

Programmer Response: None.

AMD173I SYSUT1 IS NOT DA - DUMP WILL BE PROCESSED ON TAPE

Explanation: The SYSUT1 data set was not assigned to a direct access device.

System Action: Instead of processing the dump data set on direct access storage, AMDPRDMP processes the dump on the input tape.

Programmer Response: None.

AMD174I { SYSUT1 / SYSUT2 } LOADED

Explanation: The work data set indicated in the message text has been loaded from the input data set.

System Action: If the work data set is SYSUT1, module AMDPREAD will get the dump information from the SYSUT1 data set. If the work data set is SYSUT2, the copying of the data set has been successful; execution terminates.

Programmer Response: None.

AMD175I NO TAPE DD CARD - SYSUT1 ASSUMED LOADED

Explanation: A TAPE DD statement is not included in the AMDPRDMP JCL.

System Action: AMDPRDMP assumes that the dump to be processed is in the data set described by the SYSUT1 DD statement. Dump processing will be attempted on this data set.

Programmer Response: None.

AMD177I THESE MODULES NOT FOUND
AMD177I mod
AMD177I mod
etc.

Explanation: AMDPRDMP was unable to locate the named modules in either SYS1.LINKLIB or in a private library.

System Action: AMDPRDMP suppresses the function that required the use of the named modules, issues message AMD180I to indicate which function cannot be used, and continues processing with one of the following actions:

- If the module named in message AMD180I is required for execution of a control statement, that control statement is not executed, and AMDPRDMP proceeds with the next control statements.
- If the module is a user exit program for the EDIT function of AMDPRDMP, message AMD214I is issued to indicate that EDIT processing will terminate. AMDPRDMP continues with the next control statement.
- If the module is a format appendage for the EDIT function that trace records requiring this appendage will be printed in the hexadecimal dump format.

Operator Response: Note the module names identified by message AMD177I and inform the system programmer that this message has been issued.

Programmer Response: If the module named in message AMD177I has the format AMDUSRxx, xx being a hexadecimal number in the range 1-50, the module is a user format appendage for the EDIT function. Trace records requiring this module are user trace records for which the hexadecimal dump may be desired. If this is the case, no programmer action is required.

If the module name is not of the format AMDUSRxx, or if the user format appendage is desired, message AMD177I indicates a probable user error. The required AMDPRDMP module must be link edited into a private library or the SYS1.LINKLIB data set.

Problem Determination: Table I, items 2, 4, 29.

AMD178I I/O ERROR ON BLDL

Explanation: AMDPRDMP issued a BLDL macro instruction to locate a required module. The BLDL macro instruction encountered an input/output error.

System Action: AMDPRDMP suppresses the function that required use of the module, issues message AMD180I to indicate which function cannot be used, and continues processing with one of the following actions:

- If the module named in message AMD180I is required for execution of a control statement, that control statement is not executed and AMDPRDMP proceeds with the next control statement.
- If the module named in message AMD180I is a user exit program or a format appendage for the EDIT function of AMDPRDMP, message AMD214I is issued to indicate that EDIT processing will terminate. AMDPRDMP proceeds with the next control statement.

Operator Response: Inform the system programmer that this message was issued.

Programmer Response: Verify that the AMDPRDMP modules have been link edited correctly into the private library or SYS1.LINKLIB data set.

Problem Determination: Table I, items 1, 4, 29.

AMD180I mod FUNCTION INOPERATIVE

Explanation: The function of AMDPRDMP, mod in the message text, is inoperative. This module can be one of the following:

- Required for the execution of an AMDPRDMP control statement. In this case, the module name will have the format AMDPRxxx where xxx is one of:

  PCR - PRINT CURRENT function
  FXT - FORMAT function
  PJB - PRINT JOBNAME= (print storage by specific jobname)
  LPA - LINK PACK AREA map function
  SCN - EDIT GTF trace data (control card scan phase)
  XED - EDIT GTF trace data (processing phase)
  NUC - PRINT NUCLEUS, SQA, and CSA functions
  PMS - PRINT STORAGE= or PRINT REAL
  GCD - CPUDATA function
  SUM - SUMMARY function

- A system or subsystem format appendage routine for the EDIT function of AMDPRDMP. In this case, the module name has the format AMDSYSxx where xx is a hexadecimal number, or AMDUSR yy where yy is a hexadecimal number in the range 51-FF.
- A user exit program for the EDIT function of AMDPRDMP as specified by the EXIT parameter of the EDIT control statement.

System Action: The action taken by AMDPRDMP depends on why the named function has become inoperative. One of the message AMD177I or AMD178I is issued prior to issuing message AMD180I to indicate both the reason for the function becoming inoperative and the resulting system action.

Operator Response: Follow the recommended programmer response indicated for messages AMD177I - AMD178I.

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

AMD181I DELETE ERROR - mod

Explanation: During execution of the EDIT function, AMDPRDMP attempted to acquire storage for the load of a program segment by deleting the loaded module (mod). It was found that module (mod) had already been deleted.

System Action: EDIT execution terminates; AMDPRDMP processing proceeds with the next control statement.

Operator Response: Report this message to the programmer.

Programmer Response: Probable user error. User exit programs and user format appendages for the EDIT function must not issue the DELETE macro instruction specifying modules of AMDPRDMP. Verify that this is not done. Rerun the job including a SYSPRINT DD statement in the AMDPRDMP JCL.

Problem Determination: Table I, items 1, 2, 4, 29.

AMD187I INVALID EXEC CARD PARAMETER

Explanation: The AMDPRDMP program detected a syntax error in the value of the PARM= parameter of its EXEC JCL statement.

System Action: AMDPRDMP processing continues; the value assumed for this parameter may be in error.

Programmer Response: Probable user error. Correct the value of the PARM= parameter, and make sure that a SYSPRINT DD statement has been included with the AMDPRDMP JCL.

Problem Determination: Table I, items 1, 4, 29.

AMD199D CONTINUE DEFINITION

Explanation: Control statements for the EDIT function of AMDPRDMP are being entered from the system console. An EDIT control statement is to be continued.

System Action: The AMDPRDMP program enters a wait pending the operator's reply.

Operator Response: Enter the continuation for the current EDIT control statement.

AMD201I INVALID KEYWORD BEGINNING WITH xxx

Explanation: While scanning a control statement, EDIT has encountered an invalid keyword. The first three characters of that keyword are indicated by xxx.

System Action: If control statements are being provided by the SYSIN data set, the function requested by the control statement in error will not be executed. Further action depends on the type of data set being processed:

1. If a dump data set is being processed, AMDPRDMP will syntax-check the remaining control statements for that dump without executing them.

2. If an external trace data set is being processed, AMDPRDMP will resume processing with the next control statement.

If user control statements are being entered from the primary system console, AMDPRDMP issues message AMD210D to allow the user to enter EDIT keywords.

Operator Response: If the control statements are being entered by way of the system console, reenter the EDIT keywords with correct syntax.

Programmer Response: Probable user error. If the control statements are being provided by the SYSIN data set, rerun the job using valid keywords and abbreviations.

Problem Determination: Table I, items 2, 4, 29.

AMD202I INVALID PARENTHESES

Explanation: While scanning a control statement, EDIT encountered either unbalanced parentheses or parentheses around keyword values for which only one value may be specified.

System Action: If control statements are being provided by the SYSIN data set, the function requested by the control statement in error will not be executed. Further action depends on the type of data set being processed:

1. If a dump data set is being processed, AMDPRDMP will syntax-check the remaining control statements for that dump without executing them.

2. If an external trace data set is being processed, AMDPRDMP will resume processing with the next control statement.

If user control statements are being entered from the primary system console, AMDPRDMP issues message AMD210D to allow the operator to enter EDIT keywords.

Operator Response: If entering the control statements from the system console, reenter the EDIT keywords correctly.

Programmer Response: Probable user error. If the control statements were entered by way of the SYSIN data set, rerun the job, making sure that all parentheses are paired and that no parentheses are used with the DDNAME and EXIT keywords.

Problem Determination: Table I, items 2, 4, 29.

AMD203I INVALID PARM VALUE FOR KEYWORD keywd

Explanation: While scanning the keyword parameter - keywd, EDIT encountered a value that contains other than valid alphameric values or a value that falls outside the range of values allowed for that keyword.

System Action: If control statements are being provided by the SYSIN data set, the function requested by the control statement in error will not be executed. Further action depends on the type of data set being processed:

1. If a dump data set is being processed, AMDPRDMP will syntax-check the remaining control statements for that dump without executing them.

2. If an external trace data set is being processed, AMDPRDMP will resume processing with the next control statement.

If user control statements are being entered from the primary system console, AMDPRDMP issues message AMD210D to allow the operator to enter EDIT keywords.

Operator Response: If the control statements are being entered by way of the system console, reenter the EDIT keywords, making sure that all the errors mentioned above have been corrected.

Programmer Response: Probable user error. If the control statements are being provided by the SYSIN data set, rerun the job, making sure that alphabetic and numeric characters are used correctly, and that all parameters fall within the range of values allowed.

Problem Determination: Table I, items 2, 4, 29.

AMD204I LENGTH OF PARM INVALID FOR KEYWORD keywd

Explanation: While scanning parameter values associated with keyword (keywd), EDIT encountered a parameter value that exceeds the maximum length allowed for parameters of that keyword.

System Action: If control statements are being provided by the SYSIN data set, the function requested by the control statement in error will not be executed. Further action depends on the type of data set being processed:

1. If a dump data set is being processed, AMDPRDMP will sntax-check the remaining control statements for that dump without executing them.

2. If an external trace data set is being processed, AMDPRDMP will resume processing with the next control statement.

If user control statements are being entered from the primary system console, AMDPRDMP issues message AMD210D to allow the operator to enter EDIT keywords.

Operator Response: If the control statements are being entered from the system console, reenter the EDIT keywords, making sure that the error mentioned above has been corrected.

Programmer Response: Probable user error. If the control statements are being provided by the SYSIN data set, rerun the job, making sure that all parameter values conform to length requirements.

Problem Determination: Table I, items 2, 4, 29.

AMD205I DUPLICATE KEYWORD-keywd

Explanation: While scanning a control statement, EDIT encountered the EXIT or DDNAME keyword after it had already been specified with a different value.

System Action: If control statements are being provided by the SYSIN data set, the function requested by the control statement in error will not be executed. Further action depends on the type of data set being processed:

1. If a dump data set is being processed, AMDPRDMP will syntax-check the remaining control statements for that dump without executing them.

2. If an external trace data set is being processed, AMDPRDMP will resume processing with the next control statement.

If user control statements are being entered from the primary system console, AMDPRDMP issues message AMD210D to allow the operator to enter EDIT keywords.

Operator Response: If the control statements were entered from the system console, reenter the EDIT keywords, making sure that the error mentioned above has been corrected.

Programmer Response: Probable user error. If the control statements are being provided by the SYSIN data set, rerun the job, making sure that the EXIT or DDNAME keyword is specified only once per EDIT control statement.

Problem Determination: Table I, items 2, 4, 29.

AMD206I EXCESSIVE NO. PARM VALUES FOR KEYWORD keywd

Explanation: While scanning multiple parameter values associated with keyword (keywd), EDIT has encountered a greater number of unique parameter values than is allowed for this keyword.

System Action: If control statements are being provided by the SYSIN data set, the function requested by the control statement in error will not be executed. Further action depends on the type of data set being processed:

1. If a dump data set is being processed, AMDPRDMP will syntax-check the remaining control statements for that dump without executing them.

2. If an external trace data set is being processed, AMDPRDMP will resume processing with the next control statement.

If user control statements are being entered from the primary system console, AMDPRDMP issues message AMD210D to allow the operator to enter EDIT keywords.

Operator Response: If entering the control statements from the system console, reenter the EDIT keywords, making sure that the error mentioned above has been corrected.

Programmer Response: Probable user error. If the control statements were entered from the SYSIN data set, rerun the job, making sure that the number of unique parameter values does not exceed the maximum number allowed for this keyword.

Problem Determination: Table I, items 2, 4, 29.

AMD207I INVALID DELIMITER FOR KEYWORD keywd

Explanation: While scanning values for keyword (keywd) EDIT has encountered either a delimiter in the place of a value or an unexpected type of delimiter.

System Action: If control statements are being provided by the SYSIN data set, the function requested by the control statement in error will not be executed. Further action depends on the type of data set being processed:

1. If a dump data set is being processed, AMDPRDMP will syntax-check the remaining control statements for that dump without executing them.

2. If an external trace data set is being processed, AMDPRDMP will resume processing with the next control statement.

If user control statements are being entered from the primary system console, AMDPRDMP issues message AMD210D to allow the operator to enter EDIT keywords.

Operator Response: If the control statements are being entered from the system console, reenter the EDIT keywords with the proper delimiters.

Programmer Response: Probable user error. If the control statements are being provided by SYSIN data set, check all delimiters and rerun the job.

Problem Determination: Table I, items 2, 4, 29.

AMD208I START VALUE EXCEEDS STOP VALUE IN STMTS ABOVE

Explanation: The START parameter value is larger than the STOP parameter value.

System Action: If control statements are being provided by the SYSIN data set, the function requested by the control statement in error will not be executed. Further action depends on the type of data set being processed:

1. If a dump data set is being processed, AMDPRDMP will syntax-check the remaining control statements for that dump without executing them. will resume processing with the next control statement.

If user control statements are being entered from the primary system console, AMDPRDMP issues message AMD210D to allow the user to enter EDIT keywords.

Operator Response: If the control statements are being entered from the system console, reenter the EDIT keywords, making sure that the error mentioned above has been corrected.

Programmer Response: Probable user error. If the control statements are being provided by the SYSIN data set, rerun the job, ensuring that the STOP parameter value is greater than the START parameter value.

Problem Determination: Table I, items 2, 4, 29.

AMD209I INVALID USERID OR RANGE

Explanation: While scanning the parameter values associated with the USR keyword, EDIT has encountered one of the following conditions:

- An invalid symbolic EID.
- An EID range in which the left (lower) value exceeds the right (upper) value.

System Action: If control statements are being provided by the SYSIN data set, the function requested by the control statement in error will not be executed. Further action depends on the type of data set being processed:

1. If a dump data set is being processed, AMDPRDMP will syntax-check the remaining control statements for that dump without executing them.
2. If an external trace data set is being processed, AMDPRDMP will resume processing with the next control statement.

If user control statements are being entered from the primary system console, AMDPRDMP issues message AMD210D to allow the operator to enter EDIT keywords.

Operator Response: If entering the control statements from the system console, reenter the EDIT keywords, making sure that all of the errors mentioned above have been corrected.

Programmer Response: Probable user error. If the control statements were entered by way of the SYSIN data set, rerun the job, making sure that any symbolic EIDs used are valid and that the right (upper) value in an EID range is equal to or greater than the left (lower) value.

Problem Determination: Table I, items 2, 4, 29.

AMD210D RESPECIFY EDIT KEYWORDS OR REPLY 'RUNEDIT'

Explanation: An EDIT control statement entered from the system console is in error. This message is issued to allow the operator to respecify the keywords contained in that statement or to select default processing.

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Note: If the control statement has been divided into a string of continued lines, only the keywords for the line in error may be respecified. The keywords from the previous lines have already been accepted.

System Action: EDIT waits pending the operator's reply.

Operator Response: Do one of the following:

- Respecify the keywords and values from the statement in error including corrections to syntax violations as noted by messages AMD201I through AMD209I.
- Reply RUNEDIT to cause EDIT execution to begin with the parameters selected on the previously accepted control statements. If no control statements have been accepted, the default options (EDIT SYS,USR=ALL) will be in effect.

AMD211I EDIT OPTIONS IN EFFECT-option list

Explanation: This message is issued to inform the user what keyword options have been accepted for EDIT's data reduction process. If more than one option has been accepted, they are separated by commas in the order specified below:

EXIT=exitname
DDNAME=ddname
START=(day,hh.mm.ss)
STOP=(day,hh.mm.ss)
JOBNAMES=(jjj,jjj,...jjj)
ASCB=(ascbaddr,ascbaddr,...ascbaddr)
either of the following:
IO=SIO=parm
or
SIO=parm,IO=parm
SVC=parm
PI=parm
USR=parm
EXT
RNIO
SRM
RR
DSP

In the options listed, parm may be either ALL, or SEL, where ALL indicates that all events within that event class will be edited, and SEL indicates that only events selected by the user supplying the keyword parameter values for that event class will be edited.

System Action: EDIT processing continues with the above data reduction options in effect.

Operator Response: None.

Programmer Response: None.

AMD212I RCD ON PG nnnn. RET CODE rc RCVD FR MODULE mod

Explanation: The record currently being processed by EDIT has been dumped in hexadecimal on page number nnnn of the output data set. Module (mod) attempted to format that record, but EDIT was unable to process it because module (mod) returned an invalid return code (rc).

System Action: EDIT will display, in hexadecimal, the record associated with the error.

EDIT takes action based on the value of the "ER" parameter, specified in the EXEC statement of the AMDPRDMP JCL, as follows:

0 If the error was in a format appendage module, as soon as EDIT recognizes that a subsequent record requires that module, processing will terminate for that record and EDIT will select another. If the error was in a user exit module, records will continue to be processed by the format appendages. Message AMD213I will then be issued by EDIT.

1 If the error was in a format appendage module, all subsequent records requiring the same format module will be dumped in hexadecimal format. Message AMD215I will then be issued by EDIT. If the error was in a user exit module, formatting of records will continue. Message AMD213I will then be issued by EDIT.

2 Processing of the current EDIT function will terminate. Message AMD214I is issued by EDIT, and processing will continue with the next control statement.

If ER= is not specified on the EXEC statement, a value of ER= 2 will be assumed.

Operator Response: Report this message to the programmer.

Programmer Response: Probable user error if the module name is either:

1. AMDUSRxx where xx is a hexadecimal number in the range 01-50.

2. A user exit name.

Verify that the module sets a valid return code, and correct it, if necessary.

Problem Determination: If the module name is neither case, (1) nor (2), see Table I, items 1, 2, 4, 29. Make sure that a SYSPRINT DD statement is included in the AMDPRDMP JCL. Save a listing of the SYSPRINT data set and the GTF input trace data set or the dump data set being processed.

AMD213I PROCESSING CONTINUES - BYPASSING MODULE mod

Explanation: This message is issued following message AMD212I and message AMD216I if the user has specified "0" as the value of the ER parameter on the AMDPRDMP EXEC statement. EDIT continues processing, bypassing format appendage or user exit module (mod).

System Action: EDIT execution continues. If the error noted in message AMD212I or AMD216I occurred in a format appendage module, further records requiring that module will not be processed. If the error noted in message AMD212I or AMD216I occurred in a user exit module, processing of records will continue without passing control to the failing user exit.

Operator Response: None.

Programmer Response: None.

AMD214I CURRENT EDIT FUNCTION TERMINATED

Explanation: This message is issued, during EDIT execution, when one of the following occurs:

1. A user exit module could not be found or loaded for execution.

2. A format appendage module, required for processing an external data set, existed in the correct library but could not be loaded for execution.

3. During an attempt to load a user exit module or a format appendage module, an I/O error occurred during execution of a BLDL macro instruction.

4. EDIT attempted to acquire virtual storage space for the load of a module needed to process the current input record by deleting a previously loaded user exit or format appendage module which is no longer in use. EDIT found, however, that the previously loaded format appendage or user exit module had already been deleted.

5. The user has specified '2' or '3' as the value of the ER= parameter on the AMDPRDMP EXEC statement, and an error, identified by message AMD212I, and message AMD216I occurs. When the user has specified 1 as the value of the ER= parameter on the AMDPRDMP EXEC statement, EDIT continues processing, dumping in hexadecimal any record that requires format appendage module (mod) for editing.

System Action: The current EDIT function terminates. Processing continues with the next control statement.

Operator Response: None.

Programmer Response: None.

AMD215I FURTHER RCDS REQUIRING mod WILL BE DUMPED IN HEX

Explanation: This message is issued following message AMD212I and message AMD216I when the user has specified 1 as the value of the ER= parameter on the AMDPRDMP EXEC statement. EDIT continues processing, dumping in hexadecimal any record that requires format appendage module (mod) for editing.

System Action: EDIT continues processing, having deleted format appendage module (mod). Any subsequent records requiring mod for editing will be dumped in hexadecimal.

Operator Response: None.

Programmer Response: None.

AMD216I RCD AND OTHER INFO ON PG nnnn. PGM CHECK IN MODULE mod

Explanation: A program check interrupt has occurred during execution of the format appendage or user exit module (mod). The current input record will be dumped in hexadecimal, along with information pertaining to the program check, on page nnnn of the AMDPRDMP data set.

System Action: EDIT will display in hexadecimal the record associated with the error. EDIT continues execution based on the value of the ER parameter specified on the EXEC statement:

0 If the error was in a format appendage module, as soon as EDIT recognizes that a subsequent record requires that module, processing will terminate for that record an EDIT will select another. If the error was in a user exit module, records will continue to be processed by the format appendages. EDIT will then issue message AMD213I.

1 If the error was in a format appendage module, all subsequent records which require processing by the same format module will be dumped in hexadecimal format. Message AMD215I is then issued by EDIT. If the error was in a user exit module, the resultant action is the same as if 'ER=0' had been specified.

2 Processing of the current EDIT function will terminate. Message AMD214I is issued by EDIT. Processing continues with the next control statement.

If ER= is not specified on the EXEC statement, a value of ER=2 is assumed.

Operator Response: Report this message to the programmer.

Programmer Response: Probable user error if the module name is either:

1. AMDUSRxx where xx is a hexadecimal number in the range 01-50.

2. A user exit name.

Verify that the module in error has been thoroughly tested, using the 'ER=3' parameter value on the AMDPRDMP EXEC statement and including a SYSABEND DD statement in the AMDPRDMP JCL if a dump of the module is desired.

Problem Determination: If the module name is neither case (1) or (2), see Table I, items 1, 2, 4, 13, 29.

AMD217I NO SYS DATA, JOB SELECTION NOT ALLOWED

Explanation: The EDIT function of AMDPRDMP is being used and the JOBNAME keyword parameter was specified on the EDIT control statement. The trace data set being processed is in the SYSM format; therefore, editing of trace records by specific jobname is not possible.

System Action: If control statements are being provided by the SYSIN data set, EDIT processing terminates and AMDPRDMP execution continues with the next user control statement. If control statements are being entered from the system console, message AMD218D will be issued allowing the operator to decide if EDIT processing is to continue.

Operator Response: Message AMD218D will be issued following message AMD217I. Respond to message AMD218D.

Programmer Response: Probable user error. If control statements are being provided by the SYSIN data set, do not use the JOBNAME parameters of the EDIT control statement. Make sure that a SYSPRINT DD statement is included in the AMDPRDMP JCL. Rerun the job.

If control statements are being entered from the system console, respond to message AMD218D when it is issued.

Problem Determination: Table I, items 1, 3, 4, 29. Save the GTF trace data set or the dump data set being processed.

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AMD218D REPLY 'C' TO EDIT WITHOUT JOB SELECTION, 'S' TO TERMINATE

Explanation: AMDPRDMP control statements are being entered from the system console. The EDIT function of AMDPRDMP is being used and the JOBNAME keyword parameter was specified on the EDIT control statement. Trace data being processed is in the SYSM format; therefore, editing by specific jobname is not possible. The operator is asked to decide whether or not processing is to continue without the requested selective editing.

System Action: The AMDPRDMP program waits pending the operator's reply.

Operator Response: If EDIT processing is to continue and all trace records are to be edited, reply 'C'. If EDIT processing is to stop, enter 'S', causing AMDPRDMP execution to continue with the next user control statement.

AMD220I NO EDIT DD CARD - ddname

Explanation: The EDIT function of AMDPRDMP is being used. The DD statement specified by the EDIT keyword parameter DDNAME has been omitted from the AMDPRDMP JCL. In the message text, ddname is the name specified by this parameter.

System Action: EDIT processing terminates. AMDPRDMP execution continues with the next control statement.

Operator Response: Report this message to the programmer.

Programmer Response: Probable user error. Supply the necessary DD statement, or correct the DDNAME parameter by specifying the correct ddname. Make sure that a SYSPRINT DD statement has been included in the AMDPRDMP JCL.

Problem Determination: Table I, items 1, 4, 29.

AMD225I REGION TOO SMALL FOR EDIT BUFFERS

Explanation: AMDPRDMP's region is too small to contain the trace data set buffers. The amount of storage required for the buffer is three times the BLKSIZE. A BLKSIZE of 4096 bytes is always used.

System Action: EDIT processing terminates. AMDPRDMP execution continues with the next user control statement.

Operator Response: Report this message to the programmer.

Programmer Response: Probable user error. Increase the region size.

Problem Determination: Table I, items 1, 4, 29.

AMD226I NO RECORDS IN REQUESTED INTERVAL

Explanation: EDIT did not find any records in the requested interval for one of the following reasons:

- The time interval specified by the START/STOP keywords is within the time interval covered by the trace data set, but GTF did not generate any records during that time.
- The entire trace data set was generated before the START= time indicated by the EDIT control statement.

System Action: EDIT processing terminates. AMDPRDMP execution continues with the next user control statement.

Operator Response: None.

Programmer Response: None.

AMD227I DATA SET CREATED AFTER STOP TIME

Explanation: The EDIT function of AMDPRDMP is being used for an external trace data set. The user specified a STOP= value in his EDIT control statement that is earlier than the value of any time stamp record in the data set.

System Action: Current EDIT processing terminates and processing resumes with the next control statement.

Operator Response: Report this message to the programmer.

Programmer Response: Probable user error. Make sure that the STOP= time is within the time-range of this data set (this can be determined by executing AMDPRDMP EDIT with the same data set, specifying the SYS and USR=ALL options, and examining the block time stamps). Rerun the job with the correct STOP= value.

Problem Determination: Table I, items 4, 29.

AMD228I TRACE INPUT TO EDIT FROM NON-MVS SYSTEM OR AN EMPTY DATA SET

Explanation: The trace tape mounted as input for AMDPRDMP EDIT was created on an operating system other than OS/VS2 MVS or is an empty data set.

System Action: AMDPRDMP EDIT processing terminates.

Programmer Response: Probable user error. Make sure that the output tape was created by AHLGTF or AMDSADMP service aids on an OS/VS2 MVS System.

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

AMD229I MODULE mod EXCEEDS 10K LIMIT

Explanation: The size of the user exit or user format appendage (mod) is greater than 10K.

System Action: Further processing depends on the nature of the appendage and the type of trace data set being processed:

- If the data set being processed is an external trace data set, EDIT issues message AMD214I and terminates processing.
- If the data set being processed is an internal trace data set and module (mod) is a user exit, EDIT issues message AMD214I and terminates processing.
- If the data set being processed is an internal trace data set and module (mod) is a user format appendage, EDIT issues messages AMD215I and dumps, in hexadecimal format, further records requiring that format appendage.

Programmer Response: Ensure that the user exit or user format appendage is less than 10K.

AMD251I INPUT FILE DOES NOT CONTAIN A REAL OR VIRTUAL DUMP

Explanation: AMDPRDMP has determined that the input data set does not contain a real or virtual dump and therefore cannot print storage for a real or virtual request.

System Action: AMDPRDMP execution continues, but virtual and real requests cannot be printed.

Operator Response: Probable user error. If control statements are being entered through the console, the current tape volume should be demounted by entering the NEWDUMP or NEWTAPE control statement. Otherwise, execute AMDPRDMP again, making sure that the correct dump tape is mounted.

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

AMD252I INPUT FILE DOES NOT CONTAIN A REAL DUMP

Explanation: AMDPRDMP has determined that the input data set does not contain a real storage dump for a PRINT REAL operation.

System Action: AMDPRDMP execution continues without satisfying PRINT REAL requests.

Operator Response: Probable user error. If control statements are being entered by way of the console, the current tape volume should be demounted by entering the NEWDUMP or NEWTAPE control statement. Otherwise, execute AMDPRDMP again, making sure that the correct dump tape is mounted.

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

AMD254I SYSUT1 D.A. FILE NOT DEFINED - EXECUTION TERMINATED

Explanation: Because there is no TAPE DD statement included in the AMDPRDMP JCL, the dump information is assumed to be on the direct access file, SYSUT1. However, either the SYSUT1 DD is into defined or else the file described by that DD statement is not direct access storage.

System Action: Execution terminates.

Programmer Response: Probable user error. Either supply a TAPE DD statement defining a tape containing dump data sets, or supply a SYSUT1 DD statement describing a direct access data set that contains dump information.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 29.

AMD260I UNABLE TO ACCESS {PAGE / SEGMENT} TABLE AT adr ID=id

Explanation: An attempt to verify that the segment table can be accessed from dumped storage failed, adr is the 3-byte real storage address used to access the segment table.

id	Meaning
1.	The address was specified by the user with the SEGTAB= control statement.
2.	The address was found in the dumped storage at location X'31C'.

System Action: Processing continues.

Programmer Response: If id is 1, verify that the address specified in the SEGTAB= control statement is in dumped real storage. If id is 2, verify that the address found at location X'31C' is the address of an area in dumped real storage.

Problem Determination: Table I, items 1, 2, 3, 4, 29.

AMD261I UNABLE TO ACCESS CVT

Explanation: AMDPRDMP was unable to locate the CVT in the dump data set. If input is an SVC dump, or a DSS dump then selected portions of storage were dumped that did not include the CVT. If input was created by AMDSADMP, then there was a probable I/O error either creating or reading the data set.

System Action: Processing continues for as many verbs as possible. Error messages will be put out for any verbs that cannot be processed.

Programmer Response: None.

AMD263I DUMP MAY NOT BE FROM AN OS/VS2 RELEASE 3 SYSTEM

Explanation: AMDPRDMP can only successfully process dumps from OS/VS2 Release 3 systems. Checks are made in the dumped system's CVT option field (CVTDCB) for the correct bit configurations for an OS/VS2 system and a release level of 3. One of these checks failed indicating that the dump might not be from an OS/VS2 Release 3 system. AMDPRDMP only processes dumps taken by OS/VS2 dump programs that are at the same release level as AMDPRDMP.

System Action: Processing will continue if it is at all possible.

Programmer Response: Probable user error. Verify that the dump was taken on an OS/VS2 Release 3 system with a Release 3 program. Dumps created from other systems or from Release 1 or 2 of OS/VS2 must be processed by the version of PRDMP for that system.

Problem Determination: Table I, items 1, 2, 3, 4, 29.

AMD264I PAGE TABLE FOR LOCATION ZERO NOT VALID ID=id

Explanation: An attempt to verify that the segment table (and hence page tables) is valid has failed. The id indicates where the segment table address was obtained.

id	Meaning
1.	The address was specified by the user with the SEGTAB= control statement.
2.	The address was found in the dumped storage at location X'31C'.

System Action: Processing continues.

Programmer Response: If id is 2, the SEGTAB= verb in AMDPRDMP can be used to specify the valid segment table address.

Problem Determination: Table I, items 1, 2, 3, 4, 29.

AMD280I INSUFFICIENT SYSUT1 SPACE PROCESSING CONTINUES

Explanation: The data set corresponding to the SYSUT1 DD statement does not have enough space allocated to it or space was not available to be allocated. A B37, D37, or E37 ABEND was intercepted which is explained by a write-to-programmer message issued by the system.

System Action: Processing continues. When dump data is requested which was successfully written to SYSUT1 it is obtained from the SYSUT1 data set. However, when dump data is requested which could not be written to SYSUT1, it is obtained from the original input tape.

Programmer Response: If the job needs to be rerun for any other reason, more space may be provided for the SYSUT1 DD statement.

Problem Determination: Table I, items 1, 4, 25a, 29.

AMD281I AMDPRDMP EXIT INTERFACE INOPERATIVE mod, cde [-rc]

Explanation: AMDPRDMP was unable to load a required exit interface module (mod) and consequently, the exit function of AMDPRDMP is inoperative. The cde is the ABEND completion code return from this LOAD. The return code, (-rc), from this LOAD is also returned.

System Action: AMDPRDMP continues processing without the exit interface. Exit verbs will be ignored as indicated in message AMD289I. Exit modules defined in AMDPRECT will not obtain control on the various AMDPRDMP exits.

Operator Response: Notify the system programmer of this message.

Programmer Response: Follow the directions for the system completion code (cde) in *VS2 System Codes*.

AMD282I SOME SPECIFIED ASIDS COULD NOT BE FOUND

Explanation: Not all of the ASIDs specified on the control statement could be processed. The omitted ASIDs were either not active or the storage associated with them was not dumped.

System Action: The specified ASIDs which were found are processed.

Operator Response: None.

AMD283D REPLY WITH NEWDUMP OR END

Explanation: An error has occurred during PRDMP processing such that the program is in flushmode. This means that no functions will be performed unless a valid NEWDUMP statement or an END statement is encountered. This message, issued to the console, requests one of these responses.

System Action: AMDPRDMP waits for the operator to reply.

Operator Response: Enter a valid NEWDUMP control statement if you wish to process another dump. Otherwise, enter END to terminate AMDPRDMP processing.

AMD284I PREFIX VALUES NOT AVAILABLE

Explanation: The value of the PSA prefix register could not be found in the dump data set. This value is used for accessing logical locations 0-4K when an AMDSADMP is taken on a multiprocessing system. This message may be output for a dump from a uniprocessing system and should be ignored in this case.

System Action: AMDPRDMP continues processing, but no prefixing is done. When information is requested from the logical block 0-4K, the information that was in the physical block 0-4K at the time of the dump is used. This may or may not be the correct information.

Programmer Response: None.

Note: If dump was taken on a uniprocessing system and this message is issued, ignore it. In this circumstance, logical location 0-4K equals the physical location 0-4K.

AMD285I DUMP DEFINED ON DIRECT ACCESS DEVICE SYSUT1 IGNORED

Explanation: A SYSUT1 file was provided but AMDPRDMP determined that the dump data set was already defined on a direct access device.

System Action: AMDPRDMP will process the dump on the direct access device defined by TAPE (or anyname) DD statement without loading the SYSUT1 work file.

Programmer Response: None.

AMD286I CVT AT xxxxxx NOT VALID ID=n

Explanation: AMDPRDMP was unable to verify that the CVT address (xxxxxx) did not pass the validity checks:

- n=1 - The CVT address (xxxxxx) was supplied by the user.
- n=2 - The CVT address (xxxxxx) was supplied in a DSS or SVC DMP header.
- n=3 - The CVT address (xxxxxx) was at loc X'4C' in the dump.

System Action: AMDPRDMP attempts to process the dump data set using the CVT address specified by the user. It is possible that just part of the CVT is invalid and that some parts of it are valid.

Programmer Response: Verify that the address specified in the CVT= control statement really points to the CVT.

AMD287I UNABLE TO LOAD EXIT MODULE - mod,cde [-rc]

Explanation: The exit control table (AMDPRECT) indicated that module (mod) should be loaded to process a AMDPRDMP exit, but AMDPRDMP was unable to load the exit module. In the message text, cde is the ABEND completion code returned from this LOAD. The return code (-rc) from this LOAD is also returned.

System Action: Processing continues. AMDPRDMP will not attempt to invoke this exit module for AMDPRDMP exits during the remainder of this execution. If the exit has its own verb, however, AMDPRDMP will attempt to invoke the exit routine each time the verb is encountered.

Operator Response: Notify the system programmer of this message.

Programmer Response: Follow the directions for system completion code (cde) in *VS2 System Codes*.

AMD288I NO OUTPUT PRODUCED BY verb

Explanation: A AMDPRDMP exit module was processing in conjunction with its own verb (verb) and produced no output to the PRINTER data set.

System Action: Processing continues with the next control statement.

Operator Response: None.

Programmer Response: If the module that processes verb is an IBM-supplied AMDPRDMP exit module, this message indicates a probable system error. Make sure that the exit verb and its associated operands, if any, were specified correctly. If the module is a user-supplied AMDPRDMP exit module, this message indicates a probable user error, unless the exit routine intentionally produces no output under certain conditions. Make sure that the exit routine is coded correctly if some output is expected under all conditions.

Problem Determination: Table I, items 1, 2, 3, 13, 22, 29.

AMD289I VERB IGNORED - verb

Explanation: The AMDPRDMP exit interface function is inactive as indicated by message AMD281I. AMDPRDMP determined that verb was probably an exit verb defined in AMDPRECT, but the inoperative exit interface could not determine if it was a valid exit verb.

System Action: The verb is ignored. AMDPRDMP processing continues normally for all verbs not defined in AMDPRECT.

Programmer Response: Correct the problem that caused the exit interface to be inactive, as specified by message AMD281I.

AMD290I ERROR IN PREFIX VALUES REAL = yyyyyyyy, VIRTUAL = xxxxxxxx

Explanation: The values that AMDPRDMP found for the PSA prefix register failed the validity checks of being non-zero and on a 4K boundary. These values are used for accessing logical locations 0-4K when an AMDSADMP dump is taken on a multiprocessing system. Particular circumstances in which this message is issued are:

- One address was zero but the other was not. (Both addresses equal zero is an indication of a dump from a uniprocessing system.)
- At least one address was not on a 4K boundary.
- One of the addresses could not be read from the dump. In this case, the address that could not be read is set to zero in the message.

The addresses in the message are the addresses that were found either in the PCCA for the IPLed CPU in the dumped system or in the CPU status record (real address only).

System Action: AMDPRDMP continues processing after substituting a zero for the invalid address. Prefixing is not done when this happens.

Programmer Response: None.

AMD291I PERMANENT I/O ERROR ON SYSUT1

Explanation: An unrecoverable I/O error occurred while writing the SYSUT1 work file.

System Action: Processing continues. When dump data, which was successfully written to SYSUT1, is requested, it is obtained from the SYSUT1 data set. However, when dump data, which could not be written to SYSUT1, is requested, it is obtained from the original input tape.

Programmer Response: None.

Problem Determination: Table I, items 1, 2, 13, 18, 29.

AMD292I ERROR IN ASCB DISPATCHING CHAIN

Explanation: One of the following errors occurred while AMDPRDMP was reading the ASCB dispatching queue during dump initialization:

- The block of dump data containing one or more of the following pointers was not found in the dump data set:
  - The pointer in the CVT to the head ASCB on the dispatching chain.
  - The pointer in the CVT to the last ASCB on the dispatching chain.
  - The forward or backward chain pointer in any of the ASCBs on the dispatching chain.
- An I/O error occurred while reading the block of dump data that contained one or more of the preceding pointers.

System Action: Processing continues. If any part of the dispatching chain was read, it is saved for later use by the read control module for translating virtual address requests to real addresses when required. Only those virtual read requests whose ASCBs were read will be satisfied. If no part of the dispatching chain could be read, then only requests for virtual storage from common memory will be satisfied.

Operator Response: None.

Programmer Response: None.

AMD293I NUMBER OF ASCBs EXCEEDED DEFAULT LIMIT OF xxx

Explanation: AMDPRDMP found more than xxx ASCBs on the ASCB dispatching chain during dump initialization. This limit is used by AMDPRDMP to avoid a possible looping condition. It is also used in the determination of the ratio of buffer space to workspace required to format address spaces in excess of 200 in a dumped system.

System Action: Processing continues. Only the first xxx ASCBs are saved for later use by AMDPRDMPs read control module for translating virtual addresses to real addresses when required.

Operator Response: None.

Programmer Response: If the number of address spaces in the dumped system is greater than xxx, increase the limit to contain the actual number. This limit is initially established at 200 but can be changed by the user if too small. Care should be taken not to change this limit unless the dumped system actually contains more than 200 address spaces.

Problem Determination: Table I, items 1, 2, 3, 13, 16, 29.

AMD294I UNABLE TO ACCESS SEGMENT TABLE ADDRESS AT LOCATION 31C

Explanation: The user did not include a SEGTAB= verb on a PRDMP control statement, so PRDMP attempted to get the address of the segment table from location X'31C' in the dumped system. However, the read for this location failed, so no segment table address is available.

System Action: PRDMP attempts further processing. Since no segment table address could be found, no translation can take place. Hence, only requests for a real storage print will be successful.

Operator Response: None.

Programmer Response: Rerun the PRDMP job being sure to include a SEGTAB= verb as the first PRDMP verb.

AMD295I NONE OF THE SPECIFIED ASIDs COULD BE FOUND

Explanation: None of the ASIDs specified on the control statement could be processed. The ASIDs were either not active or the storage associated with them was not dumped.

System Action: AMDPRDMP processing continues with the next control statement.

Virtual Fetch Messages (CSV)

Component Name	CSV
Program Producing Message	Virtual Fetch
Audience and Where Produced	For the operator or system programmer: on the console and/or the system log
Message Format	xx CSVnnns 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 stops until the operator acts. text Message text.
Associated and Referenced Publications	*OS/VS2 SPL: MVS Diagnostic Techniques*, GC28-0725 *OS/VS2 SPL: Initialization and Tuning Guide*, GC28-1029

CSV101I MAJOR NAME name1 FROM ALIAS ENTRY name2 IN DDNAME ddn1 COMES FROM DDNAME ddn2 - ALIAS IGNORED

Explanation: Virtual fetch data sets are identified by //VFINxx DD statements. This message appears when a virtual fetch data set includes an alias name, but the major name for that alias is in a different virtual fetch data set. The variables in the message text are:

name1 The major name identified in the directory entry for the alias

name2 The alias name

ddn1 The ddname of the data set containing the directory entry for the alias name

ddn2 The ddname of the data set containing the directory entry for the major name that is associated with the alias name

System Action: Virtual fetch ignores the alias name.

Operator Response: None.

Programmer Response: Check to see if, during earlier virtual fetch processing, the major name (name1) was dropped from the data set identified in DD statement ddn1. (If it was dropped, one or more of these messages precedes message CSV101I: CSV106I, CSV107I, CSV111I, CSV112I, CSV113I, and CSV116I.)

Problem Determination: Table I, items 2, 3, 4, 13, and 22.

CSV102I VIRTUAL FETCH REFRESH REQUESTED FOR NO MODULES - REQUEST IGNORED

Explanation: A refresh of virtual fetch was requested (that is, CSVVFRSH was invoked), but either no load modules were provided as input or the directory entries or load modules provided were invalid input for virtual fetch.

System Action: Virtual fetch ignores the request. The previous generation of virtual fetch remains active.

Operator Response: Notify the system programmer.

Programmer Response: Verify that the data sets named as input are valid load libraries. Check to see if errors during virtual fetch refresh processing prevented modules from being included. (Look for one or more of these messages: CSV101I, CSV104I, CSV106I, CSV107I, CSV111I, CSV112I, CSV113I, CSV114I, CSVC115I, and CSV116I.)

CSV103I VIRTUAL FETCH INITIALIZATION REQUESTED FOR NO MODULES - REQUEST IGNORED

Explanation: Virtual fetch initialization was requested (that is, CSVVFCRE was invoked), but either no load modules were provided as input, or the directory entries or load modules provided were invalid input for virtual fetch. Module CSVVFCRE issues return code 08.

System Action: Virtual fetch is not initialized.

Operator Response: Notify the system programmer.

Programmer Response: Be sure that valid DD statements (in the form //VFINxx) are provided, and that all data sets named as input are valid load libraries. Check to see if errors during the virtual fetch building process prevented modules from being included. (Look for one or more of these messages: CSV101I, CSV104I, CSV106I, CSV107I, CSV111I, CSV112I, CSV113I, CSV114I, CSV115I, and CSV116I.)

CSV104I CONCATENATION OF DDNAME ddname IS IGNORED - ONLY THE FIRST DATA SET IS USED

Explanation: The JCL used to request virtual fetch initialization (that is, to invoke CSVVFCRE) included a concatenation of DD statements, but virtual fetch does not support DD concatenation.

The variable in the message text is:

ddname The ddname of the data set that was concatenated

System Action: Virtual fetch processes only those modules associated with the first DD statement in the concatenation, and ignores the other DD statements.

Operator Response: None.

Programmer Response: Check to see if any of the DD statements that virtual fetch ignored are needed as input to virtual fetch. If necessary, correct the VFINxx DD statements so that next time virtual fetch is initialized, there is no concatenation.

CSV105I VIRTUAL FETCH CANNOT BE REFRESHED - REFRESH REQUEST IGNORED

Explanation: A virtual fetch refresh was requested (that is, CSVVFRSH was invoked), but virtual fetch was unable to post its refresh ECB. One of the following conditions causes this error:

- Virtual fetch was not initialized.
- Virtual fetch has been initialized, but some error caused it to become inactive. For example, the VFCB (virtual fetch control block) might have been overwritten, or an abend might have occurred in the virtual fetch service address space.

System Action: Virtual fetch ignores the request.

Operator Response: If virtual fetch has not been initialized, invoke CSVVFCRE to initialize it. If this message continues to appear, notify the system programmer.

Programmer Response: Verify that the virtual fetch pointers in the CVT are valid, and that the VFCB has not been overwritten.

If the VFCB shows that virtual fetch has become inactive, cancel the virtual fetch service address space and reinitialize virtual fetch.

CSV106I DIRECTORY ENTRY FOR MEMBER mem FROM DDNAME ddn IS INVALID FOR A LOAD MODULE - DIRECTORY ENTRY IGNORED

Explanation: Virtual fetch found that the length of the directory entry for the load module identified in the message text is invalid for a load module directory entry.

The variables in the message text are:

mem The name of the PDS member
ddn The ddname of the data set containing the member

System Action: Virtual fetch ignores the directory entry.

Operator Response: None.

Programmer Response: If you want the load module to be included in virtual fetch, link edit the module again and refresh virtual fetch (that is, invoke CSVVFRSH).

Problem Determination: Table I, items 2, 3, 4, 13, and 22.

CSV107I MODULE mod IN DDNAME ddn HAS ATTRIBUTE attr - MODULE IGNORED BY VIRTUAL FETCH

Explanation: Input to virtual fetch includes a module that has the NOT EXECUTABLE attribute or the OVERLAY FORMAT attribute. Virtual fetch does not process modules with either of these attributes. The variables in the message text are:

mod The name of the module

ddn The virtual fetch DD statement with which the module is associated

attr The attribute: NOT EXECUTABLE or OVERLAY FORMAT

System Action: Virtual fetch ignores the module.

Operator Response: None.

Programmer Response: Check the module attributes. If you want the module to be included in virtual fetch, link edit the module again to change the invalid attribute.

Problem Determination: Table I, items 2, 3, 4, 13, and 22.

CSV108I VIRTUAL FETCH PREVIOUSLY STARTED - SUBSEQUENT REQUEST IGNORED

Explanation: Virtual fetch initialization was requested (that is, CSVVFCRE was invoked), but virtual fetch has already been initialized. Module CSVVFCRE issues return code 04.

System Action: Virtual fetch ignores the request.

Operator Response: Notify the system programmer.

Programmer Response: Do not attempt to initialize virtual fetch if it has already been initialized. However, you can refresh virtual fetch after it has been initialized, or you can reinitialize it after it has been cancelled or has terminated.

Problem Determination: Table I, items 2, 3, 4, 13, and 22.

CSV109I REPEATED REFRESH IS REDUNDANT - REQUEST IGNORED

Explanation: When this message appears, there have been three or more requests to refresh virtual fetch. (That is, CSVVFRSH has been requested a total of three or more times.)

The second and third (and possibly more) requests were made while virtual fetch was still processing the first request.

When virtual fetch finishes processing the first refresh request, it will process the second request. It ignores the third request (and any additional requests that were made while it was processing the first request), and issues this message.

Since virtual fetch must wait until it finishes processing the first refresh request to do another refresh, all requests after the second one are meaningless -- they are asking virtual fetch to do something it already plans to do.

Note: It is possible that this error occurred because one or more fields in the CVT or the VFCB have been overwritten or are invalid.

System Action: While it is still processing the first request, virtual fetch ignores the third request and any additional requests, and issues this message when the third request and any additional requests are made.

Operator Response: Notify the system programmer.

Programmer Response: Allow refresh processing to complete before entering additional refresh requests. If necessary, inspect the CVT and VFCB to ensure that they have not been overwritten.

Problem Determination: Table I, items 2, 3, 4, 13, and 22.

CSV110I VIRTUAL FETCH { INITIALIZED / REFRESHED }

Explanation: Virtual fetch has completed initialization or refresh processing, as shown in the message text.

System Action: Virtual fetch processing continues.

Operator Response: None.

Programmer Response: None.

CSV111I MAJOR NAME name1 FROM ALIAS ENTRY name2 IN DDNAME ddn IDENTIFIES AN ALIAS ENTRY - ALIAS name2 IGNORED

Explanation: A virtual fetch data set contains a directory entry that is an alias, but the directory entry for the alias's major name also has the alias attribute.

The variables in the message text are:

name1	The major name for the alias
name2	The alias
ddn	The ddname of the data set containing the alias

System Action: Virtual fetch ignores the directory entry for the alias (name2).

Operator Response: None.

Programmer Response: Determine why the alias's major name also has the alias attribute and correct the error.

Problem Determination: Table I, items 2, 3, 4, 13, and 22.

CSV112I MAJOR ENTRY name1 NOT FOUND FOR ALIAS ENTRY name2 IN DDNAME ddn - ALIAS IGNORED

Explanation: The virtual fetch library identified by ddname ddn contains a directory entry for an alias (name2), but virtual fetch cannot find the major name associated with that alias.

This situation can occur when virtual fetch ignores the major name because it is invalid for virtual fetch.

The variables in the message text are:

name1	The major name for the alias
name2	The alias
ddn	The ddname of the data set containing the alias

System Action: Virtual fetch ignores the directory entry for the alias (name2).

Operator Response: None.

Programmer Response: Determine if virtual fetch ignored the major name because the major name was invalid. (If it did, message CSV112I is preceded by message CSV101I, CSV106I, CSV107I, CSV111I, CSV113I, or CSV116I.) Correct the major name. If the major name is correct, correct the library directory entries and refresh virtual fetch, or substitute different libraries and restart virtual fetch.

Problem Determination: Table I, items 2, 3, 4, 13, and 22.

CSV113I MODULE mod FROM DDNAME ddn COULD NOT BE PROCESSED (R. C. xx) - MODULE IGNORED BY VIRTUAL FETCH

Explanation: Virtual fetch could not process the module identified in the message text. The xx field contains a reason code:

Reason Code	**blank Meaning**
12	The size of the module is greater than the storage requirements specified in its directory entry.
13	The module contains a record that has a type code that is invalid for a load module, or a record that is in an invalid position for a load module record of its type.
14	An RLD (relocation dictionary) item specified an ADCON with an invalid length (the length must be 2, 3, or 4 bytes), or an invalid offset (the ADCON must be within the module).
15	There was an I/O error, or EOD (end of data) was reached before the EOM (end of module) flag was read.

System Action: Virtual fetch ignores the module.

Operator Response: None.

Programmer Response: Check the virtual fetch load library to be sure it has no errors. If necessary, link edit the module again. If there is an I/O error, follow your installation's procedures for correcting it.

Problem Determination: Table I, items 2, 3, 4, 13, 22, and 37.

CSV114I DDNAME ddn COULD NOT BE OPENED TO ACCESS DIRECTORY - DDNAME IGNORED BY VIRTUAL FETCH

Explanation: Virtual fetch tried unsuccessfully to open the library identified by ddname ddn to read the directory.

System Action: Virtual fetch ignores ddname ddn.

Operator Response: None.

Programmer Response: Determine why the library could not be opened. Check for JCL errors.

Problem Determination: Table I, items 2, 3, 4, 13, and 22.

CSV115I DDNAME ddn COULD NOT BE OPENED TO ACCESS MODULES - DDNAME IGNORED BY VIRTUAL FETCH

Explanation: Virtual fetch tried unsuccessfully to open the library identified by ddname ddn to access modules.

System Action: Virtual fetch ignores ddname ddn.

Operator Response: None.

Programmer Response: Determine why the library could not be opened. Correct the error and refresh virtual fetch. If necessary, restart virtual fetch.

Problem Determination: Table I, items 2, 3, 4, 13, and 22.

CSV116I MODULE mod IN DDNAME ddn2 IS ALREADY INCLUDED FROM DDNAME ddn1 - MODULE IGNORED

Explanation: While processing the library identified by ddname ddn2, virtual fetch found module mod. Virtual fetch already includes a module by that name, which it got from the library identified by ddname ddn1.

System Action: Virtual fetch ignores the second occurrence of module mod.

Operator Response: None.

Programmer Response: Be sure that the correct module is included in virtual fetch. If necessary, correct the libraries and refresh virtual fetch.

Problem Determination: Table I, items 2, 3, 4, 13, and 22.

CSV117I VIRTUAL FETCH {INITIAL / REFRESH} PROCESSING ENCOUNTERED A SYSTEM ERROR - REQUEST IGNORED

Explanation: Virtual fetch issued an ABEND while it was building a new VIO data set and hash table.

If INITIAL PROCESSING appears in the message text, the ABEND occurred while the system was processing a request for virtual fetch initialization.

Module CSVVFCRE issues one of these return codes:

0C ASM's group operations starter (module ILRGOS) gave a nonzero return code to CSVVFCRE.

10 RSM's assign-null service (in module IEAVAMSI) gave a nonzero return code to CSVVFCRE.

14 RSM's moveout-disconnect service (in module IEAVAMSI) gave a nonzero return code to CSVVFCRE.

Virtual fetch has not been initialized.

If REFRESH PROCESSING appears, the ABEND occurred while virtual fetch was processing a refresh request. When the error occurred, CSVVFRSH had posted the ECB in the VFCB (virtual fetch control block). Virtual fetch has not been refreshed. The previous version remains active.

System Action: The request is ignored. If the ABEND occurred during refresh processing, virtual fetch releases the storage it had acquired for the new VIO data set and new hash table.

Operator Response: Notify the system programmer.

Programmer Response: If the ABEND occurred during virtual fetch initialization processing, restart virtual fetch.

If the ABEND occurred during refresh processing, you can continue with the existing version of virtual fetch, or attempt to refresh it again. It might be necessary to cancel virtual fetch and restart it.

Problem Determination: Table I, items 2, 3, 4, 13, 22, and 31.

CSV118E VIRTUAL FETCH IS UNUSABLE

Explanation: An ABEND occurred in the virtual fetch service address space while virtual fetch was searching the hash table.

System Action: The system marks virtual fetch as unavailable to all callers.

Operator Response: Notify the system programmer.

Programmer Response: Cancel virtual fetch and then restart it. Do not restart it while any of the input libraries are being updated.

Problem Determination: Table I, items 2, 3, 4, 5, and 16.

Resource Measurement Facility Messages (ERB)

Component Name	ERB
Program Producing Message	Resource Measurement Facility
Audience and Where Produced	For operator: on console. For programmer: in options-in-effect SYSOUT data set and message SYSOUT data set. For terminal user: on display station screen.
Message Format	ERBnnns xxx: text nnn Message serial number, which indicates the class of message: 100 - 199 Normal operational. 200 - 299 Error associated with the control function of RMF. 300 - 399 Error and conversation associated with the input option merge functions of RMF. 400 - 499 Error associated with the formatting and writing of reports. s Type code: D Decision; the operator must choose an alternative. I Information; no operator action is required. xxx Session identifier: id Identifier for particular session to which message pertains. RMF Message does not pertain to a particular session. PPS Message is issued by the post processor. text Message text.
Associated and Referenced Publications	*OS/VS2 MVS Resource Measurement Facility (RMF) General Information Manual*, GC28-0921 *OS/VS2 MVS Resource Measurement Facility (RMF) Program Logic Manual*, SY28-0923 *OS/VS2 MVS Resource Measurement Facility (RMF) Reference and User's Guide*, SC28-0922 *OS/VS2 System Programming Library: Job Management*, GC28-1303

ERB100I xxx:ACTIVE

Explanation: When xxx is RMF, RMF has been initialized and is ready to receive session commands. When xxx is a session identifier, that session has started and data is being collected to form the first report/SMF record entry.

System Action: Processing continues.

Operator Response: None.

ERB101I xxx:REPORT AVAILABLE FOR PRINTING

Explanation: A reporting interval for the Monitor I session, has ended. This message appears only where REPORT (REALTIME) is in effect.

System Action: A report is formatted and written to SYSOUT storage. The reports for this interval are printed according to RMF priority and output class.

Operator Response: Start a printer to the RMF SYSOUT class if printing of the report is desired.

ERB102I xxx:TERMINATED

Explanation: When xxx is RMF, all RMF processing has terminated. When xxx is a session identifier, that session has terminated.

System Action: Processing continues.

Operator Response: None.

ERB103I xxx:OPTIONS IN EFFECT

Explanation: The options listed are now in effect for the post processor or the session identified by xxx. The message appears in the message data set for the session.

System Action: After the message, the options in effect are listed, one per line, in the form option (value). Each option is followed by its source, which can be:

COMMAND - the option was specified on a START or MODIFY command.

DEFAULT - the option was taken from the program defaults.

EXEC - the option was specified on the EXEC statement in the RMF cataloged procedure.

CHANGED - the option was changed by RMF.

MEMBER - the option was specified in a member of the RMF partitioned data set.

SYSIN - the option was specified on a control statement for the post processor.

Operator Response: None.

ERB104I xxx:MODIFIED

Explanation: The options previously in effect for the session identified by xxx have been successfully modified.

System Action: The session continues processing, using the new options specified on the MODIFY command.

Operator Response: None.

ERB200I xxx:ALREADY ACTIVE

Explanation: If xxx is RMF, RMF (or MF/1) is already active. If xxx is a session identifier, a session with a session identifier identical to the one specified on the START session command was already active.

System Action: The START command is ignored.

Operator Response: When xxx is RMF, stop the currently active RMF or MF/1 task and reissue the START command, if desired. When xxx is a session identifier, do one of the following:

- Stop the currently active session and reissue the START command.
- Issue a MODIFY session command to modify the options of the currently active session.
- Start a new session by issuing a START session command with a unique session identifier.

ERB201I xxx:TASK REINSTATED { **Ucde** / **Scde** }

Explanation: A catastrophic error in RMF, or the RMF session identified by xxx, was detected by RMF or another system component that was providing a service for RMF. Ucde is a four-digit user completion code, and Scde is the three-digit system completion code.

Note: An 80A abend can be corrected by changing the REGION parameter on the RMF PROC statement to a larger value.

System Action: The resulting ABEND is intercepted by the RMF recovery routines and the task is successfully reinstated. Data being collected for the current reporting interval is lost and data collection for the new interval is started.

Operator Response: None.

ERB202I xxx: NO RMF MEASUREMENTS SELECTED

Explanation: The options in effect for the session identified by xxx do not specify any measurements to be made, reported, or recorded by the RMF session.

System Action: The session terminates.

Operator Response: Restart the session, supplying valid input options that activate at least one RMF measurement applicable to the type of session.

ERB203I xxx: INVALID MENU, NO USABLE ENTRIES FOUND

Explanation: During the Monitor II display session identified by xxx, RMF was unable to initialize any measurements because the menu could not be processed. This problem can be the result of an attempt to modify the menu that caused an incorrect length field for one or more of the entries.

System Action: The session terminates.

Operator Response: Ask the RMF license holder at your installation to correct any errors in the menu control section (ERBFMENU) and retry the display session.

ERB204I RMF NOT DESIGNED FOR THIS DEVICE - PROCEED AT YOUR OWN RISK

Explanation: The RMFMON command was issued from a terminal that is not an IBM 3270 Display Station. Because RMF output is formatted specifically for these devices, the output will be jumbled and probably not useful on any other terminal device.

System Action: The session continues.

Operator Response: End the session. At a display station, use the RMF stop display command (Z) or the TSO attention function. At a non-display station, enter 'INPUT=Z' or use the TSO attention function. Restart the session at an IBM 3270 Display Station.

ERB205I xxx: CANNOT BE MODIFIED, COMMAND REJECTED

Explanation: A MODIFY session command was issued for the session identified by xxx, but that session is a Monitor II local 3270 display session, which cannot be modified by a MODIFY session command.

System Action: The MODIFY session command is rejected; that is, the session identified by xxx is not modified.

Operator Response: If desired, reissue the MODIFY session command, specifying the identifier of a session that can be modified.

ERB206I xxx: INVALID SESSION COMMAND, cccc

Explanation: The invalid session command that appears in the cccc field of the message has been issued for the session identified by xxx. The valid session commands are START or S, DISPLAY OR D, MODIFY or F, and STOP or P.

System Action: The command is rejected. All active sessions continue processing.

Operator Response: Determine the cause of the error and issue the correct command.

ERB207I xxx: INVALID SESSION-ID, COMMAND REJECTED

Explanation: A command has been issued that contained an invalid session identifier. RMF appears in the xxx field.

System Action: The command is rejected.

Operator Response: Reissue the command with a valid session identifier. If necessary, use the DISPLAY session command to list the identifiers of all active sessions.

ERB208I xxx: NO PARMS SPECIFIED, MODIFY COMMAND REJECTED

Explanation: A MODIFY session command was issued, but no options were specified on the command; therefore, no changes could be made to the options for the currently-active session identified by xxx.

System Action: The MODIFY session command is rejected.

Operator Response: Reissue the MODIFY session command, specifying the options that are to be modified.

ERB209I xxx: UNABLE TO ALLOCATE DISPLAY. RETURN CODE rrr ERROR CODE eeee, INFORMATION CODE iiii

Explanation: The attempt to dynamically allocate the unit specified in xxx failed. The SVC 99 return code is shown in rrr. The error (eeee) and information (iiii) codes returned in the request block are also shown.

System Action: The display session is terminated.

Operator Response: Correct the situation described by the return, error and information codes. Some codes that are frequently encountered are:

- return code 4, error code 214 - indicates that the device is being used by another job.
- return code 4, error code 21C - indicates that the unit specified in xxx is not one of the devices defined to the system. The meaning of all possible codes is described in *OS/VS2 System Programming Library: Job Management.*

ERB210I xxx: INVALID COMMAND SYNTAX

Explanation: A session command pertaining to the session identified by xxx was issued. The command was a valid RMF session command, but the syntax of the command was invalid.

System Action: The command is rejected. All active sessions continue processing.

Operator Response: Determine the cause of the error and reissue the command with correct syntax.

ERB211I xxx: ACTIVE SESSION - sss,...

Explanation: A DISPLAY session command with the ACTIVE option has been issued. The session(s) listed in the sss field(s) are currently active. Because this message does not pertain to a particular session, xxx is always RMF.

System Action: Processing continues.

Operator Response: Inspect the list and take appropriate action, depending on your reason for issuing the DISPLAY ACTIVE command.

ERB212I xxx: NO ACTIVE SESSIONS

Explanation: A DISPLAY session command was issued, requesting that the session identifiers of all active sessions be displayed, but there were no currently-active sessions.

System Action: Processing continues.

Operator Response: None.

ERB213I xxx: UNSUPPORTED DEVICE

Explanation: A START session command for a display session with the session identifier shown in xxx was issued. The device address used as the session identifier was not the device address of an IBM 3270 Display Station.

System Action: The display session is terminated. All other active sessions continue processing.

Operator Response: Reissue the START session command, using the three-character device address of an IBM 3270 Display Station as the session identifier.

ERB214I xxx: LOGICAL TERMINAL I/O ERROR

Explanation: During the display session identified by xxx, an error code was returned from the BTAM READ or WRITE routine. active sessions continue processing.

Operator Response: Verify that the device is correctly connected to the system and restart the session. Communicate the problem to the RMF user at the display station. If the problem recurs, contact the RMF license holder at your installation.

ERB215I xxx: PHYSICAL TERMINAL I/O ERROR

Explanation: During the display session identified by xxx, the BTAM READ or WRITE ECB was posted with an error condition.

System Action: The display session is terminated. All other active sessions continue processing.

Operator Response: Verify that the device is correctly connected the system and restart the session. Communicate the problem to the RMF user at the display station. If the problem recurs, contact the RMF license holder at your installation.

ERB216I ERROR ON FULL SCREEN TPUT - CHECK OWAITHI VALUE

Explanation: A return code of 16 was issued by the TSOTPUT routine. This code indicates that the data could not be accommodated with the current values specified for the BUFFERS, BUFSIZE, and OWAITHI parameters. These values are specified in the parmlib member used to initialize TSO under TCAM (IKJPRMxx).

System Action: The RMF session is terminated. The TSO session continues.

Programmer Response: Reinitialize TSO under TCAM with a parmlib member designed to accommodate full-screen TPUTs for the IBM 3270 Display Station.

ERB217I YOU ARE NOT AUTHORIZED TO USE RMFMON

Explanation: Your installation authorization exit routine (ERBTSOCK) has determined that the userid of the user attempting to start an RMF session is not authorized to use RMF under TSO.

System Action: The RMF session is terminated. The TSO session continues. installation to obtain authorization to use RMF; reissue the RMFMON command.

ERB218I SESSION CREATE FAILED

Explanation: In response to an RMFMON command, RMF attempted to create a TSO display session. ERBSESSC (the RMF session create function) has returned a non-zero return code to the TSO RMF interface module.

System Action: The RMF session under TSO is terminated. The TSO session continues.

Operator Response: Retry the RMFMON command. If the problem recurs, contact the RMF license holder at your installation.

ERB219I xxx: UNRECOGNIZABLE { OPTION / SUBOPTION } 'ccc'IN { OPERATOR / PARM / LIBRARY nn / REPLY / SYSIN } INPUT

Explanation: The invalid option or suboption keyword indicated by ccc was detected during input merge for the post processor or the session identified by xxx. The source of the invalid value was:

OPERATOR	operator command
PARM	PARM field of EXEC statement in RMF cataloged procedure
LIBRARY nn	library member ERBRMFnn
REPLY	operator reply to message ERB306D
SYSIN	post processor control statement

System Action: Operator intervention is forced when the error occurred during a session. RMF issues message ERB305I, listing the current session options, followed by message ERB306D, to which the operator must reply by supplying new options or entering 'GO'. RMF processing continues. When the error occurred during execution of the post processor, the option in error is ignored and the default value is substituted, if one is present.

Operator Response: Examine the options listed following message ERB305I and respond to message ERB306D.

Programmer Response: If the invalid option occurred on the EXEC statement, the library data source, or a post processor control statement, correct the statement or library member.

ERB220I xxx: OPTION 'ccc' NOT VALID ON { START / MODIFY / STOP } COMMAND

Explanation: The option indicated by ccc for the session identified by xxx is not a valid option for the type of command issued.

System Action: Operator intervention is forced. RMF issues message ERB305I, listing the current session options, followed by message ERB306D, to which the operator must reply by supplying new options or entering 'GO' RMF processing continues.

Operator Response: Examine the options listed following message ERB305I and respond to message ERB306D.

ERB221I xxx: OPTION 'ccc' FOUND IN { OPERATOR / PARM / LIBRARY nn / REPLY } INPUT IS IGNORED

Explanation: During input merge, an option, indicated by ccc, for the session identified by xxx violated an RMF restriction. For example, the MEMBER option cannot appear in a library member. The source of the option in error was:

OPERATOR	operator command
PARM	PARM field of EXEC statement in RMF cataloged procedure
LIBRARY nn	library member ERBRMFnn
REPLY	operator reply to message ERB306D

System Action: Operator intervention is forced. RMF issues message ERB305I, listing the current session options, followed by message ERB306D, to which the operator must reply by supplying new options or entering 'GO' RMF processing continues.

Operator Response: Examine the options listed following message ERB305I and respond to message ERB306D. Programming Response: If the option in error occurred on the EXEC statement or library data source, correct the statement or library member.

ERB222I xxx: MEMBER ID LIMIT EXCEEDED, MEMBER 'nn' IN { OPERATOR / PARM } INPUT IS IGNORED

Explanation: During input merge for the session identified by xxx, more than five valid members were specified as the library data source. As a result, member ERBRMFnn is ignored, and the session options are merged from other sources. The source of the error is either an operator command (OPERATOR) or the PARM field on the EXEC statement in the RMF cataloged procedure (PARM).

System Action: Operator intervention is forced. RMF issues message ERB305I, listing the current session options, followed by message ERB306D, to which the operator must reply by supplying new options or entering 'GO' RMF processing continues.

Operator Response: Examine the options listed following message ERB305I and respond to message ERB306D.

Programmer Response: If the error occurred on the EXEC statement, correct the statement.

ERB223I xxx: UNEXPECTED END OF TEXT IN { OPERATOR / PARM / LIBRARY nn / REPLY / SYSIN } INPUT

Explanation: During input merge for the post processor or the session identified by xxx, RMF encountered the end of text in an input source when it expected to find additional required information. The source of the error was:

OPERATOR	operator command
PARM	PARM field of EXEC statement in RMF cataloged procedure
LIBRARY nn	library member ERBRMFnn
REPLY	operator reply to message ERB306D
SYSIN	post processor control statement

System Action: Operator intervention is forced when the error occurred during a session. RMF issues message ERB305I, listing the current session options, followed by message ERB306D, to which the operator must reply by supplying new options or entering 'GO' When the error occurred during execution of the post processor, the option in error is ignored and the default value is substituted, if one is present.

Operator Response: Examine the options listed following message ERB305I and respond to message ERB306D.

Programmer Response: If the error occurred on the EXEC statement, the library data source, or a post processor control statement, correct the statement or library member.

ERB224I xxx: 'cccccccc' SKIPPED DUE TO PREVIOUS ERROR

Explanation: When input merge for the session identified by xxx or the post processor detected an error, such as a syntax error, it attempted to validate the remaining input. The input text skipped over during this attempt to validate the input appears in the 'cccccccc' message field.

System Action: Operator intervention is forced when the error occurred during a session. RMF issues message ERB305I, listing the current session options, followed by message ERB306D, to which the operator must reply by supplying new options or entering 'GO' RMF processing continues. When the error occurred during execution of the post processor, the option in error is ignored and the default value is substituted, if one is present.

Operator Response: Examine the options listed following message ERB305I and the text that was skipped to determine the options that were skipped. Respond to message ERB306D with the missing options.

Programmer Response: When the error occurred during execution of the post processor, correct the control statement that caused the error before using the post processor again.

ERB225I xxx: INVALID ccc VALUE 'yyyy' IN { OPERATOR / PARM / LIBRARY nn / REPLY / SYSIN } INPUT

Explanation: During input merge for the session identified by xxx, or the post processor, an invalid value was detected. The option for which the invalid value was specified is indicated by ccc; the invalid value is indicated by yyyy. The source of the invalid value was:

OPERATOR	operator command
PARM	PARM field of EXEC statement in RMF cataloged procedure
LIBRARY nn	library member ERBRMFnn
REPLY	operator reply to message ERB306D
SYSIN	post processor control statement

System Action: Operator intervention is forced when the error occurred during a session. RMF issues message ERB305I, listing the current session options, followed by message ERB306D, to which the operator must reply by supplying new options or entering 'GO'. RMF processing continues. When the error occurred during execution of the post processor, the option in error is ignored and the default value is substituted, if one is present.

Operator Response: Examine the options listed following message ERB305I and respond to message ERB306D.

Programmer Response: If the invalid value occurred on the EXEC statement, the library data source or a post processor control statement, correct the statement or library member.

ERB226I xxx: OPEN FAILED FOR MESSAGE DATASET

Explanation: When xxx identifies the Monitor I session or a Monitor II background session, an attempt to open an output message data set for the session identified by xxx has failed. When xxx identifies the post processor, an attempt to open the output message data set (MFPMSGDS) for the post processor has failed.

System Action: When xxx is a session identifier, that session is terminated. All other active sessions continue processing. When xxx identifies the post processor, the post processor job is terminated.

Operator Response: Try to start the session or the post processor again. If the problem persists, contact the RMF license holder at your installation.

ERB227I xxx: REJECTED, MAX SESSIONS ALREADY ACTIVE

Explanation: An attempt was made to start a non-TSO Monitor II session when the maximum number of Monitor II sessions possible (32) were already active.

System Action: The command to start the session identified by xxx is rejected. All other active RMF sessions continue processing.

Operator Response: Either stop one of the currently active sessions or wait until an active session stops. Re-issue the START command for session xxx.

ERB228I xxx: UNABLE TO OPEN DISPLAY

Explanation: An attempt was made to start a Monitor II local 3270 display session at the device identified by xxx, but the BTAM open for the device was not successful.

System Action: The display session identified by the device address xxx is terminated. All other active RMF sessions continue processing.

Operator Response: Verify that the device is correctly connected to the system and restart the session. Communicate the problem to the RMF user at the display station. If the problem recurs, contact the RMF license holder at your installation.

ERB229I xxx: INITIALIZATION FAILED

Explanation: RMF was unable to initialize the session identified by xxx.

System Action: RMF terminates the session. All other active RMF sessions continue processing.

Operator Response: If another RMF message, such as ERB230I, describing the reason for the failure is issued, take the appropriate action. If no other message appears, try to restart the session. If the problem persists, contact the RMF license holder at your installation.

ERB230I xxx: TERMINATED ABNORMALLY { Ucde / Scde }

Explanation: RMF has detected the abnormal termination of the session identified by xxx. Ucde is the user completion code, and Scde is the system completion code.

System Action: If a SYSABEND or SYSUDUMP DD statement was specified in the RMF cataloged procedure, a storage dump is provided for the failing session. All other active sessions continue processing.

Operator Response: None.

Programmer Response: Examine the dump provided and take the appropriate action related to the completion code.

ERB231I xxx: NOT ACTIVE

Explanation: A MODIFY, STOP, or DISPLAY command has been issued specifying session xxx, and there is no currently active session with that identifier.

System Action: The command is rejected. All active RMF sessions continue processing.

Operator Response: Determine the correct session identifier and reissue the command, if desired.

ERB232I xxx: UNABLE TO ALLOCATE HARDCOPY. RETURN CODE rrr, ERROR CODE eeee, INFORMATION CODE iiii

Explanation: An attempt to dynamically allocate an output data set for hardcopy during a Monitor II display session or a printed report during a background session has failed.

System Action: If the session is a display session, the session continues, but no hardcopy output is produced. If the session is a background session, the measurement for which the allocation failed continues without printed reports when the RECORD option is in effect. If RECORD is not in effect, the specific measurement is terminated, and the session continues.

Operator Response: Continue the session, or end the session and correct the situation described by the return, error, and information codes. The meaning of these codes is described in *OS/VS2 System Programming Library: Job Management.*

ERB233I xxx: UNABLE TO OPEN HARDCOPY

Explanation: An attempt to open an output data set for hardcopy during a Monitor II display session or a printed report during a Monitor II background session has failed. The attempt occurred during the session identified by xxx.

System Action: If the session is a display session, the session continues, but no hardcopy output is produced. If the session is a background session, the measurement for which the allocation failed continues without printed reports when the RECORD option is in effect. If RECORD is not in effect, the specific measurement is terminated, and the session continues.

Operator Response: Continue the session.

ERB234I xxx: mmmmmmmm TERMINATED ABNORMALLY Scde

Explanation: An error has occurred during the session identified by xxx or during execution of the post processor, causing an abnormal termination; Scde is the system completion code. The RMF module last in control is identified mmmmmmmm.

System Action: If the error occurred during a display session that has been initialized successfully, RMF issues message ERB235A to give the user a choice about whether or not to continue the session. When RMF cannot issue ERB235A, the session is terminated. In either case, all other active RMF sessions continue processing. If the error occurred during execution of the post processor, the Monitor II session interval report being generated when the error occurred is terminated. If other reports were requested, the post processor continues to execute.

Operator Response: Take the appropriate action related to the system completion code. Respond to message ERB235A, if issued by RMF.

ERB235A xxx: TO CONTINUE RMF SESSION, ENTER ANY RMF COMMAND. TO TERMINATE THE SESSION AND OBTAIN A DUMP, ENTER 'STOP'

Explanation: An abnormal termination, described in a previous message, has occurred during the session identified by xxx. It is possible to continue the session without obtaining diagnostic information about the problem or terminate the session and obtain the diagnostic information.

System Action: Waits for the response to this message.

Operator Response: To continue the session, respond to the message with any explicit RMF display command (using the ENTER key to repeat the previous command will probably cause the problem to recur). To terminate the session and obtain a dump, enter 'STOP'. The type of dump depends on whether a SYSUDUMP DD statement or SYSABEND DD statement was provided for RMF.

ERB236I xxx: TERMINATED ABNORMALLY Ucde

Explanation: An error causing abnormal termination has occurred during the session identified by xxx. Ucde is the user completion code.

System Action: If the error occurred during a display session that has been initialized successfully, RMF issues message ERB235A to give the user a choice about whether or not to continue the session. When RMF cannot issue ERB235A, the session is terminated. In either case, all other active RMF sessions continue processing.

Operator Response: Take the appropriate action related to the user completion code. Respond to message ERB235A, if issued by RMF.

ERB237I xxx: ABEND U1403 FROM ERBRMFPL - INPUT ERROR

Explanation: During the post processor or the Monitor II session identified by xxx, the RMF module ERBRMFPL - the putline routine - was called with an invalid input parameter. Either the text length was 0 or greater than 79, or the data type contained a value other than HD or DT.

System Action: If the error occurred during a display session that has been initialized successfully, RMF issues message ERB235A to give the user a choice about whether or not to continue the session. When RMF cannot issue ERB235A, the session is terminated. In either case, all other active RMF sessions continue processing. If the error occurred during execution of the post processor, the Monitor II session report being printed when the error occurred is terminated. If other reports were requested, the post processor continues.

Operator Response: If the error occurred during the execution of a reporter module supplied by your installation, report the problem to the responsible programmer. If a module supplied by IBM caused the error, take the appropriate action related to the user completion code 1403. Respond to message ERB235A, if issued by RMF.

Problem Determination: Table I, items 4, 5b, 16, and 29.

ERB238I xxx: ABEND U1404 FROM ERBPUTSM - TOO MANY HEADER OR DATA LINES

Explanation: During the display session identified by xxx, the RMF module ERBPUTSM was called to add a header or data line to the logical terminal buffer, but the buffer already contained the maximum number of header or data lines. The maximum number of header lines is 2; the maximum number of data lines cannot exceed the number of relocate blocks in the SMF record for the report.

System Action: If the error occurred during a display session that has been initialized successfully, RMF issues message ERB235A to give the user a choice about whether or not to continue the session. When RMF cannot issue ERB235A, the session is terminated. In either case, all other active RMF sessions continue processing.

Operator Response: If the error occurred during the execution of a reporter module supplied by your installation, report the problem to the responsible programmer. If a module supplied by IBM caused the error, take the appropriate action related to the user completion code 1404. Respond to message ERB235A, if issued by RMF.

Problem Determination: Items 4, 5b, 16, and 29.

ERB239I xxx: ABEND U1405 FROM ERBPUTSM - INPUT ERROR

Explanation: During the display session identified by xxx, the RMF module ERBPUTSM was called to add a text string to the logical terminal buffer, but the length specified for the text was zero.

System Action: If the error occurred during a display session that has been initialized successfully, RMF issues message ERB235A to give the user a choice about whether or not to continue the session. When RMF cannot issue ERB235A, the session is terminated. In either case, all other active RMF sessions continue processing.

Operator Response: If the error occurred during the execution of a reporter module supplied by your installation, report the problem to the responsible programmer. If a module supplied by IBM caused the error, take appropriate action related to the user completion code 1405. Respond to message ERB235A, if issued by RMF.

Problem Determination: Table I, items 4, 5b, 16, and 29.

ERB240I xxx: ABEND U1401 FROM ERBMFDPC - ERROR RETURN FROM TGET

Explanation: During a TSO display session, a code of 4, 16, 20, or more than 20 was returned from the TGET SVC.

System Action: If the error occurred after the session had been initialized successfully, RMF issues message ERB235A to give the user a choice about whether or not to continue the session. When RMF can not issue ERB235A, the session is terminated. In either case, all other active RMF sessions continue processing.

Operator Response: Respond to message ERB235A, if issued by RMF. Take the appropriate action related to user completion code 1401.

ERB241I xxx: ABEND U1402 - INVALID ENTRY CODE TO DATA GATHERER OR DATA REPORTER

Explanation: During the post processor or the Monitor II session identified by xxx, a data gatherer or data reporter issued a return code of 8, indicating that it detected an invalid entry code in its input parameters.

System Action: If the error occurred during a display session that has been initialized successfully, RMF issues message ERB235A to give the user a choice about whether or not to continue the session. When RMF cannot issue ERB235A, the display session is terminated. If the error occurred during a background session, the session is terminated. All other active RMF sessions continue processing. If the error occurred during execution of the post processor, the Monitor II session report being printed when the error occurred is terminated. If other reports were requested, the post processor continues.

Operator Response: For a display session, respond to message ERB235A, if issued by RMF. For either a display or a background session or the post processor, take the appropriate action related to user completion code 1402.

Problem Determination: Table I, items 4, 5b, 16, and 29.

ERB242I xxx: POST PROCESSOR TERMINATED - UNABLE TO OPEN INPUT FILE (MFPINPUT)

Explanation: The RMF post processor (ERBRMFPP) was unable to open the input data set.

System Action: The post processor is terminated.

Operator Response: None.

Programmer Response: Ensure that a DD statement named MFPINPUT that correctly describes the input data set is present.

ERB243I xxx: POST PROCESSOR TERMINATED - ESTAE COULD NOT BE ESTABLISHED

Explanation: During execution of the post processor, the ESTAE macro issued a non-zero return code, indicating the failure of the macro.

System Action: The post processor is terminated.

Programmer Response: Report the problem to the RMF license holder at your installation.

ERB244I xxx: MONITOR II REPORTS TERMINATED ABNORMALLY { **Ucde** | **Scde** }

Explanation: An error occurred while the post processor was formatting and writing Monitor II session reports. Ucde is the user completion code, and Scde is the system completion code. The error was not associated with a particular report.

System Action: Because the error was not associated with a particular report, the formatting and writing of all Monitor II session reports is terminated for this execution of the post processor. If other reports were requested, the post processor continues execution.

Programmer Response: Examine the dump provided and take the appropriate action related to the completion code.

ERB245I xxx: INVALID RETURN CODE FROM USER EXIT - USER EXIT IGNORED

Explanation: During execution of the post processor when the EXITS option was in effect, the Monitor I session user exit (ERBMFPUS) issued an invalid return code (a return code other than 0, 4, or 8) to the post processor.

System Action: Execution of the post processor continues; however, the user exit is no longer invoked.

Operator Response: None.

Programmer Response: Have the user exit routine retested to ensure that it sets a valid return code for the post processor.

ERB246I xxx: { **CPU** | **CHAN** | **DEVICE** | **PAGING** | **WKLD** } **PLOTS ELIMINATED DUE TO** { **Scde** | **Ucde** } **ABEND**

Explanation: While processing a plot report, the post processor detected an error. Scde is the system completion code, and Ucde is the user completion code. The error occurred while the post processor was generating a plot report for the system activity identified in the message.

System Action: Data is no longer formatted and written for plot reports describing the system activity identified in the message. The post processor continues to generate other plot reports, if any were requested.

Programmer Response: Examine the dump provided and take the appropriate action related to the completion code.

ERB247I xxx: INTERVAL REPORT TERMINATED DUE TO UNRECOVERABLE ERROR - ABEND { Scde / Ucde }

Explanation: During execution of the post processor, either (1) an unrecoverable error occurred during initialization for Monitor I session interval reporting or (2) all requested Monitor I session interval reports terminated abnormally. In the second case, messages ERB401I and ERB402I precede this message. Scde is the system completion code and Ucde is the user completion code.

System Action: In either case, the post processor terminates the generation of interval reports. Execution continues if a summary report or plot reports were requested.

Programmer Response: Examine the dump provided and take the appropriate action related to the completion code.

ERB248I xxx: DURATION REPORT TERMINATED TO UNRECOVERABLE ERROR - ABEND { Scde / Ucde }

Explanation: An error occurred while the processor was formatting and writing a duration report. The error was not associated with a particular report. Scde is the system completion code, and Ucde is the user completion code Messages ERB401I and ERB402I might precede this message.

System Action: Because the error was not associated with a particular report, the formatting and writing of all duration reports is terminated for this execution of the post processor. If a summary report or plot reports were requested, the post processor continues execution.

Programmer Response: Examine the dump provided and take the appropriate action related to the completion code.

ERB249I xxx: PLOTS REPORT TERMINATED DUE TO UNRECOVERABLE ERROR - ABEND { Scde / Ucde }

Explanation: While the post processor was generating plot reports, an error was detected that was not associated with a particular report. Ucde is the user completion code, and Scde is the system completion code.

System Action: Because the error was not associated with a particular report, the formatting and writing of all plot reports is terminated for this execution of the post processor. If a summary report or interval or duration reports were requested, the post processor continues execution.

Programmer Response: Examine the dump provided and take the appropriate action related to the completion code.

ERB252I xxx: CYCLE CHANGED DURING date1 time1 DURATION INTERVAL.

n { CPU / PAGING / CHAIN / DEVICE(DASD) / DEVICE(TAPE) / DEVICE(COMM) / DEVICE(CHRDR) / DEVICE(GRAPH) / DEVICE(UNITR) / PAGESP } INTERVALS SKIPPED

STARTING date2 time2

Explanation: While processing the type of duration report indicated in the message, the post processor encountered a change in the cycle length for the session that produced the input records. The date1 and time1 fields indicate the starting time of the duration interval during which the cycle change was encountered, n indicates the number of RMF measurement intervals that were skipped because of the different cycle length, and date2 and time2 indicate the date and start time of the first RMF measurement interval that was skipped. Note that the date1 and time1 are taken from the first input record for the duration interval during which the cycle changed. Therefore, the date and time shown might be later than the start date and time specified on the post processor control statements.

System Action: Processing of the duration reports continues, but all data in the SMF records with different cycle lengths is ignored.

Programmer Response: None.

ERB253I xxx: { CPU / PAGING / WKLD / CHAN / DEVICE / PAGESP } RECORDS NO LONGER COLLECTED DUE TO { Scde / Ucde } ABEND

IN DURATION INTERVAL date time

Explanation: While processing a duration report, the post processor detected an error. Scde is the system completion code, and Ucde is the user completion code. The error occurred while the post processor was generating the type of duration report indicated in the first message field. The date and start time of the duration interval during which the error occurred are shown in the date and time fields.

System Action: If the error occurred during the data collecting phase of the post processor, data is no longer collected for the type of duration report indicated in the message. The post processor continues to generate other duration reports, if any were requested. If the error occurred during the report writing phase, some or all of the reports for the duration interval indicated in the message might be lost. The post processor continues to generate all duration reports.

Programmer Response: Examine the dump provided and take the appropriate action related to the completion code.

ERB254I xxx: SUMMARY REPORT COLUMN heading ELIMINATED DUE TO {Scde / Ucde} ABEND - INTERVAL date time

Explanation: While processing a summary report, the post processor detected an error. Scde is the system completion code, and Ucde is the user completion code. The error occurred while the post processor was calculating or formatting data for the column in the report shown in the heading message field. The date and start time of the SMF record being processed when the error occurred are shown in the date and time fields.

System Action: Generation of the summary report continues; however, no further attempts are made to calculate or format data for the column being processed when the error occurred.

Programmer Response: Examine the dump provided and take the appropriate action related to the completion code.

ERB255I xxx: SUMMARY REPORT TERMINATED DUE TO UNRECOVERABLE ERROR - ABEND {Scde / Ucde}

Explanation: While the post processor was generating a summary report, an error was detected that was not associated with a particular column in the report. Ucde is the user completion code, and Scde is the system completion code.

System Action: Because the error was not associated with a particular column in the report, the formatting and writing of the entire summary report is terminated for this execution of the post processor. If a summary report or interval or duration reports were requested, the post processor continues execution.

Programmer Response: Examine the dump provided and take the appropriate action related to the completion code.

ERB256I xxx: SUMMARY REPORT heading COLUMN CONTAINS DATA FROM TRUNCATED RECORDS. DATA MAY BE INCOMPLETE.

Explanation: During a session, RMF can generate SMF records that are long enough to require that the records be spanned; that is, the records occupy more than one physical block. Spanned records are most likely to occur when I/O device activity is measured for direct access devices. If the input data set contains spanned records and the spanning indicators are lost through improper copying of the SMF records, the post processor regards the records as truncated or incomplete and issues this warning message to indicate the column in the report affected by the apparently truncated records. The column is identified in the heading field.

System Action: The post processor continues to generate the summary report, using the data available. No columns are eliminated.

Programmer Response: Review your installation's procedures for copying or processing the SMF records produced by RMF. In particular, ensure that the IFASMFDP program is always used to copy records from the SMF data sets.

ERB257I xxx: RECORDS WITH VERSION NUMBER nn WERE FOUND IN THE INPUT DATA SET. THE EXPECTED VERSION NUMBER IS vv.

Explanation: The post processor encountered SMF (system management facility) records produced by an unsupported version (level) of RMF (resource management facility). For the version numbers of SMF records and the corresponding versions (levels) of RMF, see the *RMF Reference and User's Guide.*

System Action: The post processor ignores any records containing an inappropriate version number and continues reading records. If any are found that contain the appropriate version number, they are processed. If none are found, the post processor terminates with return code 4.

Programmer Response: Use the level of the post processor that corresponds to the version of the SMF records to be processed. (See *OS/VS MVS Resource Measurement Facility (RMF): Reference and Users Guide.*)

ERB258I xxx: MONITOR I INTERVAL COLLECTION SKIPPED

Explanation: A reporting interval for RMF Monitor I session xxx extended beyond 99 minutes. RMF did not create an SMF record for this interval because the interval value field in the SMF record cannot contain a value greater than 99. If produced, the SMF record would be invalid. The long interval occurred because:

1. RMF did not have a high enough dispatching priority to be dispatched before 100 minutes had elapsed.
2. The processor was stopped during the interval.
3. A SET command was issued to change the system clock during the interval.

System Action: RMF cancels the output for this interval; no SMF record is produced and no reports are written for this RMF interval.

Programmer Response: If the dispatching priority of RMF is too low, raise it so that RMF can be dispatched more frequently.

ERB259I EXCEPTION REPORTING TERMINATED

Explanation: An error occurred in the ERBMFXCB or the ERBMFPER module. The post processor ESTAE routine tried unsuccessfully to recover.

System Action: RMF post processing continues, but exception reporting terminates.

Operator Response: None.

Programmer Response: Take a user dump. If the error is the result of a space limitation, specify a larger value for the REGION parameter in your JCL. Check to see if the SMF records are valid.

ERB299I NO DCB ADDR PASSED TO ERBMFMPR

Explanation: The RMF message processing routine, ERBMFMPR, was called to process a message intended for a data set; however, no DCB address for the data set was passed to the message processing routine.

System Action: The system issues this message. ERBMFMPR sends the message intended for the data set to the operator's console. Other processing continues.

Operator Response: Report the occurrence of this message to the RMF license holder at your installation, noting the number of the RMF message that immediately preceded ERB299I.

ERB300I xxx: SYNTAX ERROR IN OR FOLLOWING TEXT BEGINNING 'text'

IN { OPERATOR / PARM / LIBRARY nn / REPLY / SYSIN } INPUT

Explanation: The syntax scan of the input options for the post processor or the session identified by xxx determined that one or more errors existed in or following the text shown by text, in the source indicated. Usually, the last character shown in text is the actual cause.

System Action: RMF attempts to parse the remainder of the input source that was in error and then continues with the input from any other sources. Operator intervention is forced when the error occurred during a session; that is, message ERB305I and message ERB306D are issued to allow the operator to examine and change the options. When the error occurred during execution of the post processor, the option in error is ignored and the default value is substituted, if one is present.

Operator Response: Examine the list of options following message ERB305I. Reply to message ERB306D as desired.

Programmer Response: If the error was in PARM input, correct the input source before the next execution of RMF. If the error was in library input, correct the member ERBRMFnn before using it again. If the error was in SYSIN input, correct the post processor control statement before using the post processor again.

ERB301I xxx: CONFLICTING OPTIONS - n

Explanation: Invalid values or mutually exclusive options were specified for the session identified by xxx; n indicates the type of conflict and can have any one of the following values:

1. both NOREPORT and NORECORD were specified, indicating that no output data could be produced
2. REPORT(DEFER) and NOSTOP were specified, indicating a situation where SYSOUT spool space could be filled
3. the STOP value is less than the INTERVAL value, indicating that the session will terminate before the first measurement interval

System Action: RMF modifies the options and continues with input merge and initialization for the session; n indicates the type of change:

1. NOREPORT is changed to REPORT(DEFER)
2. NOSTOP is changed to STOP(value); value is set equal to the length established for the interval
3. the STOP value is set equal to the length established for the interval

The OPTIONS option is forced and messages ERB305I and ERB306D are issued to allow the operator to examine and, if required, change the options. The modified options are followed by the word CHANGED in the list of options for message ERB305I.

Operator Response: Examine the session options listed for message ERB305I. Respond to message ERB306D to accept or change the options.

Programmer Response: Examine the input sources and correct any errors before the next execution of RMF.

ERB302I xxx: MEMBER ERBRMFnn NOT FOUND IN PARM LIBRARY

Explanation: During input merge for session xxx, ERBRMFnn was generated as a default or by recognition of MEMBER(nn) in the RMF input stream. A member by this name does not exist in the library data set specified by the IEFRDER DD statement (usually SYS1.PARMLIB). (nn is the member number specified in the control input as MEMBER(nn).)

System Action: The library is ignored as the source of input and input merge and initialization continue. Operator intervention is forced, allowing the operator to examine and, if required, change the RMF options upon completion of the merge.

Operator Response: Examine the options following message ERB305I and reply to message ERB306D to modify any option established during input merge.

Programmer Response: Create a member with the name ERBRMFnn, if desired.

ERB304I xxx: I/O ERROR WHILE PROCESSING RMF LIBRARY DATA SET. ffiTHE SYNAD TEXT FOLLOWS. text"

Explanation: During initialization for session xxx, an uncorrectable I/O error or OPEN error occurred while reading or searching for the specified member in the library data set defined by the IEFRDER DD statement (usually SYS1.PARMLIB). The SYNAD text will not appear in the message text if the error occurred while opening the data set and finding the member.

System Action: The library input source is ignored. Input parameter merge and initialization continue. The OPTIONS option is forced to allow the operator to examine and, if required, change the options chosen by the system.

Operator Response: Examine the options following message ERB305I and reply to message ERB306D to modify any option established during the input merge.

Programmer Response: Recreate the library data set before using the library again.

Problem Determination: Table I, items 2, and 30.

ERB305I xxx: PARAMETERS

Explanation: This message is issued when a list of options is desired upon completion of input merge or when RMF detects an error during input merge.

System Action: All of the options are listed following this message, one option to a line, in the format option(value). Each option is followed by its source, which can be:

COMMAND - the option was specified on a start or modify command.

DEFAULT - the option was taken from the program defaults.

EXEC - the option was specified on the EXEC statement in the RMF cataloged procedure.

CHANGED - the option was changed by RMF. The preceding message, ERB301I describes the nature of the error and the change RMF has made.

MEMBER - the option was specified in a member of the RMF partitioned data set.

Message ERB306D is then issued.

Operator Response: Examine the list of options and verify the values.

ERB306D xxx: REPLY WITH OPTIONS OR GO

Explanation: This message follows message ERB305I and permits changes to be made in the options listed.

System Action: The RMF session control task waits for the operator to reply. All other active sessions continue processing.

Operator Response: If changes are to be made, enter REPLY nn, 'option(value),option(value,...'. If changes are not desired, enter REPLY nn, 'GO'. If you respond with new options, those options will be changed. This message will be issued repeatedly, allowing additional changes, until you respond with 'GO'. If you enter a syntax error, mutually exclusive values, or invalid values in your reply, message ERB300I or ERB301I will follow. If you specify MEMBER(nn) or OPTIONS, special processing will occur. MEMBER(nn) will be ignored because the input merge is already complete and a particular library member has already been used. If you specify OPTIONS, the RMF options will be listed following a subsequent reply of 'GO'.

Note: A syntax error, mutually exclusive options, or invalid values in your reply will force OPTIONS.

ERB400I xxx: I/O ERROR RMF WRITE. THE SYNTAX TEXT FOLLOWS. text

Explanation: An uncorrectable I/O error occurred during session xxx while writing to a report SYSOUT data set.

System Action: No further writes are issued to the data set. One retry is performed by unallocating the data set and allocating a new one. If this retry is successful, RMF continues with no data loss. If unsuccessful, RMF continues but the reports for this interval are not completed.

Programmer Response: None.

Problem Determination: Table I, item 30.

ERB401I xxx: RMF REPORT SUBTASK FOR INTERVAL BEGINNING hh.mm.ss REINSTATED { **Ucde** / **Scde** }

Explanation: An error was detected during the post processor or session xxx while formatting and writing a report to a SYSOUT data set. hh.mm.ss is the beginning of the report interval, Ucde is the user completion code, and Scde is the system completion code.

System Action: When the message occurs during a session, the data being processed is presumed intact. The report subtask is reinitialized, the old data set is closed, a new one is reallocated and opened, and the report is written to the new SYSOUT data set. If two errors occur, the subtask is terminated. When the message occurs during execution of the post processor, the report being processed when the error occurred is terminated. However, the post processor continues to generate any other requested reports. The message is issued each time a specific interval or duration report is terminated because of an error.

Programmer Response: Examine the dump provided and take the appropriate action for the original completion code causing the reinstatement.

ERB402I xxx: RMF REPORT SUBTASK FOR INTERVAL BEGINNING hh.mm.ss ABENDED { **Ucde** / **Scde** }

Explanation: During the post processor or session xxx, an RMF subtask was formatting data and writing records to a SYSOUT data set when it abended with the indicated completion code.

System Action: When the message occurs during a session, RMF processing continues. The reports for data collected for this interval are not completed; however, the SMF records containing the data collected for this interval are written if the RECORD option is in effect. When the message occurs during execution of the post processor, all requested interval or duration reports have terminated because of an error. Generation of all interval or duration reports is ended. However, the post processor continues to generate any other requested summary or plot reports.

Programmer Response: Take the appropriate action related to the completion code.

ERB403I xxx: I/O ERROR ON HARDCOPY DATASET - SYNAD TEXT FOLLOWS text

Explanation: During the session identified by xxx, an uncorrectable I/O error occurred while writing to the SYSOUT data set. For a display session, the error occurred because of a print (P) command or because the hardcopy mode was set on (H ON) for the session.

System Action: No further writes are issued to the data set. For a display session, the hardcopy mode is terminated or the print command ignored, and session processing continues. For a background session, the data for the measurement continues to be gathered and formatted into SMF records when the RECORD option is in effect, but no subsequent reports are printed. If NORECORD is in effect, the measurement is terminated because there is no way to record the data gathered.

Operator Response: For a display session, data can continue to be reported on the display screen; do not issue the print command or turn on hardcopy mode. For a background session to continue to measure data, ensure that the RECORD option is in effect.

ERB404I xxx: HARDCOPY FUNCTION CANNOT BE USED. USE THE RECALL FUNCTION TO VIEW THE DATA GATHERED

Explanation: This message is issued following message ERB403I for the display session identified by xxx. No data can be printed because of the failing hardcopy data set.

System Action: None.

Operator Response: Use the recall function (Rmm), where mm is the menu item. Respecify any operands specified for the previous report. The data will be displayed on the screen for inspection.

ERB405I xxx: NO DATA WAS FOUND TO FIT YOUR SELECTION CRITERIA

Explanation: During the Monitor II session identified by xxx, the data gatherer or data reporter for a requested report returned a return code of 16, indicating that no data was produced. In the case of an IBM-supplied report, this message indicates that no address spaces met the selection criteria established in the operands when the report was requested. For example, the message can occur when ARDJ jobname is entered, and the job named has not yet started or has already terminated. The message would also occur if ASD B,A,2 has been entered, requesting address space state data for all batch users in domain 2, but your installation has assigned domain 2 to TSO users.

System Action: The session continues. In the case of a display session, RMF waits for the next display command. In the case of a background session, no report or SMF record is produced for the measurement for this interval; all measurements continue.

Operator Response: Respecify the command or change the options to create different selection criteria.

ERB406I xxx: ESTAE COULD NOT BE ESTABLISHED BY mmmmmmmm

Explanation: During the post processor or the Monitor II session identified by xxx, a data gatherer or data reporter, identified by mmmmmmmm issued a return code of 20, indicating the failure of the ESTAE macro.

System Action: For a display session, the current report is terminated but the session continues; RMF waits for the next command. For a background session, the current measurement is discontinued but the session continues with other measurements. If the error occurred during execution of the post processor, the Monitor II session report being printed when the error occurred is terminated. If other reports were requested, the post processor continues.

Operator Response: For a display session, enter a request for another report. For a background session or the post processor, report the problem to the RMF license holder at your installation.

ERB407I xxx: INVALID SYNTAX IN MENU DEFAULT OPERANDS - ccc - DURING THIS SESSION DO NOT DEFAULT OPERANDS FOR PICTURE mm

Explanation: During the post processor or the Monitor II session identified by xxx, a data gatherer or data reporter attempted to use the default operands included in the menu or option list. During this attempt, the operands indicated by ccc were found to be invalid for the report identified by mm.

System Action: For a display session, the current report is terminated but the session continues; RMF waits for the next command. For a background session, the current measurement continues if the failure occurred in the data reporter and the RECORD option is in effect. Otherwise, the current measurement is discontinued but the session continues with other measurements, if any were specified. If the error occurred during execution of the post processor, the Monitor II session report being printed when the error occurred is terminated. If other reports were requested, the post processor continues.

Operator Response: For a display session, reissue the command, explicitly specifying all operands. For a background session, modify the options to specify explicitly all operands required for the measurement.

Programmer Response: Correct the entry in the menu table that contains the operands that have invalid syntax.

ERB408I xxx: RETURN CODE rrr FROM mmmmmmmm

Explanation: During the post processor or the session identified by xxx, the return code rrr, which is greater than 24, was returned by the data gatherer or reporter identified by mmmmmmmm.

System Action: For a display session, the current report is terminated but the session continues; RMF waits for the next display command. For a background session, the current measurement continues if the failure occurred in the data reporter and the RECORD option is in effect. Otherwise, the current measurement is discontinued but the session continues with other measurements, if any were specified. If the error occurred during execution of the post processor, the Monitor II session report being printed when the error occurred is terminated. If other reports were requested, the post processor continues.

Operator Response: For a display session, enter a request for another report. For a background session, continue the session with other measurements. If the module causing the problem is a module supplied by your installation, have the module retested. If the module is one supplied by IBM, report the problem to the RMF license holder at your installation.

ERB409I xxx: INVALID OPERAND SYNTAX ccc

Explanation: During the post processor or the Monitor II background session identified by xxx, the option operands indicated by ccc were found to have invalid syntax. The error can be detected during either the data gathering or the data reporting phase of a measurement.

System Action: If the error was detected by a data reporter and if the RECORD option is in effect, the current measurement continues. Otherwise, the current measurement is discontinued but the session continues with other measurements, if any were specified. If the error occurred during execution of the post processor, the Monitor II session report being printed when the error occurred is terminated. If other reports were requested, the post processor continues.

Operator Response: Modify the session options to replace the invalid operands with valid operands.

Programmer Response: If the error occurred during execution of the post processor, correct the control statement that caused the error before using the post processor again.

ERB410I xxx: rrr TERMINATED ABNORMALLY ccc-SESSION nnn, SYSTEM sss

Explanation: Abend code ccc has occurred while the post processor was producing Monitor II results. rrr is the failing report. Session nnn on system sss produced the Monitor II records.

System Action: The system produces a dump. If any other reports were requested, the post processor processes them.

Programmer Response: Examine the dump provided and take the appropriate action related to the completion code.

ERB411I INCOMPLETE DATA - MAXRBS VALUE IN MENU ENTRY HAS BEEN EXCEEDED

Explanation: The RMF data gathering routine found that the number of SMF relocate blocks specified in the menu entry MAXRBS is insufficient to accommodate all the data found that satisfies the operand requests. Data is recorded in all available relocate blocks.

System Action: The session continues. In the case of a display session, a report is produced and RMF waits for the next display command. In the case of a background session, a report is produced for all measurements taken within the interval; all measurements continue.

Programmer Response: Use the PICTURE macro instruction to increase the number of relocate blocks in the menu list. (See *OS/VS2 MVS Resource Measurement Facility (RMF) Reference and Users Guide* for a description of the PICTURE macro instruction.) Be sure the number of relocate blocks times the size of one relocate block does not exceed the maximum size of an SMF record less the size of the common section of the record (32k bytes - 160 bytes).

ERB412I DATA UNAVAILABLE - MONITOR I REPORT NOT ACTIVE

Explanation: The Monitor II transaction activity report was requested but the workload activity measurement table (WAMT) that contains the data used in the report is not available. SRM collects data in the WAMT only when a Monitor I session that is measuring workload activity is active.

System Action: The session continues. In the case of a display session, RMF waits for the next display command. In the case of a background session, no SMF record is produced; all measurements continue.

Programmer Response: Be sure the transaction activity report is requested only when a Monitor I session with the WKLD option is active.

ERB413I DATA REINITIALIZED - MONITOR I INTERVAL ENDED

Explanation: The Monitor II transaction activity report was requested, but the source data for the report has been reinitialized since the previous request for the report, so that any data reported would be misleading. The source data is contained in the workload activity measurement table (WAMT).

System Action: The session continues. In the case of a display session, RMF waits for the next display command. In the case of a background session, no report is produced for the measurements taken within the interval; all measurements continue.

Programmer Response: Request the report again. Be sure the report is requested only when a Monitor I session is active that is measuring workload activity.

JES2 Messages ($HASP)

Component Name	HASP
Program Producing Message	JES2
Audience and Where Produced	For operator: console. For programmer: SYSOUT listing.
Message Format	(hh.mm.ss) jjjj ● @ b [+] $HASPnnn text hh.mm.ss Time stamp (optional). jjjj JES2 job identification (optional). ● Indicates a request for operator action. @ Indicates a request for operator action by JES2 generation modules or RMTGEN. b Bland, if no operator action is required. + Indicates the message is issued by JES2 generation or RMTGEN; no action is required. nnn Message serial number. text Message text.
Comments	Some JES2 messages are assigned an importance level of 1, 3, 5, or 7. The higher the value, the more important the message. The importance level of a message is indicated in the message explanation. The operator can use the $TC command to control messages sent to local MCS (multiple console support) consoles by eliminating those messages with importance levels at or below a certain value (such as 1, 3, 5, or 7). See *Operator's Library: JES2 Commands*, SC23-0048.
Associated and Referenced Publications	*System Programming Library: JES2 Initialization and Tuning*, SC23-0046 *JES2 Logic*, LY24-6006 *Operator's Library: JES2 Commands*, SC23-0048 *MVS JCL*, GC28-1300 *VTAM Macro Language Reference*, GC27-6995 *OS/VS2 Supervisor Services and Macro Instructions*, GC28-0683 *OS/VS2 MVS Data Management Macro Instructions*, GC26-3873 *OS/VS2 MVS System Programming Library: Job Management*,GC28-0627-2 *Operator's Library: OS/VS2 MVS System Commands*, GC28-1031 *VS2 System Codes*, GC38-1008 *IBM 3800 Printing Subsystem Operator's Guide*, GA26-1634 *ACF/VTAM Programming*, SC27-0449 *ACF/VTAM Advanced Communication Function for VTAM Programming*, SC27-0611 *IBM 2701 Data Adapter Unit Component Description*, GA22-6864 *System/360 Component Description - 2703 Transmission Control*, GA27-2703 *Print Services Facility Diagnosis Guide and Reference*, SY35-0062

$HASP000 OK

Explanation: The command has been accepted for action. The appropriate action has been taken or has been scheduled. The OK response is an indication that the JES2 command processor found no fault in the command; however, actions such as an attempt to initiate a function already scheduled or in progress may be ignored. (The importance level is 7.)

System Action: Processing continues.

Operator Response: None.

$HASP001 r, text

Explanation: The operator at a central console (r=0) or at a remote terminal identified by the value r has entered the displayed message, via the $DM (display message) command. (The importance level is 7.)

System Action: Processing continues.

Operator Response: Perform the appropriate action in accordance with installation procedures.

$HASP002 AUTOMATIC COMMANDS HALTED

Explanation: The operator has commanded the system to automatically issue commands via the $TA command. The system has detected a potentially undesirable situation as follows:

1. The time and date are inconsistent with a previously recorded time and date. This inconsistency results from leaving the automatic command feature halted for greater than 24 hours or altering the time and date greater than 24 hours forward or backing the date up to a previous day. Lowering the time is considered consistent but will stop interval displays until the time reaches the previously set value.

2. The system was congested with activity, preventing automatic issuance of commands for an extended period of time.

(The importance level is 7.)

System Action: The system performs a $ZA command action and records the new time so that a $SA command will allow continuation of automatic command processing.

Operator Response: Display the automatic command queue using the $TA command to determine if time values should be altered or entries should be deleted. Because the $TA command only displays elements consistent with the operator console authority, a fully authorized console should be used for queue examination.

$HASP050 JES2 SHORTAGE OF resource type

Explanation: JES2 has a shortage of the resource type identified in the message text, where a shortage is defined as one of the following:

- The initialization statement for the resource type included a percent utilization value, and JES2 is now using more than that percentage of the resource.

- The initialization statement for the resource type did not include a percent utilization value, and JES2 is now using more than 80% of the resource. (80 is the default value for the percent utilization value.)

The resource types and the corresponding initialization statements are:

CMBS (console message buffers) -- &NUMCMBS
LBUF (logical buffers) -- &NUMBUF
TPBF (teleprocessing buffers) -- &NUMTPBF
SMFB (system management facilities buffers) -- &NUMSMFB
JQES (job queue elements) -- &MAXJOBS
JOES (job output elements) -- &NUMJOES
TGS (spool space/track groups) -- &NUMTG

For example, the initialization statement &NUMTPBF=(20,75) tells JES2 to generate 20 TP buffers and to issue this message when 75% of those buffers are being used.

This message reappears every 32 seconds as long as the resource shortage exists.

(The importance level does not apply to this message.)

System Action: Processing continues.

Operator Response: Notify the system programmer.

Programmer Response: If this message appears frequently, increase the value of the initialization parameter for the resource.

$HASP070 SPECIFY RECOVERY OPTIONS - ('RECOVER' OR 'TERMINATE' AND, OPTIONALLY, ',NODUMP')

Explanation: A JES2 error has occurred and JES2 has issued message $HASP095 to describe the error. The JES2 error rate has reached or exceeded the value specified on the RECVOPTS initialization statement (RECVOPTS COUNT=nn,INTERVAL=hhhh, where nn is the number of system abends of the JES2 main task plus the number of JES2 catastrophic errors within the interval of hhhh hours. The default values for nn and hhhh are 2 and 24, respectively).

The JES2 processor that was executing has a recovery routine for this error, but because the error rate has exceeded the value specified at initialization, JES2 does not automatically execute the processor recovery routine. Instead, JES2 issues this message to require the operator to choose the action JES2 should take. (The importance level does not apply to this message.)

System Action: JES2 waits for the operator to reply. If the operator replies RECOVER, JES2 issues an indicative dump (message $HASP088) to the hardcopy log and then attempts recovery. If the operator replies SNAP, JES2 issues message $HASP088 at the console, and then issues message $HASP070 again. If the operator replies TERMINATE, JES2 terminates and the system dump is taken.

Operator Response: Reply RECOVER to allow the JES2 processor recovery routine to execute and to allow the automatic system dump. Reply RECOVER,NODUMP to allow the recovery routine to execute and to prevent the system dump. Reply TERMINATE to terminate JES2 and to allow the automatic system dump. Reply TERMINATE,NODUMP to terminate JES2 and prevent the system dump.

Programmer Response: None.

$HASP071 INVALID REPLY TO $HASP070

Explanation: The operator entered an invalid reply to message $HASP070. (The importance level does not apply to this message.)

System Action: JES2 reissues message $HASP070.

Operator Response: Enter a valid reply to message $HASP070.

Programmer Response: None.

$HASP072 RECOVERY IN PROGRESS

Explanation: An error has occurred in a JES2 processor (for example, in the JES2 command processor). The processor recovery routine has received control and is attempting to recover from the error and to avoid JES2 termination. (The importance level does not apply to this message.)

System Action: While the JES2 processor recovery routine is executing, JES2 runs in a quiesced state. JES2 processors that are not essential to the recovery attempt (those processors controlling readers and printers, for example) do no processing.

Operator Response: None.

Programmer Response: None.

$HASP073 RECOVERY SUCCESSFUL - NORMAL PROCESSING RESUMES

Explanation: A JES2 processor recovery routine successfully recovered from a JES2 error. (The importance level does not apply to this message.)

System Action: JES2 processing continues.

Operator Response: Check the $HASP messages to see if the processor recovery routine caused any units of work to be canceled or suspended. Take corrective action if necessary.

Programmer Response: None.

$HASP074 RECOVERY UNSUCCESSFUL

Explanation: An error occurred in a JES2 processor (for example, in the command processor). The processor recovery routine received control but was unable to recover from the error. (The importance level does not apply to this message.)

System Action: JES2 issues message $HASP098 to request termination options.

Operator Response: Reply to message $HASP098.

Programmer Response: None.

$HASP080 JES2 SYSTEM DUMP IN PROGRESS

Explanation: The operator has responded DUMP in reply to message $HASP098, and a system dump is being taken to the dump data set. (The importance level does not apply to this message.)

System Action: When the system dump completes, message $HASP098 is issued.

Operator Response: None.

$HASP080 JES2 SYSTEM DUMP REQUESTED FROM xxxxxxxx (aaaaaa) + X'oooo'

Explanation: A SVC dump was requested by JES2 module xxxxxxxx, at address aaaaaa in the JES2 address space. The request was issued from offset 'oooo' in the module. Messages issued prior to the $HASP080 message define the reason for the dump request. (The importance level does not apply to this message.)

Where:

xxxxxxxx	JES2 module name
aaaaaa	beginning address of the JES2 module
'oooo'	offset of the failing instruction in the JES2 module

System Action: JES2 issues an SDUMP macro to request a dump of the appropriate storage areas, address spaces, and diagnostic information.

Operator Response: Notify the system programmer, and note the descriptions of messages issued prior to $HASP080.

Programmer Response: Print the dump taken, and note the descriptions of the messages issued prior to $HASP080.

Problem Determination: Table I, items 2, 7, 16, 18, 33.

$HASP081 JES2 SYSTEM DUMP UNSUCCESSFUL

Explanation: The SDUMP requested by JES2 failed after issuing message $HASP080. A probable cause is that the dump data set is full. (The importance level does not apply to this message.)

System Action: The JES2 module that requested the SDUMP did not specify operator intervention if an error occurred while taking the SDUMP, so the module regains control. JES2 processing continues, and the dump request is cancelled.

Operator Response: Notify the system programmer.

Programmer Response: Determine the reason(s) why the SDUMP failed using the IEA messages issued, and correct the problem.

Problem Determination: Table I, items 2, 7.

$HASP083 R13 NOT A VALID PCE ADDRESS

Explanation: The operator responded SNAP in reply to message $HASP070 or $HASP098, requesting an indicative dump. JES2, during indicative dump processing, found that register 13 contains zeros or an invalid PCE (processor control element) address. (The importance level does not apply to this message.)

System Action: Indicative dump processing continues, but PCE information is not displayed in message '$HASP088 PCE = pceid (adr)'. When indicative dump processing completes, message $HASP098 is issued.

Operator Response: None.

$HASP084 INVALID SAVE AREA CHAIN

Explanation: The operator responded SNAP in reply to message $HASP070 or $HASP098, requesting an indicative dump. JES2, during indicative dump processing, found that the chain of PCE (processor control element) save areas in fields PSVNEXT and PSVPREV is invalid. (The importance level does not apply to this message.)

System Action: Indicative dump processing continues, but message '$HASP088 --CALLED BY mod2' is not included in the output. When the indicative dump completes, message $HASP098 is issued.

Operator Response: None.

$HASP085 JES2 TERMINATION COMPLETE

Explanation: JES2 has completed termination because the operator entered the $P JES2 command or the operator replied EXIT or PURGE to message $HASP098. If PURG was entered, JES2 attempts to terminate any attached tasks. (The importance level does not apply to this message.)

System Action: JES2 withdraws from the system.

Operator Response: None.

$HASP086 WARNING - JES2 CHECKPOINT LOCK NOT RELEASED

Explanation: JES2 has abnormally terminated without releasing the DASD resident checkpoint data set lock. (The importance level does not apply to this message.)

System Action: When any other system in the multi-access spool complex cannot obtain the checkpoint data set lock, it issues message $HASP264 or $HASP479.

Operator Response: See the descriptions of messages $HASP264 and $HASP479.

$HASP087 HASPTERM HAS ABENDED, SDUMP IN PROGRESS

Explanation: Module HASPTERM has abnormally terminated while trying to process a JES2 ABEND. (The importance level does not apply to this message).

System Action: An ESTAE is entered to issue an SDUMP macro instruction to gather information about the problem.

Operator Response: None.

$HASP087 JES2 FAILED DURING TERMINATION PROCESSING, type ABEND cde

Explanation: HASPTERM ABENDed during termination processing for JES2. In the message, type is the type of abend (system or user), and cde is the system or user completion code. (The importance level does not apply to this message.)

System Action: An SDUMP is requested by the ESTAE issuing this message. JES2 terminates.

Operator Response: Notify the system programmer.

Programmer Response: Refer to other error messages and the description of the completion code. Print and analyze the SDUMP. For descriptions of the system completion codes, see *VS2 System Codes*.

Problem Determination: Table I, items 2, 7, 16, 18, 33.

$HASP088 JES2 ABEND ANALYSIS

```
FMID = xxxxxxx      LEVEL SET PTF = xxxxx
SUBSYS = ssss vvvvvvvv      MODULE = mod
DATE = yy.ddd TIME = hh.mm.ss
DESC = text
ABEND scde AT mod1 (start1) + X'offset1'
--- CALLED BY mod2 (start2) + X'offset2'
FAILING INSTRUCTION WAS instr
PSW = psw     ILC = n     IC = mm
ASID =  xxxx (HOME)  xxxx (PRIM)  xxxx (SCND)
PCE = pceid   (adr)  [type]    [number]   [name]
R0 = r0       r1     r2        r3
R4 = r4       r5     r6        r7
R8 = r8       r9     r10       r11
R12 = r12     r13    r14       r15
-------------------------------------------------
```

Explanation: In response to message $HASP070 or $HASP098, the operator replied SNAP. The message contains the requested indicative dump information, where:

FMID	is SMP Function Modification ID for the current JES2 product.

LEVEL SET PTF will normally have a PTF number (UZxxxxx).

ssss	subsystem name (such as JES2 or JESA)
vvvvvvvv	subsystem version identifier
mod	module name (from the contents directory)
yy.ddd	year and day of the dump
hh.mm.ss	the time in hours, minutes, and seconds when the dump was taken
text	description of the error from field $ERCODET (such as invalid operation code or data exception)
scde	system (Snnn) or JES2 ($nnn) abend code
modl	JES2 module name
start1	beginning address of the JES2 module
offset1	offset into the JES2 module of the failing instruction
mod2	name of the calling module
start2	beginning address of the calling module
offset2	offset into the calling module
instr	actual failing instruction. It is not given if the home asid is not the same as the primary asid.
psw	PSW at the time of the error

n	instruction length code
mm	interruption code
ASID	asid values at the time of ABEND (home asid, primary asid, and secondary asid). All the address spaces indicated by this message are included in the SDUMP(s) taken from this ABEND by JES2. These asid values are not given on a SNAP dump if the reason for termination is a catastrophic error (cde $nnn) caused by a JES2 $ERROR macro, or if an SDWA (system diagnostic work area) was not allocated for this ABEND. If the home asid is not the same as the primary asid, then the failing instruction is not given in the $HASP088 message.
pceid	name of the PCE (processor control element)
adr	address of the PCE
type	type of JQE (job queue element) currently associated with the PCE. The value is JOB, STC, or TSU.
number	number of the current job
name	name of the current job
r0-r15	contents of the registers at the time of the error

(Importance level does not apply to this message.)

System Action: When the indicative dump completes, message $HASP098 is issued.

Operator Response: None.

Programmer Response: Note that if the home asid is not the primary asid, diagnosis from the associated dump(s) should be done recognizing that the $HASP088 'CALLED BY' trace indicates activity within the JES2 address space (HOME), while the actual ABEND location is in the primary address space and occurred in a cross-memory 'PC' routine.

Problem Determination: Table I, items 2, 7, 16.

$HASP089 SDUMP FAILED, REPLY 'Y' TO TRY AGAIN, OR 'N' TO EXIT

Explanation: Message $HASP087 was issued, and the subsequent SDUMP failed. A probable cause is that one or more dump data sets are full. (The importance level does not apply to this message.)

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

Operator Response: Reply Y to attempt SDUMP again. Reply N to exit HASPTERM. If the reply is N, no dump is written.

$HASP089 JES2 SYSTEM DUMP UNSUCCESSFUL, REPLY 'Y' TO TRY AGAIN, OR 'N' TO BYPASS DUMP

Explanation: An SDUMP requested by JES2 after issuing message $HASP080 has failed. (The importance level does not apply to this message.)

System Action: The operator is given control with this message to retry the SDUMP, if desired.

Operator Response: Notify the system programmer. If possible, correct the reason(s) for the SDUMP failure and reply 'Y' to retry the SDUMP.

Note: At this time, the JES2 subsystem issuing this message cannot start a job of any kind. If a job must be run to clear out a SYS1.DUMPxx DASD data set, the running of that job must not involve services from this subsystem.

Programmer Response: If a successful dump cannot be taken, see the description of message $HASP081.

Problem Determination: Table I, items 2, 7, 16, 18, 33.

$HASP092 API ERROR ON devname ACB rrrr,VTAM,ssss

Explanation: The interface between VTAM and JES2 has failed. rrrr indicates the VTAM service that was requested; the first two characters of ssss indicate the return code in register 15 after the ACB request and the last two characters indicate setting of the ACBERFLG field. (The importance level is 7.)

System Action: The ACB is closed, and the connection between VTAM and JES2 is terminated.

Operator Response: Check to see if VTAM has been started, and then try to log on again. If the attempt to log on fails, contact the system programmer.

Programmer Response: Refer to *VTAM Macro Language Reference* for an explanation of the ACBERFLG setting and return code, and correct the problem.

$HASP093 nnn% SPOOL UTILIZATION

Explanation: JES2 has detected that space used on the available spool volumes has exceeded the percentage specified in the resource threshold subparameter on the &NUMTG initialization statement. This message reappears at 30-second intervals as long as the threshold subparameter value is exceeded. (The importance level is 7.)

System Action: Processing continues.

Operator Response: Increase the rate of job output by starting more JES2 output devices, routing data sets to available devices, and releasing HELD jobs and data sets. Reduce the input rate by draining reader devices and stopping initiators. Report the occurrence of frequently high spool utilization to the system programmer.

Programmer Response: If frequent high utilization is experienced, provide larger data sets for JES2 spooling. Take steps to reduce the amount of output backlog.

Note: Reaching 100% spool utilization is considered a serious operational problem and generally undesirable conditions will result. This may include forced canceling of job output and consequently loss of data.

$HASP094 I/O ERROR ON SPOOL, INVALID EXTENT, MTTR = nnnnnnnn

Explanation: An invalid extent was supplied when requesting I/O from a spool device. Either the 'm' from the MTTR was greater than X'20', or the spool volume designated by the 'm' value was not available for use.

System Action: JES2 continues job processing and submits additional error messages, indicating the severity of the error.

Operator Response: None.

$HASP094 I/O ERROR ON ser ddd,cde,stat,sens,bbcchhr

Explanation: An input/output error has occurred on the indicated JES2 device where:

ser = JES2 device name, or volume serial if direct access
ddd = hardware address
cde = CCW op code used at the time of error
stat = CSW status code
sens = sense information
bb = bin, as appropriate
cc = cylinder, as appropriate
hh = head, as appropriate
r = record, as appropriate

Associated error messages may be displayed as a result of the error. For direct access, the following could be causes of the error:

1. The channel, control unit, or device is malfunctioning. This may be determined by moving the volume (if moveable) to a new drive, control unit, or channel and by restarting JES2.
2. The recording surface is bad, possibly indicated by the nature and the distribution of the bbcchhr information. (A reinitialization with assignment of alternate tracks, followed by a JES2 format start, may be desirable.)
3. The data set SYS1.HASPACE may have been overwritten by improper data set assignment and protection procedures. This may be indicated by wrong length record indicators. (A JES2 format start is required.)

(The importance level is 7.)

System Action: JES2 continues job processing and submits additional error messages, indicating the severity of the error to the system.

Operator Response: Determine the cause of the error, and take appropriate action.

$HASP094 I/O ERROR ON LINElna adr,cde,stat,sensrr,xyee

Explanation: An error has been detected on the indicated JES2 RJE line, or on a device attached to that line. The fields in the message and their values are as follows:

lna JES2 RJE line number

adr Line adapter address

cde CCW op code used at the time of error.

The codes are as follows:
- 01 WRITE
- 02 READ
- 03 NOP (SYN)
- 07 CTCA CONTROL
- 08 TIC
- 14 CTCA SENSE
- 23 SET MODE
- 27 ENABLE
- 2F DISABLE

stat CSW status code if no block sequence check.
- 0000 - indicator for normal channel end, with a block sequence check at the central processor
- FFFF - indicator for normal channel end, with a block sequence check at the remote site

sens Sense information, if stat = 0E00.

The values are as follows:
- 01 time-out
- 02 lost data
- 04 overrun
- 08 data check
- 10 equipment check
- 20 bus out check
- 40 intervention required
- 80 command reject

Last character received, if stat = 0C00.

The values are as follows:
- 01 SOH-STX-DATA-ETB
- 02 DLE-STX-DATA-ETB
- 2D SOH-ENQ
- 37 EOT
- 3D NAK
- 61 DLE-ACK1
- 70 DLE-ACK0
- 7C RVI (reverse interrupt)

rr Remote device first response character. See the sens field for a description of the possible values.

xy JES2 CCW internal sequence identification and command type. The values are as follows:

BSC prepare sequence:
- C0 DISABLE (IOBCCW1)
- C1 SET MODE (IOBCCW2)
- C2 ENABLE (IOBCCW3)
- C4 READ (IOBCCW6)
- CA SYN (IOBCCW4)
- CA WRITE ENQ/EOT or SYN (IOBCCW5)

BSC multi-leaving sequence:
- 92 ENABLE (IOBCCW1)
- 94 READ (IOBCCW4)
- 98 SYN (IOBCCW5)
- 98 WRITE DATA (IOBCCW6)
- 98 WRITE RESPONSE (IOBCCW7)
- 99 SYN (IOBCCW2)
- 99 WRITE RESP (IOBCCW3)
- B4 READ (IOBCCW8)

BSC hardware terminal read sequence:
- 82 ENABLE (IOBCCW1)
- 84 READ (IOBCCW4)
- 89 WRITE RESPONSE (IOBCCW3)
- 90 SYN (IOBCCW2)

BSC hardware terminal write sequence:
- A0 WRITE DATA (IOBCCW6)
- A2 ENABLE (IOBCCW1)
- A5 READ (IOBCCW8)
- A6 READ (IOBCCW4)
- A8 SYN (IOBCCW5)
- A8 WRITE RESP (IOBCCW7)
- AA SYN (IOBCCW2)
- AA WRITE RESP (IOBCCW3)

CTCA sequences (x = C or x = 9):
- x2 SENSE (IOBCCW1)
- x4 READ (IOBCCW4)
- x7 CONTROL (IOBCCW3)
- x8 WRITE (IOBCCW2)
- xA WRITE ENQ (IOBCCW2)

ee Expected response, if xy contains B4 or 94. See the sens field for a description of the possible values.

Notes:

1. *This message can also occur as an informational message when JES2 trace is requested for diagnostic purposes via the E=Y option of the $T LNEn command.*

2. *For BSC terminals, see the appropriate IBM component description manual (System Reference Library) for descriptions of additional status and sense values.*

(The importance level is 7.)

System Action: JES2 will, for most line errors, attempt to recover and continue processing, using the line.

Operator Response: The console log should be saved for maintenance personnel (even if recovery is successful). Additional responses depend on the nature of the problem.

$HASP094 I/O ERROR ON LINElna adr,02,0000,00rr,
{94 / B4} ee

Explanation: A block sequence error has been detected by JES2, while communicating with a multileaving terminal. This indicates that one or more transmission blocks have been lost. rr indicates the count received, and ee indicates the count expected. This message can also occur as an informational message when JES2 trace is requested for diagnostic purposes via the E=Y option of the $T LNEn command. (The importance level is 7.)

System Action: Any job reading in is deleted and must be resubmitted.

Operator Response: This represents a very serious error. Control records may have been lost, which could cause partial loss of terminal function. The line should be drained ($P) and restarted ($S) as soon as practical.

$HASP094 I/O ERROR ON LINElna adr,02,0C00,0001,
{84 / A6} **

Explanation: A 2770, 2780, or 3780 terminal has disconnected without signing off, and a multileaving terminal has subsequently connected to the same line and is attempting to sign on. This message can also occur as an informational message when JES2 trace is requested for diagnostic purposes via the E=Y option on the $T LNEn command. (The importance level is 7.)

System Action: The previous terminal is signed off, and the line is disconnected.

Operator Response: The remote terminal operator must redial and attempt to sign on again.

$HASP094 I/O ERROR ON LINElna adr,02,0C00,003D,
{94 / A5 / A6 / B4} **

Explanation: A NAK has been received from the remote terminal, indicating an error was detected at the terminal. This message can also occur as an informational message when JES2 trace is requested for diagnostic purposes via the E=Y option on the $T LNEn command. (The importance level is 7.)

System Action: Normal error recovery procedures are invoked.

Operator Response: None.

$HASP094 I/O ERROR ON LINElna adr,02,0C00,0061,
{A5 / A6} 70

$HASP094 I/O ERROR ON LINElna adr,02,0C00,0070,
{A5 / A6} 61

Explanation: JES2 has received an incorrect acknowledgment from a 2770, 2780, or 3780 terminal. This may indicate that an output device (printer or punch) at the remote terminal has become not ready. It may also indicate that an output block has been lost. This message can also occur as an informational message when JES2 trace is requested for diagnostic purposes via the E=Y option on the $T LNEn command. (The importance level is 7.)

System Action: The last block is retransmitted.

Operator Response: The remote terminal operator should check (to any extent possible) for missing or duplicate output and should request a backspace or restart, if the output looks questionable.

$HASP094 I/O ERROR ON LINElna adr,02,0C00,00rr,84 **

Explanation: Invalid data has been received from a 2770, 2780, or 3780. "rr" indicates the first significant byte received. This message can also occur as an informational message when JES2 trace is requested for diagnostic purposes via the E=Y option on the $T LNEn command. (The importance level is 7.)

System Action: Normal error recovery procedures are invoked.

Operator Response: None.

$HASP094 I/O ERROR ON LINElna adr,02,0C00,ii
{01 / 02} {94 / B4} **

Explanation: An invalid termination character was received from a multileaving terminal. "ii" indicates the termination character received. This message can also occur as an informational message when JES2 trace is requested for diagnostic purposes via the E=Y option on the $T LNEn command. (The importance level is 7.)

System Action: Normal error recovery procedures are invoked.

Operator Response: None.

$HASP094 I/O ERROR ON LINElna adr,02,0D00,0037,84**

Explanation: The card reader on a 2770, 2780, or 3780 has become not ready. This may be caused by a card feed error or by the failure of the remote operator to activate the END-OF-FILE switch or button. This message can also occur as an informational message when JES2 trace is requested for diagnostic purposes via the E=Y option on the $T LNEn command. (The importance level is 7.)

System Action: The system waits for the reader to be made ready and transmission to continue.

Operator Response: The remote terminal operator should correct the problem and ready the card reader (ensuring that the END-OF-FILE switch or button is activated).

$HASP094 I/O ERROR ON LINElna adr,02,0D00,0037, { **94** / **B4** / **C4** / **A6** } **

Explanation: JES2 has received an unexpected EOT. This message can also occur as an informational message when JES2 trace is requested for diagnostic purposes via the E=Y option on the $T LNEn command. The importance level is 7.)

System Action: Normal error recovery procedures are invoked.

Operator Response: None.

$HASP094 I/O ERROR ON LINElna adr,cde,sens,ii,****

Explanation: A unit check on the communications adapter has been detected by JES2. For more detailed information concerning the exact nature of the error, *IBM 2701 Data Adapter Unit Component Description* and/or the *System/360 Component Description - 2703 Transmission Control* should be consulted. (The importance level is 7.)

System Action: Processing continues.

Operator Response: None.

$HASP094 I/O ERROR ON LINElna adr,02,FFFF,00rr, { **94** / **B4** } **ee**

Explanation: A block sequence error has been detected by a multileaving terminal, indicating that one or more transmission blocks have been lost. "rr" indicates the count that was received at the remote terminal, and "ee" indicates the count that was expected. This message can also occur as an informational message when JES2 trace is requested for diagnostic purposes via the E=Y option on the $T LNEn command. (The importance level is 7.)

System Action: Any job printing on the terminal is interrupted, and any job punching on the terminal is restarted.

Operator Response: This represents a very serious error. Control records may have been lost, which could cause partial loss of terminal function. The line should be drained ($P) and restarted ($S) as soon as practical.

$HASP094 I/O ERROR ON LINElna adr,cde,sens,ii,****

Explanation: An unusual channel end condition on the communications adapter has been detected by JES2. This message can also occur as an informational message about LINE and/or LOGONx, when JES2 trace is requested for diagnostic purposes via the E=Y option of the $T LNEn or $T LGNx command. For more detailed information concerning the exact nature of the error, the appropriate hardware component description manuals should be consulted. (The importance level is 7.)

System Action: The line is automatically restarted.

Operator Response: None.

$HASP094 I/O ERROR ON devname SNA,xx,dddd,iiiiiiii,ttrrffeebbssccgwvvkkwwyy

Explanation: A VTAM RPL request has failed because an I/O error has occurred on the indicated SNA device or line. The message includes:

devname
The device or line on which the error occurred

SNA
The type of device

xx
The VTAM request type (RPLREQ), as follows:

X'15'	SETLOGON
X'17'	OPNDST
X'1A'	INQUIRE
X'1F'	CLSDST
X'22'	SEND
X'23'	RECEIVE
X'24'	RESETSR
X'25'	SESSIONC
X'27'	SENDCMD
X'28'	RCVCMD
X'29'	REQSESS
X'2A'	OPNSEC
X'2C'	TERMSESS

For descriptions of the VTAM request types for your system, see the level of *VTAM Macro Language Reference* or *ACF/VTAM Programming* that corresponds to the level of your system.

dddd
The data length including FM headers (RPLRLEN).

iiiiiiii
System and user sense information (RPLFDBK2). See the following:

Systems Network Architecture Reference Summary,
VTAM Macro Language Reference
ACF/VTAM Diagnosis Guide
IBM 3790 Host System Programmer's Guide
IBM 3770 Data Communications System: System Components

tt

The JES2 RPL sequence type (RPLSEQTP), as follows:

Normal Sequences
00 Normal RECEIVE
01 Normal SEND
02 RESETSR (continue-specific)
03 RESETSR (continue-any)
Special Sequences
1x Connection sequence
3x Disconnection sequence
6x Autologon sequence

rr

The VTAM return code (RPLRTNCD). See the level of *VTAM Macro Language Reference* or *ACF/VTAM Programming* that corresponds to the level of your system.

ff

The VTAM feedback code (RPLFDBK). See the level of *VTAM Macro Language Reference* or *ACF/VTAM Programming* that corresponds to the level of your system.

ee

FM header type (FMHBYTE1), as follows:

00 No FM header
01 Type 1 FM header (destination select)
02 Type 2 FM header (PDIR)
03 Type 3 FM header (compaction table)
04 Type 4 FM header (NJE)

bb

Bracket and direction controls (RPLRH3), as follows:

X'80' Begin bracket
X'40' End bracket
X'20' Change direction
X'08' Alternate code

ss

The SEND/RECEIVE type (RPLSRTYP), as follows:

X'80' Send response
X'0C' Receive response
X'00' Receive synch data
X'06' Receive asynch data

cc

Chaining controls (RPLCHN), as follows:

X'80' First-in-chain
X'40' Middle-in-chain
X'20' End-of-chain
X'10' Only-in-chain

gw

FM header properties (FMHPROPS) set for type 1 FM headers only, as follows:

g Destination select
- 0 Resume
- 2 Normal end
- 4 Begin
- 8 Suspend
- A Abort end
- 1 Basic exchange (used in combination with the above)

w Data Stream properties
- 0 No compression or compaction
- 2 Compaction only
- 4 Compression only
- 6 Compression and compaction

vv

VTAM flags (RPLVTFL2), as follows:

X'80' POST = SCHED
X'04' Exception response
X'02' No definite response 1 (note inverse)
X'01' Definite response 2

kk

Data flow controls (DFC), first byte RPLCNTDF, as follows:

X'80' Normal data
X'40' CANCEL DFC

ww

Additional data flow controls (DFC), second byte RPLCNTLC, as follows:

X'40' RTR DFC
X'20' LUSTAT DFC
X'10' SIGNAL DFC
X'08' BIND SC
X'04' UNBIND SC

yy

Session control indications, third byte RPLCNTSC, as follows:

X'04' RQR SC
X'02' RSHUTD DFC

Note: This message can occur as an informational message about LINE and/or LOGONx when JES2 trace is requested for diagnostic purposes via the E=Y option of the $T LNEn or $T LGNx command.

(The importance level is 7.)

System Action: Normal recovery procedures are invoked.

$HASP095 JES2 CATASTROPHIC {ABEND/ERROR} CODE=cde [desc]

Explanation: An error has caused the JES2 main task to enter the ESTAE routine. For some errors, a brief description of the error appears in the desc field.

If ABEND appears in the message text, an MVS system service (GETMAIN processing, for example) detected an error or abnormally terminated, and the cde field contains one of the system completion codes documented in *VS2 System Codes*.

If ERROR appears in the message text, the error was detected by JES2 processing and the cde field contains one of the following:

- If one of your installation's JES2 exit routines detected the error, the cde field contains the error code specified on the $ERROR macro instruction.

- If JES2 detected the error, the cde field contains one of these codes:

cde	Explanation
$A01	JES2 detected more channel end indications for a device than expected. Only one channel end indication should be received from IOS for each input/output operation that JES2 has initiated.
$B01	Either an attempt has been made to return an invalid JES2 buffer to the buffer pool, or the free buffer chain has been destroyed.
$B02	The available buffer count for a buffer pool is non-zero, but no buffer is indicated as available.
$E01	The total number of channel end indications from IOS has exceeded the total number of input/output operations initiated by JES2. For example, the total number of outstanding input/output operations became negative.
$ER1	LOGIC ERROR IN USE OF $ESTAE – A JES2 processor is attempting to cancel or replace its current JES2 recovery environment, but there is no recovery environment associated with the current save area level. That is, the processor has not established a recovery environment since it obtained control, and therefore cannot cancel one.
$ER5	INVALID RETURN FROM RECOVERY ROUTINE – When a JES2 processor recovery routine returned control, critical register contents, or control block contents, or both, had been destroyed.
$ER9	LOGIC ERROR IN RECOVERY SUPPORT – There is a logic error in the JES2 processing associated with (but not included in) a JES2 processor recovery routine.
$F08	Functional subsystem interface (FSI) POST request failed.
$G01	GETMAIN FOR TGB FOR A BAD TRACK GROUP FAILED – JES2 issued the GETMAIN macro instruction for storage for a TGB (track group buffer), but the required storage is not available in subpool 0.
$GW1	INVALID GET WORK AREA REQUEST – Either a JES2 processor requested a work area larger than the maximum size allowed, or a processor's total work area requests are larger than the total allowed.
$GW2	INVALID RETURN WORK AREA REQUEST – One of the following occurred: ● Critical control information in a work area has been destroyed. ● A JES2 processor is attempting to return a larger work area than it acquired.
$GW3	INVALID USE OF WORK AREA – A JES2 processor used part of a work area that it did not own. (For $DEBUG=YES only.)
$GW4	GETMAIN FAILURE IN $GETWORK ROUTINE – A $GETWORK request was issued unconditionally (without ERRET= on the macro), and a GETMAIN was required to satisfy the request; the GETMAIN failed.
$I01	No routine name was specified in a $PTENT (parameter statement table entry) macro call.
$I02	The field length parameter on a $PTENT macro was specified as greater than 4 bytes.
$I03	The keyword length parameter on a $PTENT macro was specified as greater than 8 characters.
$J05	JOE NOT FOUND ON REQUESTED QUEUE – A request was made to remove a JOE from a queue, but the JOE is not on the requested queue.
$J06	$#POST entered when not under control of $QSUSE macro.
$K01	Invalid alteration of checkpoint record contents when not under control of $QSUSE macro.
$K03	One of the following is true: ● Two systems are using the same system identifier. ● There is a time stamp synchronization problem in a multi-access spool configuration. This is usually caused by an invalid operator reply to message $HASP419 or some other operator error. ● This error requires a re-IPL.
$K05	A checkpoint record has been changed, but not flagged for checkpoint. (For &DEBUG=YES only)
$K10	A permanent read error has occurred on the JES2 primary checkpoint data set. Checkpoint duplexing was active.
$K11	A permanent read error has occurred on the JES2 primary checkpoint data set. Checkpoint duplexing was not active. JES2 could not establish ownership of the checkpoint data set lock when it attempted to format-write.
$K12	A permanent write error has occurred while trying to release the JES2 checkpoint data set lock.
$K13	The holder ID of the JES2 checkpoint data set lock was found to be invalid.
$K14	A permanent read error has occurred on the JES2 primary checkpoint data set. Checkpoint duplexing was not active. A configuration-wide warm start is required.
$K15	A permanent I/O error has occurred during a format-write to the JES2 primary checkpoint data set. This error requires a re-IPL.
$K16	A permanent I/O error has occurred during a format-write to the JES2 alternate checkpoint data set. This error requires a re-IPL.
$K17	A primary checkpoint read channel program has been interrupted. Retries were also interrupted.
$K18	One of the following occurred: ● A primary checkpoint write channel program was interrupted. ● Tried to start a secondary JES2 subsystem without the program properties table indicating that the JES2 subsystem is nonswappable.
$K19	An alternate checkpoint write channel program has been interrupted. Retries were also interrupted.
$M01	JES2 has detected more channel end indications for a BSC RJE line than expected. Only one channel end indication should be received from IOS for each input/output operation initiated by JES2.
$M02	An attempt has been made to initiate an input/output operation on an RJE line before the previous operation has completed.
$M03	An internal logic error has been detected by RTAM during processing for an SNA remote work station.
$M04	A SNA logical line has been erroneously removed from the SNA line queue after having been reserved for an SNA application-to-application session.
$M10	The network path manager has determined that the nodes attached table is invalid.
$PD1	$PCEDYDC - UNDEFINED DCT DEVICE TYPE – A call was made to $PCEDYN for a DCT chain, and a DCT in that chain is invalid (for example, its DCT table cannot be found, or it should not have a PCE related to it).

$PD2 $PCEDYN - UNABLE TO FIND PCETAB OR DCTTAB – A call was made to $PCEDYN, passing a PCE or a DCT, and the corresponding PCE table entry or DCT table entry could not be found.

$PD3 $PCEDYN - PCETAB/DCTTAB RELATIONSHIP ERROR – A call was made to $PCEDYN, passing a DCT, and the DCT table entry corresponding to that DCT does not have a matching PCE table entry.

$PD4 $PCEDYN - PCE/DCT RELATIONSHIP ERROR – A call was made to $PCEDYN and there was an error in the connection between the PCE and a DCT (for example, the PCE and DCT are required to match one-to-one and do not).

$PD5 $PCEDYN - PCE CANNOT BE DETACHED – A call was made to $PCEDYN to detach a PCE and (1) the PCE length is incorrect, or (2) the PCE indicates the processor has resources outstanding (for example, save areas, buffers, or job queue elements).

$PD6 $PCEDYN - REQUIRED UCT CANNOT BE FOUND – A call was made to $PCEDYN that resulted in references to PCE table entries (in the installation PCE table) that indicated required fields are in the UCT. The installation has not allocated a UCT.

$PD7 $PCEDYN - DYNAMIC PCE ATTACH/DETACH NOT ALLOWED – A call was made to $PCEDYN to attach a PCE after initialization or to detach a PCE, and the corresponding PCE table entry indicates PCEs of that type cannot be dynamically attached or detached.

$PJ2 The '$PJES2,ABEND' command was issued.

$P01 INTERNAL ERROR IN $SCAN - The JES2 $SCAN facility experienced an internal error, possibly due to logic errors in installation-defined $SCANTAB tables.

$P02 $SCAN CONTROL BLOCK SEARCH FAILED - The JES2 $SCAN facility failed to find a control block required for parameter passing or displaying, possibly due to logic errors in installation-defined $SCANTAB tables.

$Q01 A JES2 processor requested a job queue service routine function with invalid arguments or failed to insure that the job queue checkpoint processor was not active for a $QMOD service function.

$Q02 A JES2 processor requested a job queue service but failed to find the queue for the type specified in the job's JQE.

$Q03 REQUIRED $QSUSE CONTROL NOT OBTAINED – $CKPT macro processing attempted to flag a queue element for checkpoint processing, but $QSUSE macro processing had not obtained control of the checkpoint.

$Q04 $CKPT INVALID ELEMENT ADDRESS – $CKPT macro processing attempted to flag a queue element for checkpoint processing, but the address of the queue element is outside the bounds of the queue.

$S01 A GETMAIN for a permanent JES2 save area pool has failed.

$S02 The JES2 $RETSAVE service routine has detected that the save area being returned is not on the calling processor's save area chain.

$T01 A GETMAIN macro has indicated that no storage is available to initialize the process-sysout processor.

$T02 A GETMAIN macro has indicated that no storage is available to satisfy the $L command.

$U01 EXIT ROUTINE EXCEEDED MAX RETURN CODE – A user exit routine issued a return code that is higher than the maximum return code value specified in the $MAXRC parameter of the $EXIT macro instruction.

$V02 GETMAIN failed to obtain the storage required by the purge processor.

$X01 XFRM BUFFER COMPLETIONS OUT OF ORDER – The spool offload channel-end routine (module HASPSTAM) found that I/O operations were not completing in order.

$X02 DCT BUFFER COUNT WENT NEGATIVE – The spool offload channel-end routine (module HASPSTAM) found that the number of I/O completions exceeded the number of I/O operations issued.

$X03 GETMAIN failed to obtain the storage required for job control blocks during conversion processing.

$X04 An attempt has been made to dequeue an SJB that has already been dequeued.

$Z01 The SMF subtask has abended. The software error has been recorded on logrec.

$Z02 The write to operator subtask has abended. The software error has been recorded on logrec.

0Cx The JES2 abnormal exit routine has been entered, indicating that the JES2 system has been abnormally terminated. 0Cx is the system completion code, where x = 1 through F. See the description of codes in *VS2 System Codes*.

(The importance level is 7.)

HASP

System Action: If a JES2 processor recovery routine exists for this error, and the JES2 error rate has *not* reached or exceeded the value specified in the RECVOPTS initialization statement, JES2 issues an indicative dump (message $HASP088) to the hardcopy log, and then executes the recovery routine.

If a JES2 processor recovery routine exists for this error, and the JES2 error rate *has* reached or exceeded the value specified in the RECVOPTS initialization statement, JES2 issues message $HASP070 and waits for the operator to reply.

If there is no JES2 processor recovery routine for this error, JES2 issues an indicative dump (message $HASP088) and message $HASP098 to the master console.

Even if a processor recovery routine exists, the following catastrophic errors cause JES2 termination: $K03, $K15, $K16 $PJ2, $ER1, $ER5, and $ER9.

The following catastrophic errors require that the system be re-IPLed: $K03, $K15, and $K16.

Operator Response: Notify the system programmer and enter the appropriate response to message $HASP098.

$HASP096 DISASTROUS ERROR - AT SYMBOL symbol IN CSECT csect

Explanation: One of the following occurred:

- If an I/O error message accompanies this message, there has been a critical I/O error on the SYS1.HASPACE data set.
- If no I/O error message accompanies this message, there is a logic error in JES2. JES2 tried to free a JCT (job control table) from the JCT queue and could not find the JCT on the queue, or JES2 detected an invalid IOT (I/O table) or invalid JCT while reading the spool.

The indicated symbol will be used to generate the error message and can be referenced in the assembler cross-reference for the indicated csect.

(The importance level is 7.)

System Action: JES2 continues processing jobs using unaffected facilities.

Programmer Response: If there is a logic error in JES2, correct the invalid IOT or JCT, or determine why JES2 is trying to free a JCT that is not on the queue. Correct the error. Restart JES2 if necessary.

Operator Response: If the error appears to be associated with an I/O error, prevent new jobs from entering the system, prepare all jobs in the JES2 execution queue for resubmission (when JES2 is restarted), allow JES2 to complete all current jobs in execution and all output activity (depleting the output queues), stop JES2, and cold start. If the message is issued as a result of an internal JES2 logic error, take a stand-alone dump and notify the system programmer.

$HASP097 devname IS DRAINED

Explanation: The operator has entered a $P device command, directed to the named device, and the device has entered the DRAINED status. (The importance level is 7.)

System Action: JES2 discontinues use of the device until a $S device command is entered, specifying the device correctly. JES2 unallocates the device, permitting it to be used by other tasks within the system.

Operator Response: Enter a $S device command when JES2 is to continue using the device.

$HASP098 ENTER TERMINATION OPTION

Explanation: The JES2 main task encountered an error and issued message $HASP095 to describe the error. JES2 is terminating because one of the following occurred:

- There is no JES2 processor recovery routine that can handle this error.
- JES2 issued message $HASP070 to ask the operator whether JES2 should attempt recovery or terminate and the operator replied TERMINATE.
- JES2 executed a recovery routine, but the recovery attempt failed.

$HASP098 appears to ask the operator to specify a termination option. (The importance level does not apply to this message.)

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

Operator Response: Enter one of the following:

EXIT - JES2 exits from the system without any attempt to clean up. When processing completes, message $HASP085 is issued.

PURGE - JES2 attempts to terminate any attached tasks, informs tasks waiting on a JES2 function of the error, and then exits from the system. When PURGE processing completes, message $HASP085 is issued.

SNAP - JES2 produces an indicative dump. Refer to message $HASP088 for a description of the contents that are displayed. When SNAP processing completes, message $HASP098 is issued again.

DUMP - JES2 initiates a system dump with a title of: ABEND cde AT modl (start1) + X'offset1' desc ssss vvv The fields in the title are:

cde	system (Sxxx) or JES2 ($xxx) abend code
modl	JES2 module name
start1	beginning address of the JES2 module
offset1	offset into the JES2 module of the failing instruction
desc	description of the error
ssss	subsystem name
vvv	subsystem version number

DUMP text - JES2 initiates a system dump with the title 'text'.

Note: When the operator enters DUMP or DUMP text, the title of the dump (up to 100 characters) is printed on the first page of the dump. Following pages might have a portion of the title overlaid by the SVC dump module name. When dump processing completes, this message is issued again.

Problem Determination: Table I, items 2, 9, 13, 15, 16, 17, 20, 21, 22, 27, 29, 33.

$HASP099 ALL AVAILABLE FUNCTIONS COMPLETE

Explanation: All JES2 job processors have become dormant, and no JES2 RJE lines are active . (The importance level is 7.)

System Action: Processing continues and JES2 waits for work.

Operator Response: Enter more jobs into the system or enter a command that will allow job processing such as:

- $S if a $P has been previously entered and processing is to be continued.
- $SI if initiators are drained or halted.
- $S devname if devices are drained, halted, or paused.
- $AQ, $AA, or $A j if queues or jobs are held.
- $TI if initiators are not set to select available jobs in the execution queues.
- $T devname if output devices are not set to select available output.
- $R if output is routed to devices that are not currently operational and should be output to alternate devices.
- $O if output is held and should be released.

$HASP100 jjj ON devname programmer

Explanation: A JOB statement has been detected in the input stream from the indicated device, and the associated job has been assigned a JES2 job number. The programmer name displayed is the programmer name from the JOB statement. (The importance level is 5.)

System Action: The previous job in the same input stream (if any) is queued for execution processing, and input service processing is initiated for the new job.

Operator Response: None.

$HASP101 jjj HELD

Explanation: The indicated job has been placed in JES2 HOLD status for one of the following reasons:

- The JOB statement specified "TYPRUN=HOLD."
- The JOB statement specified "TYPRUN=JCLHOLD."
- The device from which the job was read was set to HOLD all jobs.
- The class of the job has been set by JES2 initialization parameters such that all jobs entered in that class will be held.

(The importance level is 3.)

System Action: Processing continues on other jobs.

Operator Response: The reason the job was placed in JES2 HOLD status should be determined, and the job should be released, when appropriate, for further processing.

$HASP102 jjj HELD FOR THE FOLLOWING VOLUMES

Explanation: The indicated job has been placed in HOLD status by the JES2 input service because a /*SETUP control statement was encountered. The text of the control statement is displayed with accompanying $HASP103 messages. The importance level is 5.)

System Action: Processing continues, holding the job on the execution queue.

Operator Response: Ensure that the requested volumes are available to be mounted, and release the job.

$HASP103 jjj ser,...,ser

Explanation: The indicated job has been placed in HOLD status by the JES2 input service pending availability of the volumes indicated by ser,...,ser. (The importance level is 5.)

System Action: The job is placed in JES2 HOLD status, and input processing continues.

Operator Response: Ensure that the requested volumes are available to be mounted and release the job.

$HASP104 { **devname text** / **jjj** }

Explanation: The input service processor has detected a /*MESSAGE control statement in the input stream. (The importance level is 5.)

System Action: Processing continues.

Operator Response: Observe the message indicated by text and take any appropriate action.

$HASP109 ILLEGAL CONTROL CARD DETECTED BY EXIT 4

Explanation: The JECL/JCL user-supplied exit routine (Exit 4) has notified the input service processor that it has detected an illegal control statement. The installation may (via the exit routine) replace the text of this message. (The importance level is 1.)

System Action: Input service processing for the job is terminated.

Operator Response: None.

$HASP110 jjj -- ILLEGAL JOB CARD

Explanation: The JOB statement for the indicated job was found by the input service processor to be invalid. The importance level is 1.)

System Action: Input service processing is terminated for this job.

Programmer Response: Correct the JOB statement, and resubmit the job. A different value for &RJOBOPT could be specified to allow the illegal JOB statement to be ignored. Illegal and invalid statements are detailed in the JCL manual under Coding JES2 Control Statements.

$HASP111 jjj -- INVALID /*ROUTE CARD

Explanation: The input service processor has encountered an invalid /*ROUTE control statement. (The importance level is 1.)

System Action: Input service processing for the job is terminated.

Programmer Response: Refer to the JCL manual for correct forms of the /*ROUTE statement, correct and rerun the job.

$HASP112 jjj -- INVALID /*JOBPARM CARD

Explanation: The input service processor has encountered an invalid /*JOBPARM control statement. (The importance level is 1.)

System Action: Input service processing for the job is terminated.

Programmer Response: Refer to the JCL manual for correct forms of the /*JOBPARM statement, correct and rerun the job.

$HASP113 jjj -- INVALID /*OUTPUT CARD

Explanation: The input service processor has encountered an invalid /*OUTPUT control statement. (The importance level is 1.)

System Action: Input service processing for the job is terminated.

Operator Response: Report this message to the system programmer.

Programmer Response: Refer to the JCL manual for correct forms of the /*OUTPUT control statement, correct the control statement, and rerun the job.

$HASP114 jjj -- INVALID EXECUTION NODE

Explanation: The input service processor found that an invalid destination node was specified on a /*XEQ control statement. (The importance level is 1.)

System Action: The input service processing for job jjj is terminated.

Operator Response: None.

Programmer Response: Refer to *MVS JCL* for the correct format of the /*XEQ control statement. Correct the control statement and rerun the job.

$HASP115 jjj -- INVALID /*NETACCT CARD

Explanation: The input service processor has encountered an invalid /*NETACCT control statement. (The importance level is 1.)

System Action: Input service processing for job jjj is terminated.

Operator Response: None.

Programmer Response: Refer to *MVS JCL* for the correct format of the /*NETACCT control statement. Correct the control statement and rerun the job.

$HASP116 jjj -- INVALID /*NOTIFY CARD

Explanation: The input service processor has encountered an invalid /*NOTIFY control statement. (The importance level is 1.)

System Action: Input service processing for job jj is terminated.

Operator Response: None.

Programmer Response: Refer to *MVS JCL* for the correct format of the /*NOTIFY control statement, correct the control statement and rerun the job.

$HASP117 jjjj -- INVALID /*XMIT CARD

Explanation: The input service processor has encountered an invalid /*XMIT control statement. (The importance level is 1.)

System Action: Input service processing for job jjjj is terminated.

Operator Response: None.

Programmer Response: Refer to *MVS JCL* for the current format of the /*XMIT control statement. Correct the statement and rerun the job.

$HASP118 jjjj -- INVALID /* CONTROL STATEMENT

Explanation: The input service processor has detected an unrecognizable JES2 control statement. (The importance level is 1.)

System Action: Input service processing for job jjjj is terminated.

Operator Response: None.

Programmer Response: Refer to *MVS JCL* for the correct format of the control statement in error. Correct the statement and resubmit the job.

$HASP119 jjj DELETED

Explanation: The input service processor has deleted the indicated job. The cause for the deletion may be that the operator entered a command to cause the deletion, or an error may have been encountered while inputting the job. When input errors are encountered, a previously displayed message details the nature of the error. (The importance level is 1.)

System Action: The job is routed to the print phase for appropriate action; then, the job is purged.

Operator Response: Report this message to the system programmer.

Programmer Response: Correct the problem as appropriate and resubmit the job.

$HASP120 devname cm

Explanation: The displayed command has been entered from the device indicated. (The importance level is 3.)

System Action: The command is passed to the JES2 command processor for the further action.

Operator Response: None.

$HASP121 ERROR READING JOB HEADER OR TRAILER

Explanation: JES2 job receiver discovered an error in the information found in the job header or job trailer, or the JCT is not long enough to contain these blocks. (The importance level is 3.)

System Action: The job is queued for output.

Operator Response: None.

Programmer Response: If the JCT is not long enough to contain the header or trailer, you may choose to enlarge the &BUFSIZE initialization parameter. If other systems communicating with JES2 have specified their headers and trailers correctly, a hardware problem can be the only other cause for this message.

$HASP125 devname SKIPPING FOR JOB CARD

Explanation: The JES2 input service processor is scanning the input stream for a JOB card. This message may be accompanied by diagnostic messages indicating that errors have been encountered in the reading of jobs. (The importance level is 3.)

System Action: The input service processor continues to read the input stream until a JOB card is encountered or until an end-of-data condition is recognized.

Operator Response: If you entered a command to delete a job currently on the device, perform appropriate action consistent with the reason for deletion. If skipping is caused by the deletion of a job because of an error encountered, inform the programmer of the error. Otherwise, check the input stream to make sure that the cards are in correct order and resubmit the corrected jobs after canceling any that were incorrectly entered.

Programmer Response: Correct the JCL in accordance with the accompanying error messages.

$HASP127 devicename INPUT NOT ACCEPTED - JOB QUEUE FULL

Explanation: The NJE job receiver, indicated by devicename, received a request to transmit a job from a connected node, but was unable to add the job to the JES2 job queue. (The importance level is 7.)

System Action: The job receiver rejects the request to transmit. The job transmitter on the connected node will drain after receiving the rejection.

Operator Response: Notify the system programmer that the job queue is full. If possible, reduce the load on the job queue by starting all output devices.

Programmer Response: Increase the value of the &MAXJOBS initialization parameter at the next JES2 cold start.

$HASP128 devname SIMULATING $C
[{ JOB / STC / TSU } jjjj jobname FLUSHED]

Explanation: A program check occurred while a JES2 processor was using device devname. JES2 is simulating a $C command for the device in an attempt to avoid JES2 termination. If the device was processing a job when the program check occurred, JES2 flushes the job and identifies it in the message text. (The importance level is 7.)

System Action: Recovery processing continues.

Operator Response: None.

Programmer Response: None.

$HASP129 jjjj EXCESS SYSIN DD STATEMENTS

Explanation: A user submitted a job stream to JES2 with such a large number of SYSIN '//ddname DD * or DD DATA' JCL statements that they could not be represented within the total number of buffers allocated to JES2 by the &NUMBUF initialization parameter.

System Action: Input service processing for job jjjj terminates.

Operator Response: None.

Programmer Response: If the failing job was submitted by a program that entered a loop, correct the program. Otherwise, use the failing job's output to determine the largest number of SYSIN DD cards that can be included in one job stream on your system. Correct the JCL and rerun the job.

$HASP150 { JOB / STC / TSU } jjj jobname OUTGRP=grpid.joeid1.joeid2
ON devname
nnnn (mmmm) LINES
nnnn (mmmm) CARDS
nnnn (mmmm) PAGES

Explanation: Device devname is beginning to process the output identified in the grpid.joeid1.joeid2 fields for the indicated job. The grpid field is the groupid assigned by user JCL, or generated by JES2 if the user did not specify it. The joeid1 field is the second identifier and is assigned by JES2. This identifier is used to identify how many job output elements there are within that output group. The joeid2 field is the third identifier and is also assigned by JES2. This third identifier determines the number of job output elements there are within the output group identified by groupid (grpid) and the second identifier (joeid1).

The nnnn and mmmm fields contain, respectively, the number of lines, cards, or pages to be processed and the number of lines, cards, or pages initially represented by the job output element, identified by OUTGRP=grpid.joeid1.joeid2. If nnnn and mmmm are not equal, the job output element was partially processed at an earlier time, but that processing was interrupted. (The importance level is 1.)

System Action: JES2 processing continues.

Operator Response: None.

Programmer Response: None.

$HASP151 jjj devname text

Explanation: An error occurred while SETPRT processing was setting up the 3800 printer identified by devname for job jjj. The text field contains the ID and text of a SETPRT error message.

See *OS/VS2 MVS Data Management Macro Instructions* under the SETPRT macro instruction for the explanation of the return code in the SETPRT error message.

System Action: Processing of job jjj terminates. Message $HASP190 is issued when the indicated job (jjj) requires that the setup for the device be altered. The SETPRT error message and message $HASP154 are issued to the programmer.

Operator Response: Respond as indicated in the SETPRT error message. If necessary, issue the $DU command to display the current status of the printer and use the $T command to correct the error.

$HASP152 devname COMMAND REJECTED

Explanation: A repositioning command for the 3800 printer identified by devname cannot be processed because the output currently located at the 3800 transfer station is not valid for the specified command.

System Action: The command is not executed. Processing continues.

Operator Response: Ensure that the page currently at the transfer station is not a dummy page between jobs. Reissue the command when valid output is being printed.

$HASP153 devname JAMMED, SYSOUT RESTART

Explanation: A data lost condition has occurred on the printer identified by devname.

System Action: If the operator does not reposition the printer, output processing resumes with the output last fused by the printer. If the operator wishes to reposition the printer, the operator must wait for JES2 to resume output processing.

Operator Response: If automatic recovery is acceptable, the operator need not respond. If automatic recovery is not acceptable, the operator must wait for JES2 to complete its backspacing process. If the operator does not wait, JES2 will not accept any operator commands. The operator may enter a $F command or $B command to reposition the printer at the desired page. The operator may even choose to enter a $E command to restart the printer.

$HASP154 SETPRT ERROR DEVICE=devname JOB=jjj ID=jobid ROOM=rrr

Explanation: An error occurred while SETPRT processing was setting up the 3800 printer identified by devname for job jjj. This message appears in the programmer's listing, preceded by the appropriate SETPRT error message. The operator receives message $HASP151 or $HASP157. In the message text, jobid is the identification number assigned to the job by JES2, and rrr is the programmer's room number entered on the job statement.

System Action: Processing of job jjj halts.

Operator Response: None.

Programmer Response: Respond as indicated in the SETPRT error message and rerun the job.

$HASP155 jj devname MAX OF n WCGM'S EXCEEDED

Explanation: For job *jjj* on the specified 3800 printer, the user has specified character arrangement tables that fill up more WCGMs (writable character generation modules) than the installation has available. An installation can have up to four WCGMs. (The importance level does not apply to this message.)

System Action: Processing of the indicated job is halted.

Operator Response: Notify the user of the problem. At the first opportunity, use the set ($T) command to override the user's character arrangement table specification. (One way to correct this error with the $T command is to set all the character arrangement tables to the same value; for example, X1=GF10,X2=GF10, and so on.)

$HASP156 jjj devname JOB REQUEUED

Explanation: The operator issued a repositioning command for the 3800 printer identified by devname. At least some (and possibly all) of the output for job jjj has crossed the 3800 transfer station. Job jjj is requeued on the output queue.

System Action: The repositioning command executes. The requeued job will be printed on any eligible device.

Operator Response: None.

Programmer Response: None.

$HASP157 jjj devname SETPRT ERROR, RETURN CODE=xx

Explanation: An error occurred while SETPRT processing was setting up the printer identified by devname for job jjj; xx is the return code that SETPRT processing placed in register 15.

System Action: Processing of job jjj terminates. Message $HASP190 might be issued. The appropriate SETPRT error message and message $HASP154 are issued to the programmer's listing.

Operator Response: Issue the $DU command to display the current status of the printer, and use the $T command to attempt to correct the error. If necessary, contact the system programmer.

Programmer Response: Respond as indicated by the return code in register 15, which appears as xx in this message. See *OS/VS2 MVS Data Management Macro Instructions* under the SETPRT macro instruction for the meanings of the values in the xx field of the message.

$HASP158 jjj devname PPQ SHORTAGE - CODE = xx

Explanation: JES2 detected a critical resource shortage during processing for the 3800 printer. xx is one of the decimal codes described as follows:

xx	Description
04	The PPQ (pending page queue) of the 3800 printer has been exhausted.
08	GETMAIN attempted to expand the PPQ of the 3800 printer and failed.
12	An error has been detected in the PPQ of the 3800 printer.

System Action: When xx=04, the printer is halted. When xx=08, the current job (jjj) is interrupted and the printer is drained. When xx=12, all jobs queued to the printer that has the error are requeued to another printer. The printer that has the error is drained.

Operator Response: When xx=04, entering a $SPRT command attempts to expand the PPQ of the 3800 printer. If the expansion is successful, normal processing continues. If you enter a printer termination command ($C, $E, or $I), the command processes against the current job (jjj) and the printer drains.

When xx = 08, hold or cancel the job and restart the printer. Notify the system programmer.

When xx = 12, notify the system programmer.

Programmer Response: If this message appears frequently, increase the CKPTPAGE parameter in the printer initialization statement. If this message is associated with a particular job, increase the CKPTPGS parameter in the /*OUTPUT control statement and/or the CKPTPAGE parameter on the JCL OUTPUT statement.

$HASP160 devname INACTIVE - CLASS = class class...class

Explanation: The indicated device found no work in the queue(s) specified by class class...class. (The importance level is 1.)

System Action: The specified device remains INACTIVE until work becomes available.

Operator Response: You can use the set ($T) command to:

- Alter setup to match work in the listed classes.
- Alter the current class list.

$HASP165 JOB nnnnn jjj { **ENDED** | **ENDED-JCL ERROR** | **ENDED-CANCELED** | **ENDED-ABENDED** | **[xxx yyy] ENDED-cc = dddd** | **ENDED-SECURITY VIOLATION** }

OR

$HASP165 msgid message-text

Explanation:

ENDED job jjj number nnnnn has terminated.

ENDED-JCL ERROR
terminated. The job jjj number nnnnn has converter/interpreter or initiator phase of the job processing could not be completed due to an error in the job control language.

ENDED-CANCELED
job jjj number nnnnn was canceled by the operator.

ENDED-ABENDED
job jjj number nnnnn has terminated abnormally.

[xxx yyy] ENDED-cc = dddd
job jjj number nnnnn was terminated by a condition test specified in the COND parameter of the job statement being satisfied by the completion code dddd of the executing step xxx. If step xxx is a step of a cataloged procedure then yyy will be the step that called step xxx.

ENDED-SECURITY VIOLATION
job jjj number nnnnn has terminated due to an unsuccessful authorization check during input processing.

msgid message-text
a message from a component other than JES2 is sent with the HASP165 prefix, and may be related to the reason the job ended (whether normally or abnormally). For a description of the message and the appropriate actions to take, refer to the 'msgid' message.

(The importance level is 7).

System Action: The job enters the output phase and processing continues. This message is displayed to the TSO user via a SEND command if the parameter NOTIFY = TSUid is detected on the // JOB card, or NOTIFY is requested via JECL.

If apostrophes are imbedded in the jobname, they are replaced by quotation marks.

Programmer Response: In the case of a ENDED-JCL ERROR message, check system output for the actual error message. Correct the indicated error and resubmit the job. In the case of a END-ABENDED message, check system output for the ABEND code. In the case of ENDED-SECURITY VIOLATION, verify the user id, group id, and password used, if any.

Operator Response: None.

$HASP170 devname { **ABORTED** | **FWD-SPACED** | **DELETED** | **BACKSPACED** | **REPEATED** | **RESTARTED** | **INTERRUPTED** }

Explanation: Output processing on the indicated device has been aborted, forward-spaced, deleted, backspaced, repeated, restarted, or interrupted. (The importance level is 3.)

System Action: The system action depends on the specified function:

- ABORTED - An unrecoverable error has occurred on the 3800 printer. Output processing is terminated. Job(s) currently active on the device are requeued from their last checkpoint and the device will drain.
- FWD-SPACED - The requested number of pages or cards is skipped without printing or punching, and processing continues. If the end of the data set is encountered while skipping, processing continues with the beginning of the next data set. See *Operator's Library: JES2 Commands*.

  Note: If FWD-SPACED appears in the message, the operator might have pressed the cancel key on a printer that has cancel-key support.
- DELETED - The output being processed on the indicated device is queued for the next processing phase. Output processing is terminated.
- BACKSPACED - The requested number of pages or cards is backspaced, and processing continues. If the beginning of the data set is encountered while backspacing, processing continues at the beginning of the data set. See *Operator's Library: JES2 Commands*.

- REPEATED - The output being processed on the indicated device is requeued. Output processing is continued.
- RESTARTED - The output being processed on the indicated device is requeued. Output processing for the job is terminated.
- INTERRUPTED - The output being processed on the indicated device is requeued. When it is processed again, processing begins from the last checkpoint taken. The device selects new output to process. If the interrupted output is the highest priority output available for the device, it will be selected.

Operator Response: None.

$HASP175 devname PAUSED

Explanation: Output processing on the indicated device is stopped at an end-of-job boundary. (The importance level is 3.)

System Action: Processing continues and the indicated device is unavailable.

Operator Response: After removing the processed output, the operator can cause the device to continue its function by either depressing first the STOP then the START key on the device or by typing a $S device command on the system console. To prevent future device pauses, type in $T devname,P=NO.

$HASP179 devname IMAGE LOADER SUBTASK REINSTATED AFTER ABEND (cde)

Explanation: In the message, cde is the abend code in the task that is using the image loader subtask. The image loader subtask was reinstated for the specified device name. (The importance level does not apply to this message.)

System Action: JES2 processing continues.

Operator Response: Notify system programmer.

$HASP180 jjj devname { CHAR / MODFY / GRAPH / FLASH / WCGM / FCB / UCS / UCSB / UNKN } **IMAGE xxx** { NOT FOUND / I/O ERROR / LOAD ERROR }

Explanation: Job jjj has requested that image *xxx* be loaded into the print device character arrangement table (CHAR), copy modification module (MODIFY), graphic character modification module (GRAPH), forms overlay frame (FLASH), writable character generation module (WCGM), FCB, UCS, or UCSB. A search of all images has shown that an I/O error occurred during an attempt to read from SYS1.IMAGELIB; or a load error occurred during an attempt to load the image into the printer. If UNKN appears in the message text, JES2 cannot identify the kind of module into which image xxx is to be loaded. (The importance level is 5.)

System Action: Processing of the indicated job is halted, and if the error occurred while processing a forms overlay (FLASH), the device setup message is issued.

Operator Response: Issue the $DU command to see the current status. Then use the $T command to correct the indicated error. If FCB is indicated in the message and you have a non-impact printer, ensure that the forms settings on the printer correspond to the FCB specifications.

$HASP181 WARNING - PRINTER LOG OR MDR AREA UNAVAILABLE

Explanation: During output processing to a printer, JES2 encountered an error while attempting to obtain buffers for the printer error log or MDR area. (The importance level is 7.)

System Action: Output processing to the printer continues. However, there might be a loss of error log data and/or inappropriate error recovery procedures on some devices.

Operator Response: Use the $P PRTn command to stop the printer, then restart it with the $S PRTn command. If the problem persists, notify the system programmer.

$HASP182 NO BUFFERS TO DETERMINE IF STD { UCS / FCB }

Explanation: During JES2 initialization processing for a printer, the $GETBUF routine could not get enough buffers for JES2 to determine if the UCS or the FCB (whichever appears in the message text) is a standard image. JES2 sets the DCT to show that the UCS or the FCB is a standard image. (The importance level is 7.)

System Action: JES2 initialization processing continues.

Operator Response: You might want to reset the printer because if the UCS or the FCB is not a standard image, jobs on the device might run incorrectly.

Programmer Response: None.

$HASP183 jjj HELD - BUFFER SHORTAGE DURING { CONVERSION / OUTPUT }
mmmm REQUIRED, nnnn DEFINED

Explanation: During the indicated process, sufficient buffers were not available to process job jjj.

System Action: The job is held.

Operator Response: Release the job when fewer JES2 devices are active. If the job continues to receive this message, or if the number of required buffers (mmmm) is greater than the number defined (nnnn), notify the system programmer.

Programmer Response: Increase the &NUMBUF parameter, or use the PURGE option to cancel job jjj. Changing the $NUMBUF parameter requires a cold start.

$HASP185 devname TERMINATED

Explanation: Processing of the current data set was abnormally terminated. (The importance level does not apply to this message.)

System Action: Possible causes of this termination are:

1. An I/O error occurred on the SPOOL volume while reading a control block or a data buffer.

2. While attempting to read the next block of data for this data set, a block of data not belonging to this job was encountered.

Note: This message is the expected response when a job which was in execution during a system failure is printed after warm start, without being rerun.

Operator Response: Rerun the job.

$HASP190 jjj SETUP - PUNCHnn - F=ffff [-C=cccc - T=tttt]

Explanation: The indicated job requires that the setup of the punch device indicated by PUNCHnn be altered to forms = ffff, or that the printer device indicated be altered to forms = ffff, carriage control = cccc, and print train = tttt. (The importance level does not apply to this message.)

System Action: Output processing is halted on the specified device until an appropriate operator response is received.

Operator Response: Verify that the requested setup has been completed and enter a start ($S) command for the indicated device. If you wish to override any or all of the setup specifications, do so with the set ($T) command followed by a start ($S) command. Current activity may be suspended by the restart ($E), interrupt ($I), and cancel ($C) commands. In this event, all intervening set commands will be ignored and the device setup will be that prior to the setup message.

$HASP190 jjj SETUP--PRINTERnn--F=ffff--O=name –

$$B = \left\{ \begin{matrix} Y \\ N \end{matrix} \right\}$$

Explanation: The indicated job (jjj) requires that the setup of the 3800 printer device indicated by PRINTERnn be altered to forms=ffff, forms overlay=name, and burst mode or no burst mode. (The importance level does not apply to this message.)

System Action: Output processing is halted on the specified device until an appropriate operator response is received.

Note: For burst mode, if the burster is not threaded, this message is repeated.

Operator Response: Verify that the requested setup has been completed and enter a start ($S) command for the indicated 3800 printer device. If you wish to override any or all of the setup specifications, do so with the set ($T) command followed by a start ($S) command. Current activity may be suspended by the restart ($E), interrupt ($I), and cancel ($C) commands. In this event, all intervening set commands are ignored, and the device setup is that prior to the setup message.

$HASP191 DEVICE HALTED - POSSIBLE DATA LOSS

Explanation: A channel or I/O error has occurred while printing a data set. Printing will not continue until the operator takes some action, although during error recovery, JES2 may cause the data set to be printed again. (The importance level is 5.)

System Action: The printer is halted until the operator takes some action. The error may have caused data to be duplicated or lost.

Operator Response: Use the $S command to restart the printer if automatic recovery is acceptable. If automatic recovery is not acceptable, use the $B command to reposition the printer to the top of the page in error, or to a page before the page that has the error. Then use the $S command to restart the printer. If you must be absolutely sure that the data set prints correctly, use the $E command to reposition the printer to the beginning of the data set, and then use the $S command to restart the printer.

$HASP195 PRINTERnn PAPER JAM--APPROX PAGES=xxxx

Explanation: A paper jam has been detected on the specified 3800 printer. *xxxx* indicates the approximate number of pages involved in recovering the print data set(s). (The importance level does not apply to this message.)

System Action: Output processing on the specified 3800 printer is halted until an appropriate operator response is received.

Operator Response: Count the number of physical pages in the paper jam, and then issue the $B command to backspace the number of pages specified as xxxx in the error message plus the number of physical pages in the paper jam. To ensure complete recovery of the output, however, you might wish to increase slightly the number of pages you backspace. A $SPRTn command must be issued to start the printer.

$HASP196 PRINTERnn $E NECESSARY -xxx PAGES LOST

Explanation: A paper jam has been detected on the specified 3800 printer. The paper jam occurred while a previous data set was being printed. The system cannot purge the job, and the operator cannot backspace the data set. In the message, xxx is the number of pages lost because of the paper jam. (The importance level is 5.)

System Action: Output processing on the specified 3800 printer is halted until an appropriate operator response is received.

Operator Response: To recover the lost pages, issue a $E command to discontinue printing the current data set. Then issue a $F command to forward-space the data set in which the paper jam occurred to the page on which you want the printing to start.

$HASP197 devname SIMULATING $I; JOB jjj.jobname
{STC / TSU}
OUTGRP=grpid.joeid1.joeid2

Explanation: A program check occurred while device devname was processing the output identified in the grpid.joeid1.joeid2 field for the indicated job. The grpid field is the group id name assigned by the user or JES2. The joeid1.joeid2 fields are assigned by JES2 and are used in data set selection and output group identification. JES2 is simulating a $I command for the device in an attempt to avoid JES2 termination. (The importance level is 3.)

System Action: JES2 puts the output in SELECT = NO status. Recovery processing continues.

Operator Response: Use the $L command to display the status of this job output element identified by grpid.joeid1.joeid2. Correct the error. Use the $TO command to put the output in SELECT = YES status, or cancel the job and have the user resubmit it.

Programmer Response: None.

$HASP200 {RMTnnnn / nodename} STARTED ON LINElna
[SESSIONzzzzzzzz]

Explanation: A remote work station or JES2 NJE node has appropriately identified itself to JES2. If RMTxxx is an SNA remote work station, the message indicates the session the work station is on (zzzzzzzz). For JES2 NJE, if the line is a SNA line, the message indicates the session by using the application name (zzzzzzzz). (The importance level is 3.)

System Action: Job processing activity is initiated with the remote work station or JES2 NJE node.

Operator Response: None.

$HASP201 LINElna - INVALID PASSWORD

Explanation: A remote operator attempted to sign on the specified line with an invalid password. (The importance level is 3.)

System Action: The attempted sign-on is not allowed, and the line is left in an INACTIVE status.

Operator Response: The remote operator should determine the valid password and correct the sign-on to reflect this information.

$HASP202 LINElna - INVALID SIGNON

Explanation: A remote operator attempted to sign on the specified line with an invalid sign-on card. A sign-on card may be invalid if:

1. The remote name is spelled incorrectly. The numbers must be left-justified with no leading zeros.
2. The remote name specified has not been generated.
3. The remote name specified is attached to another line.
4. The remote name does not begin in column 16.
5. The sign-on statement was received from a BSC hardware terminal followed by other data in the same transmission. For a BSC hardware terminal, the sign-on statement must be received in a transmission by itself.

   Note: Failure to comply with the above can result in a $HASP202 message after receiving $HASP200 and after correctly processing a valid sign-on statement. The sign-on card must be the only one in the reader with the end-of-file on. If the sign-on card is from a diskette, then the same end-of-file must be simulated.

(The importance level is 3.)

System Action: The attempted sign-on is not allowed, and the line is left in an INACTIVE status.

Operator Response: The remote operator should verify the spelling of the remote. If the remote is attached to another line, steps should be taken to correct this conflict in remote assignments.

$HASP203 {RMTnnnn / nodename} DISCONNECTED

Explanation: A node or remote workstation that was previously active has been disconnected. (The importance level is 3.)

System Action: If the line is still active, JES2 prepares for a new connection, otherwise, the line will go into DRAINED status.

Operator Response: None.

$HASP204 RMTnnnn--LOGON FAILED--SESSION zzzzzzzz

Explanation: The SNA remote work station, RMTnnnn, attempted to logon, but there was no line DCT for that work station, or RMTnnnn is logged on to another system. (The importance level is 7.)

System Action: The attempted logon is not allowed, and the remote station is not connected.

Operator Response: If there is no line DCT for RMTnnnn, the network operator should start a logical line so that the remote operator can logon. If RMTnnnn is logged on to another system, RMTnnnn cannot logon to this system.

$HASP205 LOGONx--INVALID LOGON--SESSION zzzzzzzz

Explanation: An SNA remote work station attempted to log on, but failed for one of the following reasons:

- The remote station was already logged on.
- The logon contained an invalid RMT number.
- The logon contained an invalid remote password.
- The logon contained an invalid line password.
- The syntax of the logon data was invalid.

(The importance level is 7.)

System Action: The attempted logon is not allowed, and the remote station is not connected.

Operator Response: If the logon was invalid, correct it and try to log on again.

$HASP206 { LOGON / BIND } FAILED -- MAXSESS EXCEEDED

Explanation: The logon of SNA remote devices or BIND of a JES2 NJE remote node is prohibited because the maximum number of sessions has been reached. (The importance level does not apply to this message.)

System Action: Further logons are prohibited until sessions become available.

Operator Response: None.

$HASP207 RMTnnnn AUTOLOGON FAILED

Explanation: An attempt to automatically log on to this SNA remote terminal has failed for one of the following reasons:

- The VTAM SIMLOGON request failed (see $HASP092). The key code is hexadecimal 16.
- LUNAME is not specified for this SNA remote terminal.

(The importance level is 7.)

System Action: Automatic logon mode (A=Y) is reset to A=N.

Operator Response: Reinitiate the automatic logon (with the $S Rnnn or $T Rnnn, A=Y commands) after the cause of the failure has been fixed.

$HASP208 xxxxx SCHEDULED FOR yyyyyyyy SNA,VTAM,[cde]

Explanation: A system network architecture (SNA) event xxxxx occurred requiring that the sessions for yyyyyyyy be terminated. Not all SNA events have an associated reason code. If the SNA event has a reason code, the reason code is defined by cde. See *VTAM Macro Language Reference* or *ACF/VTAM Programming* for an explanation of the reason codes. Possible values of the SNA event (xxxxx) and the explanation of each follow:

xxxxx	Explanation	Reason Code Provided
TPEND	VTAM TPEND exit (terminal pending)	YES
LSTRM	VTAM LOSTERM exit (lost terminal services)	YES
NSXIT	VTAM NSXIT exit (network services)	NO
UNBND	VTAM SCIP exit (unbind)	NO
RQRVY	VTAM SCIP exit (request recovery)	NO

System Action: The affected sessions are terminated. Message $HASP210 provides additional information.

Operator Response: None.

$HASP209 SESSION xxxxxxxx STARTED ON LINE xxxx

Explanation: Another session has started for the SNA remote terminal on this line. (The importance level is 3.)

System Action: The additional session may be used to communicate with the SNA remote work station.

Operator Response: None.

$HASP210 SESSION xxxxxxxx LOGGED OFF LINE xxxx

Explanation: A session has terminated for the SNA remote terminal on this line. (The importance level is 3.)

System Action: The remaining sessions are used to communicate with this SNA remote terminal. When the last session for a SNA remote terminal is ended, a $HASP203 message is displayed.

Operator Response: None.

$HASP211 devname COMPACTION TABLE xxx NOT FOUND

Explanation: The specified compaction table was not defined during JES2 initialization. (The importance level is 5.)

System Action: The data is sent to the specified SNA remote device in uncompacted form.

Operator Response: None.

$HASP212 SNA CRITICAL ERROR ON xxxxxxxx

Explanation: On session xxxxxxxx, an unrecoverable system network architecture (SNA) error occurred in an SNA request parameter list (RPL)-based request or response.

System Action: JES2 terminates the session. Messages $HASP094 and $HASP210 provide further information.

Operator Response: A 'V NET,INACT' command may be necessary to remove the session from VTAM.

$HASP213 INVALID DATA RECORD RECEIVED FROM applid

Explanation: JES2 received an invalid data record from applid in a system network architecture (SNA) session.

System Action: JES2 restarts the line (as if a $E LNEnn command was entered) resulting in termination of the SNA session by a close destination (CLSDST).

Programmer Response: Examine incoming data buffers on this line to determine if the session partner is violating SNA protocols.

$HASP221 BIND RECEIVED FROM applid REJECTED -- NO IDLE SNA LINES AVAILABLE

Explanation: A BIND RU has been received in the RTAM SCIP exit from another NJE node attempting to establish a session with the local node. The BIND cannot be accepted (via an OPNSEC macro) because no qualifying SNA line DCT (device control table) was found on the SNA idle line DCT queue. (The importance level is 3.)

System Action: The BIND is rejected with a SESSIONC macro request.

Operator Response: Start a qualifying SNA line with the $S command and have the other node reenter the $SN command or enter the $SN command locally to start networking with the applid specified in the message text.

$HASP222 BIND RECEIVED FROM applid REJECTED -- INVALID APPLID

Explanation: A BIND RU has been received in the RTAM SCIP exit containing an application name which is not listed in the local application table (APT). (The importance level is 3.)

System Action: The BIND is rejected with a SESSIONC macro request.

Programmer Response: Take steps to ensure that the application names defined to JES2 NJE with the APPL or Nnn initialization parameters are the same as those defined to VTAM and all other JES2 NJE nodes in the network.

$HASP223 NJE UNABLE TO SIGN ON TO nodename -- SYSTEM RESOURCE SHORTAGE

Explanation: The network path manager is unable to establish a SNA network connection due to a current shortage of system resources. The shortage may exist because all networking lines defined by &NETLNES are in use or because no TP buffers are available.

System Action: The SNA application-to-application session is terminated by a CLSDST from the primary node.

Operator Response: Try the $SN command later. Notify the system programmer that this condition has occurred.

$HASP224 INVALID COMPACTION SCB RECEIVED FROM applid

Explanation: A compaction string control byte has been found in a data record received on the identified NJE session. No compaction table currently exists for this session. (The importance level is 7.)

System Action: The line is restarted (as if a $E LNEnn command was entered) resulting in the SNA application-to-application session being terminated by a CLSDST from the primary node.

Programmer Response: Examine incoming data buffers on this line to determine if the session partner is violating JES2 NJE protocols.

$HASP225 INVALID { JOB / SYSOUT } DATA RECORD RECEIVED FROM applid

Explanation: A job or SYSOUT data record was received on the indicated session for an idle or nonexistent receiver. (The importance level is 7.)

System Action: The line is restarted (as if a $E LNEnn was entered) resulting in the SNA application-to-application session being terminated by a CLSDST from the primary node.

Programmer Response: Take steps to ensure that the session partner is not violating JES2 NJE protocols.

$HASP226 INVALID STREAM ALLOCATION REQUEST RECEIVED FROM applid

Explanation: A control record requesting allocation of a job/SYSOUT stream has been received on the indicated session. The identified receiver is already in use. (The importance level is 7.)

System Action: The line is restarted (as if a $E LNE command was entered) resulting in the SNA application-to-application session being terminated by a CLSDST from the primary node.

Programmer Response: Take steps to ensure that the session partner is not violating JES2 NJE protocols.

$HASP227 LINElna SIMULATING $E

Explanation: JES2 has detected more channel end indications than expected for the BSC RJE line identified in the message text (JES2 error code $M01). JES2 is simulating a $E command for the line in an attempt to avoid JES2 termination. (The importance level is 3.)

System Action: JES2 recovery processing continues.

Operator Response: None.

Programmer Response: None.

$HASP239 PCE STORAGE UNAVAILABLE -- RMTnnnnn -- LINEnnnn

Explanation: During signon processing for a remote terminal, there was not enough virtual storage available for the processor control elements (PCEs). PCEs are required for the unit record devices (such as printers, punches, and readers) attached to the remote terminal. The importance level is 7.

System Action: Signon processing for the remote terminal terminates.

Operator Response: Notify the system programmer.

Programmer Response: Determine why the private area of the JES2 address space is exhausted and attempt to remedy the problem. It is possible that the JES2 parameters you have specified allow only a relatively limited number of remote terminals to be signed on at any one time.

$HASP240 MESSAGES TO INACTIVE SPOOL MEMBER DISCARDED

Explanation: The JES2 remote console processor has received a message for a member of a multi-access spool configuration which is not currently active. (The importance level is 7.)

System Action: Discard message and continue processing.

Operator Response: None.

$HASP241 MAXIMUM NUMBER OF MESSAGES TO QUEUE TO SPOOL EXCEEDED

Explanation: The number of commands or messages the JES2 remote console processor has queued for delivery to members of the NJE node on the spool volumes exceeds the amount allowed (as specified by JES2 initialization parameter &MAXMSGQ). (The importance level is 7.)

System Action: The commands and messages currently spooled are discarded; processing continues.

Programmer Response: Increase the value of &MAXMSGQ or install communication lines between nodes to reduce message traffic through the node.

$HASP242 INSUFFICIENT SPACE RESERVED FOR CONNECTIONS

Explanation: There is insufficient space in the nodes attached table (NAT) to represent a new NJE connection. The connection request is ignored. (The importance level is 7.)

System Action: Processing continues.

Operator Response: Inform the system programmer.

Programmer Response: Increase the value of the JES2 &NUMNAT initialization parameter.

$HASP243 PATH LOST TO name

Explanation: A command was entered into the NJE network, but all paths to the action node were lost before the command could be delivered. The command is ignored. (The importance level is 3.)

System Action: Processing continues.

Operator Response: Enter a $TN command to display the action node status. Reenter the command if a path is available; otherwise, wait until later or call the operator on the action node.

$HASP244 text INVALID COMMAND

Explanation: A command was forwarded through the NJE network to a JES2 subsystem for action. The subsystem did not recognize the command, by its first character, to be a JES2 command. The subsystem could not pass the command to OS/VS2 for action. This is due to lack of command authority (JES2 requires the entry console to have system command authority and the entry node to have network and system command authority at the action node). (The importance level is 3.)

System Action: Processing continues.

Operator Response: If the command entry was improper, correct it. Obtain correct authority to enter the command or request the operator at the action node to enter the command.

$HASP245 DISASTROUS ERROR - SPOOL MESSAGES DISCARDED

Explanation: JES2 has attempted to gain control of the job queue (for an installation specified period of time (&MAXDELT)) to write messages to the spool (multi-access spool configuration). The attempt was unsuccessful and a console lock-out condition could exist. Therefore, commands and messages are cleared to permit functions which are able to continue to do so. This message will also be issued if commands and messages are to be written to spool volumes that are already 100 percent utilized for an extended period. (The importance level is 7.)

Note: If a multi-access spool member holding the shared spool is in abend recovery for longer than &MAXDELT, this message is issued on the "locked out" system.

System Action: Processing continues.

Operator Response: Clear the hardware reserve on the spool device by bringing down the system holding the lock. Clear 100 percent spool utilization by canceling input jobs or jobs which could be easily rerun, or add spool volumes to the complex.

$HASP246 DISASTROUS ERROR {WRITING / READING} SPOOL MESSAGES

Explanation: A disastrous error occurred while JES2 was writing or reading commands and messages to or from the spool volumes. JES2 may also issue an associated $HASP096 message, so the explanation for this message may also apply. Also see $HASP094 if this message has been received. Commands and messages have been discarded.

Possible causes of this problem are:

1. The TOD clock setting for one of the systems is out of synchronization relative to one or more of the other systems. The synchronization tolerance is specified by the &SYNCTOL parameter.

2. Physical I/O errors on the spool volumes may have occurred if the $HASP094 message has been issued. Refer to the explanation of that message.

(The importance level is 7.)

System Action: Processing continues.

Operator Response: Notify the systems programmer.

Programmer Response:

1. For cause 1, correct the clock values on the system in error with the older clock value. IPL to set the TOD clock and perform a single system warm start.

2. For cause 2, evaluate the $HASP094 explanation. Consider evaluating the disk surface for bad cylinders in the SYS1.HASPACE data set or consider possible spool contamination (logical error in processing on spool).

$HASP247 ERROR ON SPOOL AT xxxxxxxx - MESSAGE TRUNCATED

Explanation: An error occurred while spooling a multi-line write to operator (WTO) message at node xxxxxxxx. This message appears as the last line of the multi-line WTO at the node for which the message was destined. (The importance level is 7.)

System Action: Processing continues.

Operator Response: Inform the operator of the node that sent the message about the truncated message.

$HASP248 INSUFFICIENT TP BUFFERS - MESSAGES LOST

Explanation: JES2 has been attempting to transmit commands and messages without success due to insufficient TP buffers. This insufficiency has exceeded an installation-defined period of time. Messages have been discarded to prevent a possible console lockout. Communication lines may also have been restarted to free the buffer resources and inform the other end of the line concerning the abnormal conditions. This condition will be followed by appropriate disconnect messages.

Possible causes of the problem are:

1. Receiving system is congested and cannot receive.
2. Line errors are extremely frequent, causing all buffers to wait for transmissions.
3. Insufficient buffers exist to accommodate the number of concurrently active functions.

(The importance level is 7.)

System Action: Processing continues.

Programmer Response: If the problem appears in the receiving system, inform the remote installation and prepare a plan to reduce congestion. For example, reduce message flow by altering connection resistances, provide more resources to handle NJE traffic, or install new lines to bypass congested system. Call hardware maintenance personnel if excessive line errors occur or provide more buffers for transmission.

$HASP249 { **Rnnnn** / **NnnMn** / **Mn** } **command text**

Explanation: A command was received for execution from a remote job entry (RJE) work station or another JES2 node. This message is not issued for global ($G) commands. (The importance level is 3.)

System Action: Processing continues.

Operator Response: None.

$HASP250 jjj IS PURGED

Explanation: JES2 has completely finished processing the designated job, and all JES2 facilities belonging to the job are made available for reuse. If the value for jjj is **TEMP**, a job was submitted through a TP line, but an error occurred before the jobname was read. (The importance level is 1.)

System Action: JES2 resources associated with job jjj are freed.

Operator Response: None.

$HASP251 TRACK GROUP { **RETURNED TO** / **REMOVED FROM** } **volser AT bbcchh**

Explanation: JES2 detected a bad track group and tried to recover from the error. If the recovery attempt was successful, TRACK GROUP RETURNED TO volser appears. If the recovery attempt was not successful, TRACK GROUP REMOVED FROM volser appears.

Note: This message appears during JES2 initialization if the number of tracks allocated to the spool extent results in a partial track group. The partial track group is removed.

The variables in the message text are:

volser
the volume serial number

bb
the bin identifier, or 00

cc
the cylinder identifier

hh
the head identifier

JES2 attempts recovery, and this message appears, when JES2 purges the job or data set associated with the track group and at future JES2 warm starts. (The importance level is 3.)

Operator Response: Notify the system programmer.

Programmer Response: If the recovery attempt was not successful, contact your IBM representative for hardware support.

$HASP262 INSUFFICIENT SPACE RESERVED FOR CONNECTIONS

Explanation: There is insufficient space in the nodes attached table (NAT) to represent a new NJE connection. The connection request is ignored. (The importance level is 3.)

Note: This message may also be issued at multi-access spool nodes not participating in NJE connections.

System Action: Processing continues.

Operator Response: Inform system programmer.

Programmer Response: At the next cold start, increase the value of the JES2 &NUMNAT initialization parameter. Refer to *System Programming Library: JES2 Initialization and Tuning* for an explanation of the &NUMNAT parameter.

$HASP263 WAITING FOR ACCESS TO JES2 CHECKPOINT DATA SET

Explanation: JES2 has issued a read (with RESERVE) operation to the primary checkpoint data set. The number of seconds specified as the warning interval on the &WARNTIM parameter has elapsed, but the read operation has not completed. Another system in the multi-access spool complex might have terminated while holding a read (with RESERVE) operation on the checkpoint data set. (Importance level does not apply to this message.)

System Action: JES2 issues this message every time the warning interval specified on &WARNTIM expires until the read operation completes.

Operator Response: Ensure that other systems in the complex are operational. If another system is down, it is probably holding a read (with RESERVE) on the JES2 checkpoint data set. If the failed system cannot be restarted, the read (with RESERVE) must be cleared by pressing SYSTEM RESET on the failed system. After pressing SYSTEM RESET, message $HASP264 might be issued.

$HASP264 WAITING FOR RELEASE OF JES2 CKPT LOCK BY ssss

Explanation: JES2 has successfully accessed the primary checkpoint data set. However, it has determined (by examining the checkpoint data set lock record) that system ssss has control of the checkpoint data set lock and has not relinquished that control because initialization processing for system ssss failed. In the message, ssss is the alphameric identifier of the failed system that is holding the checkpoint lock, or if the system undergoing initialization has failed before a system-id is assigned, ssss is INITIALIZATION. (Importance level does not apply to this message.)

System Action: JES2 cannot continue processing until it has exclusive control of the checkpoint data set lock. This message is repeated approximately every 30 seconds until the other system relinquishes control of the checkpoint data set lock.

Operator Response: If system ssss has failed, issue a '$ESYS,RESET=ssss' command to cause JES2 to remove control of the checkpoint data set lock from system ssss. See the description of the $ESYS,RESET command in *Operator's Library: JES2 Commands.*

$HASP265 DAMAGED JES2 CHECKPOINT RECORD DETECTED

Explanation: JES2 has found that the last checkpoint write operation done by another system in the multi-access spool complex was interrupted. (Importance level does not apply to this message.)

System Action: If an alternate checkpoint data set exists, JES2 processing terminates with a catastrophic error code. If an alternate checkpoint data set does not exist, JES2 attempts to reformat the primary checkpoint data set from the checkpoint information in virtual storage. In the latter case, additional messages (such as $HASP266 or $HASP267) might also be issued.

Operator Response: See the description of JES2 error codes in message $HASP095.

$HASP266 PRIMARY/ALTERNATE CHECKPOINT DATA SET IS BEING FORMATTED

Explanation: JES2 has detected a disastrous error on the primary or alternate checkpoint data set. JES2 attempts to reformat the data set. (Importance level does not apply to this message.)

System Action: If JES2 cannot reformat the checkpoint data set, JES2 terminates with error code K15 (for the primary checkpoint data set) or error code $K16 (for the alternate checkpoint data set). If JES2 can reformat the checkpoint data set, message $HASP267 follows this message.

Operator Response: If JES2 cannot reformat the checkpoint data set, and the checkpoint duplexing option is being used, attempt a complex-wide warm start. Specify either the ALTCKPT initialization option (if the error was on the primary checkpoint data set), or the PRMCKPT initialization option (if the error was on the alternate checkpoint data set).

$HASP267 JES2 CHECKPOINT DATA SET SUCCESSFULLY FORMATTED

Explanation: JES2 has reformatted the primary or alternate checkpoint data set. Message $HASP266 precedes this message. (Importance level does not apply to this message.)

System Action: Depending on where in the data set the error was originally detected, JES2 either continues normal processing or terminates with a JES2 abend code.

Operator Response: If JES2 terminates, see the description of JES2 abend codes in message $HASP095.

$HASP268 INTERRUPTED READ/WRITE TO PRIMARY/ALTERNATE JES2 CHECKPOINT DATA SET

Explanation: JES2 found that a read or write operation to a checkpoint data set was interrupted. (Importance level does not apply to this message.)

System Action: JES2 retries the read or write operation. If the problem persists, JES2 terminates with an appropriate abend code. If the retry is successful, normal processing continues.

Operator Response: If JES2 terminates, see the description of JES2 abend codes in message $HASP095.

$HASP269 JES2 CKPT ERROR (cde). CKPT DUMP IN PROGRESS

Explanation: JES2 has detected a major error during I/O processing to the checkpoint data set. JES2 takes a dump of the checkpoint information in virtual storage. In the message, cde is the error code. (Importance level does not apply to this message.)

System Action: JES2 processing terminates.

Operator Response: The description of the possible error codes is given in message $HASP095.

$HASP301 jjj - DUPLICATE JOBNAME - JOB DELAYED

Explanation: The specified job was delayed for execution, because a job of the same name was already executing. (The importance level is 3.)

System Action: The indicated job will be executed when the job with the same name terminates execution.

Operator Response: None.

$HASP302 CONVERSION SUB-TASK ABENDED [, CALLED module]

Explanation: The JCL conversion sub-task, HOSCNVT, has abnormally terminated. (The importance level does not apply to this message.)

If 'CALLED module' appears, the message indicates a non-JES2 module has been called, has abended, and its recovery (if any) has percolated. The possible modules are:

- IEFVH1 - The JCL converter
- IEFCMAUT - The authorization check routine

System Action: The job being converted is routed to the output phase for appropriate action; then the job is purged. The next job to be converted will cause the sub-task to be reattached.

Operator Response: Notify the system programmer of this message.

Programmer Response: None

$HASP303 jjj REQUEUED AND HELD

Explanation: The specified job was requeued for execution and has been placed in JES2 HOLD status. The job was one which terminated abnormally and which was restartable. (The importance level is 7.)

System Action: Processing continues.

Operator Response: The reason the job was placed in JES2 HOLD status should be determined and the job should be released, when appropriate, for further processing.

$HASP305 CONVERSION PROCESSOR AWAITING STORAGE

Explanation: Sufficient common storage was unavailable to perform JCL conversion. (The importance level is 7.)

System Action: After waiting thirty seconds, the job is resubmitted for JCL conversion.

Operator Response: If the condition persists, it should be reported to an IBM programming systems representative.

$HASP306 INVALID LRECL OR BLKSIZE ON ddn

Explanation: During JCL conversion, the specified procedure library was found to have a logical record length other than 80, or a blocksize not an even multiple of 80. (The importance level does not apply to this message.)

System Action: An attempt is made to process the JCL without using a procedure library.

Operator Response: It may be possible, by specifying SHR and not using JCL procedures, to correct the problem with the specified procedure library, without stopping the system.

$HASP307 UNABLE TO OPEN ddn

Explanation: During JCL conversion, the specified procedure library could not be opened. (The importance level does not apply to this message.)

System Action: If the specified procedure library is other than PROC00, then an attempt is made to use PROC00. If PROC00 cannot be opened, an attempt is made to process the JCL without using a procedure library.

Operator Response: A DD card for the specified procedure library may not exist in the procedure used to start the subsystem.

$HASP308 jjj ESTIMATED TIME EXCEEDED [BY mm MINUTES]

Explanation: The indicated job has exceeded its estimated real time in the JES2 execution phase by mm minutes. (The importance level is 5.)

System Action: Processing continues.

Operator Response: Cancel the job if directed to do so by installation operating procedures.

$HASP309 { **XB** / **bb** } **INIT id INACTIVE** { ******** / **monitor name** } **c=classes**

Explanation: JES2 logical initiator init is idle because the execution processor discovered that no jobs of the classes indicated were available in the JES2 job queue. (The importance level is 3.)

System Action: The execution processor activates the logical initiator when an appropriate job becomes available.

Operator Response: If the initiator is not to be used for an extended period of time, enter a $P init command for that initiator. Otherwise, enter a $TI command to allow continuation of processing, or allow the initiator to remain inactive as desired.

$HASP310 jjj TERMINATED AT END OF MEMORY

Explanation: Job jjj terminated as a result of the abnormal termination of the memory in which it was executing. (The importance level is 7.)

System Action: Processing continues.

Operator Response: None.

$HASP311 jjj REENQUEUED AT END OF MEMORY

Explanation: Job jjj has been reenqueued for warm start processing as a result of the abnormal termination of the address space in which it was executing. (The importance level is 7.)

System Action: Processing continues.

Operator Response: None.

$HASP312 [subsystem] AWAITING SECONDARY SUB-SYSTEM WITHDRAWAL

Explanation: The identified primary subsystem is attempting normal withdrawal as directed by the operator via the $PJES2 command. It is unable to withdraw because other subsystems are using the primary subsystem to run initiators. (The importance level is 5.)

System Action: JES2 waits for secondary subsystems to withdraw.

Operator Response: Attempt to clear the primary subsystem by stopping all secondary initiators and started systems tasks. If this fails, withdraw the secondary subsystems.

$HASP314 INIT id DRAINED ****** c=classes**

Explanation: The operator has entered a $PI command and the identified initiator has subsequently entered the DRAINED condition. (The importance level is 3.)

System Action: If an initiator job can be associated with the identified initiator (address space creation has been verified), the job terminates execution and becomes eligible for output.

Operator Response: Enter a $SI command to create a new initiator to process jobs.

$HASP315 { **XB** / **bb** } **INIT id HALTED** { ******** / **monitor name** } **c=classes**

Explanation: The operator has entered a $ZI command and the identified initiator has subsequently entered the HALTED condition. (The importance level is 3.)

System Action: The initiator job associated with the identified initiator remains in an indefinite wait state.

Operator Response: Enter a $SI command to resume processing jobs with the initiator.

$HASP316 jjjj HAS { **REPLACED** / **DELETED** } **THE JESNEWS DATA SET**

Explanation: Job jjjj has either replaced or deleted the JESNEWS data set. (The importance level is 3.)

System Action: Processing continues.

Operator Response: None.

$HASP317 [jjjj] jobname nnnn DATA SETS CANCELED/RELEASED [TO destid]

Explanation: The operator entered a $O or $OQ command to cancel or release held SYSOUT data sets. The nnnn field shows the number of data sets that JES2 released or canceled for the indicated job. If nnnn is 0000, JES2 found held SYSOUT data sets, but those data sets did not have the characteristics specified in the command operands. If TO destid appears, the destid field contains the destination specified in the command. (The importance level is 3.)

System Action: Processing continues.

Operator Response: If the nnnn field contains 0000, check the operands you specified on the command and reenter the command if necessary. Otherwise, none.

Programmer Response: None.

$HASP318 [jjjj] jobname JOB NO LONGER FOUND

Explanation: The operator entered the $O or the $OQ command to cancel or release held data sets associated with the indicated job. JES2 found the data sets, but the job had left the system by the time JES2 tried to cancel or release the data sets. (The importance level is 7.)

HASP

$HASP350 jjj INIT STOPPED

Explanation: JES2 has caused an initiator to stop. (The importance level does not apply to this message.)

System Action: The initiator should stop normally. The initiator is stopped due to an operator request or because the initiator had been started to run an STC or TSU job and that job had a JCL error, or because insufficient storage was available.

Operator Response: None.

$HASP351 STORAGE NOT AVAILABLE FOR JOB LOG

Explanation: JES2 cannot write the job log because JES2 could not obtain enough storage. (The importance level does not apply to this message.)

System Action: Other processing continues.

Operator Response: None.

Programmer Response: Increase the value specified on the REGION parameter.

$HASP352 jjj OPEN FAILED BECAUSE NOT SYSIN, SYSOUT, NOR PROCESS-SYSOUT

Explanation: An OPEN macro instruction failed for a subsystem data set because JES2 could not determine the data set's type from the data set name in the JFCB. (The importance level does not apply to this message.)

System Action: Processing continues.

Programmer Response: Resubmit the job.

Problem Determination: Table I, items 1, 3, 5a, 13, 16, 29.

$HASP353 jjj CLOSE FAILED BECAUSE NOT SYSIN, SYSOUT, NOR PROCESS-SYSOUT

Explanation: A CLOSE macro instruction failed for a subsystem data set because JES2 could not determine the data set's type from the data set name in the JFCB. (The importance level does not apply to this message.)

System Action: Processing continues.

Programmer Response: Resubmit the job.

$HASP354 jjj intrdrid - STORAGE NOT AVAILABLE FOR BUFFERS

Explanation: Either in the common storage area or in the user address space, storage was not available to buffer data for a JES2 internal reader data set. (The importance level does not apply to this message.)

System Action: The error is indicated to the user as a permanent write error.

Operator Response: If the internal reader ID is STCINRDR, reissue the START or MOUNT command when there is less system activity.

Programmer Response: If the internal reader ID is INTRDR, rerun the job allocating the internal reader or reissue the SUBMIT command. If this message occurs frequently, consider increasing the size of the common storage area.

$HASP355 SPOOL VOLUMES ARE FULL

Explanation: A request for JES2 direct access spool space cannot be processed. All available space has been allocated to JES2 functions. This message will appear at approximately 30-second intervals until the condition is corrected. (The importance level does not apply to this message.)

System Action: The system suspends JES2 processors and users of JES2 services that require direct access space, until an output function completes and the associated direct access space becomes available, or another spool volume is added via the $S SPOOL command.

Operator Response: Determine which jobs are awaiting output ($DN command) and then initiate output processing for those jobs. If no output is queued, cancel jobs that are awaiting execution or are in execution, or add a spool volume via the start spool ($S SPOOL) command.

$HASP357 jjj STORAGE UNAVAILABLE FOR SDB

Explanation: JES2 cannot allocate a subsystem data set, because storage within the user's address space is unavailable for a subsystem data set block. (The importance level does not apply to this message.)

System Action: The subsystem data set is not allocated.

Programmer Response: Reduce the data set requirements of the job step.

$HASP358 [jjjj] HIOTSPIN-NO STORAGE AVAILABLE IN SP 231

Explanation: During unallocation of a subsystem SPIN data set, JES2 has failed to obtain storage from the common storage area (CSA). (The importance level does not apply to this message.)

System Action: If a SYSLOG data set is being unallocated, it is converted to a non-SPIN data set that can be printed when the SYSLOG started task terminates. All other data sets are purged. Processing continues.

System Action: The data set is purged and processing continues.

Programmer Response: Provide more common storage area.

$HASP359 [jjjj] HCBGM - NO STORAGE AVAILABLE IN SP 230

Explanation: While attempting to start execution of a job, JES2 has failed to obtain storage from the user address space to hold one of the job's direct access resident control blocks. (The importance level does not apply to this message.)

System Action: Processing continues.

Programmer Response: None.

$HASP360 jjj REQUESTS ACCESS TO JESNEWS (Y OR N)

Explanation: Job jjj is requesting permission to replace or delete the JESNEWS data set. This message is issued during subsystem data set allocation. (The importance level does not apply to this message.)

System Action: JES2 waits for the operator to reply Y or N.

Operator Response: Reply Y or N. A reply of Y allows job jjj to replace or delete the JESNEWS data set. A reply of N prevents job jjj from replacing or deleting the data set and causes an allocation error.

$HASP361 JOB NOT FOUND

Explanation: JES2 was unable to find a job in its job queue which an initiator requested specifically by job identifier. The job was created by a START or MOUNT command or by a TSO LOGON command. (The importance level does not apply to this message.)

System Action: The requesting initiator is stopped.

Operator Response: Reissue the command that created the job.

$HASP362 STORAGE UNAVAILABLE FOR {SJB / SJXB}

Explanation: JES2 has failed to obtain storage for a subsystem job block or subsystem job extension block and therefore cannot continue processing for an initiator. (The importance level does not apply to this message.)

System Action: The initiator should stop normally. The initiator is stopped due to an operator request, or because the initiator had been started to run an STC or TSU job and that job had a JCL error, or because insufficient storage was available.

Programmer Response: If this message occurs frequently, increase the size of the common storage area.

$HASP363 [jjj] HCBIO - INVALID TRACK ADDRESS

Explanation: JES2 has attempted to read or write a disk-resident job control block to an invalid track address. (The importance level does not apply to this message.)

System Action: If the message occurred during job initiation, the job is terminated. Otherwise, processing continues.

Operator Response: None.

$HASP364 [jjj] FSSM - INVALID CONTROL BLOCK - xxx

Explanation: JES2 has read a disk-resident job control block whose identifier, xxx, is unrecognized. FSSM is the functional subsystem support module detecting and issuing the message. (The importance level does not apply to this message.)

System Action: The output group being processed by the functional subsystem device is terminated.

Operator Response: None.

$HASP370 [jjj] HCBIO - I/O ERROR
{READING / WRITING} CONTROL BLOCK - xxx

Explanation: JES2 has encountered a permanent I/O error while reading or writing a disk-resident job control block whose identifier is xxx. (The importance level does not apply to this message.)

System Action: If the error occurred on a read, the job is terminated. Otherwise, processing continues.

Operator Response: None.

$HASP371 [jjj] HCBFM - FREEMAIN FAILED FOR SP 230

Explanation: JES2 failed in attempting to release main storage for a direct access resident job control block. (The importance level does not apply to this message.)

System Action: Processing continues.

Operator Response: None.

$HASP373 jjj STARTED

Explanation: The named job is beginning execution. (The importance level does not apply to this message.)

System Action: Processing continues.

Operator Response: None.

$HASP374 jjj - JOB HAS NO JOURNAL

Explanation: The named job was attempting to warm start or restart. In both cases, a job journal data set is required, but the job had none. (The importance level does not apply to this message.)

System Action: The job is terminated.

Operator Response: None.

$HASP375
jjj ESTIMATED {LINES / CARDS / BYTES / PAGES} EXCEEDED BY nnn xxx
% SPOOL

Explanation: Job jjj has exceeded its estimated number of lines, cards, bytes, or pages by nnn. The xxx represents the total percentage of SYSOUT spool space that the job is using. (The importance level does not apply to this message.)

Note: When CARDS appears in the message, the total record count exceeds the user-defined limit. This record count includes any print records destined for a punch with a printing feature (for example, the D/T3525).

System Action: The action depends on the installation options. If abnormal termination results, the system completion code is 722 and a dump may or may not be taken. If the task producing the output is already terminating (normally or abnormally) JES2 does not attempt abnormal termination.

Programmer Response: None.

$HASP376 jjj - UNABLE TO PROCESS SUBSYSTEM DATA DATA SET FOR HOLD

Explanation: JES2 cannot obtain sufficient storage in the common storage area to honor a request to make a held data set out of a normal SYSOUT data set. (The importance level does not apply to this message.)

System Action: The request is ignored and processing continues.

Programmer Response: If this message occurs frequently, increase the size of the common storage area.

$HASP380 TRACE TABLE STORAGE UNAVAILABLE -- LOGGING DEACTIVATED

Explanation: An attempt to acquire fixed storage for an additional trace table has failed. (The importance level does not apply to this message.)

System Action: The trace table will no longer be queued to the trace log processor. Trace entries continue to be written to the current trace table.

Operator Response: Notify the system programmer. When it is determined that sufficient storage is available to continue, restart the trace log processor by issuing the $TRACE,P=Y command.

$HASP381 INVALID TRACE ENTRY -- TRACE ID xxx DEACTIVATED

Explanation: An attempt has been made to trace an entry that is larger than the trace table. (The importance level does not apply to this message.)

System Action: The specified trace entry (IDxxx) can not be written to the trace table; the trace id is deactivated.

Operator Response: Notify the system programmer. If necessary, increase the trace table size at JES2 initialization by increasing the value of the &TRCPGS initialization parameter. Reactivate the trace id by issuing the $TRACE,ON,ID = +xxx command.

$HASP395 jjj ENDED

Explanation: The named job has completed execution. (The importance level does not apply to this message.)

System Action: Processing continues.

Operator Response: None.

$HASP396 jjj TERMINATED

Explanation: Due to circumstances specified by previous messages, the named job was unable to start execution. (The importance level does not apply to this message.)

Note: This message can be issued with no previous messages for the following conditions:

1. A user attempted to logon to TSO on a member of a multi-access spool complex and a duplicate logon id was currently executing on another member.

2. Installation exit 10 caused the job to be terminated, but issued no explanatory message.

System Action: Processing continues.

Operator Response: None.

$HASP397 jjj REENQUEUED

Explanation: The named job is reenqueued for OS/VS2 warm-start or restart processing. (The importance level does not apply to this message.)

System Action: Processing continues.

Operator Response: None.

$HASP398 jjj QUEUED FOR REEXECUTION

Explanation: In response to operator command $E jjj or $E j, or because the initiator has insufficient resources to start the job, the named job is queued for reexecution. (The importance level does not apply to this message.)

System Action: Processing continues.

Operator Response: None.

$HASP400 ENTER REQUESTS

Explanation: JES2 is ready for job processing and is waiting for requests. (The importance level does not apply to this message.)

System Action: JES2 will not process jobs until a $S command is entered.

Operator Response: Perform necessary preparatory functions, and enter the $S command (if job processing is required) or $P JES2 if JES2 is to be withdrawn.

$HASP401 EXTENT ERROR ON volser

Explanation: The operator performed a JES2 warm start or issued a start spool ($S SPOOL) command. JES2 has found that the first extent of data set SYS1.HASPACE on volume volser is different from the extent before the warm start, or different from the first system in the complex that allocated the spool volume by a $S SPOOL command, due to: mounting the wrong volume, starting a different JES2 system, or scratching and reallocating the SYS1.HASPACE data set. (The importance level does not apply to this message.)

System Action: During a JES2 warm start, JES2 terminates after attempting to verify the remaining required volumes. After a $S SPOOL command is entered, the command is rejected and the volume is not started.

Programmer Response: Make sure that all spooling volumes are correct. If not, mount the correct ones. If correct, perform a cold start thus destroying any job information contained in the SYS1.HASPACE data set.

$HASP402 ttt ATTACH ERROR -cde

Explanation: JES2 has attempted to attach a subtask, which is required for running the system. The module name indicates the EBCDIC name of the subtask entry ttt, and cde is the system completion code returned. If the system is allowed to continue processing, the results will be unpredictable but will cause general malfunction as follows:

- HASPIMAG - JES2 FCB and UCS image retrieval facility will be inactive; output devices requiring images from SYS1.IMAGELIB will not operate.

- HASPWTO - JES2 WTO interface facility will be inactive, eventually causing JES2 to become interlocked when it attempts to use the OS console interface.

- HASPACCT - JES2 SMF interface facility will be inactive, eventually causing JES2 to become interlocked when it attempts to write SMF records.

(The importance level does not apply to this message.)

System Action: JES2 will attempt to process jobs.

Operator Response: Probable user error. Stop JES2, refer to *VS2 System Codes* and correct the problem as indicated.

$HASP403 IS SYSTEM xxxx DOWN -- REPLY Y/N

Explanation: The operator has warm-started a single system in a JES2 shared spool complex. Another JES2 system in the complex (system xxxx) is suspected of being down. The importance level does not apply to this message.)

Note: Message $HASP403 might be issued repeatedly if system xxxx is up but is unable to obtain and properly update the checkpoint data set.

System Action: The warm start does not proceed until the operator responds to the message.

Operator Response: If the system specified is down, reply Y. Otherwise, reply N.

$HASP404 {JOB / STC / TSU} jjj - BAD {JCT / IOT} - ERRORS MAY OCCUR

Explanation: The operator has warm-started JES2. A direct-access allocation map for the job was discovered to be in error. (The importance level does not apply to this message.)

System Action: The control block allocation map is altered to preserve system integrity, and the control block is rewritten. The job may experience premature end on input data sets (JCT) or output data sets (IOT).

Operator Response: Consult the installation procedures guide to determine the advisability of deleting the job, resubmitting it, or allowing the job to continue.

$HASP405 JOB jjj AWAITING BUFFER STORAGE

Explanation: JES2 warm-start processing encountered a shortage of storage for a control block. (The importance level is 7.)

System Action: JES2 will try to get the storage every 30 seconds.

Operator Response: None.

$HASP406 {JOB / STC / TSU} jjj WAS EXECUTING

Explanation: The operator has warm-started JES2. When the system stopped, the job was in the JES2 execution phase. (The importance level does not apply to this message.)

System Action: JES2 will submit the job to the system for determination of whether or not the job can be restarted. When the job is submitted to an initiator, appropriate messages will be issued allowing the operator to select restart options. In the latter case, all of the job's data sets (including the system message and JES2 job log data sets) may not print to completion; some may not print at all.

Operator Response: If the normal system action is not desired, hold or cancel the job.

$HASP407 {JOB / STC / TSU} jjj WAS TERMINATING

Explanation: JES2 warm-start processing encountered a job that was terminating its execution during system shutdown. —The importance level does not apply to this message.)

System Action: The identified job is queued for output processing.

Operator Response: None.

$HASP408 {JOB / STC / TSU} jjj IS QUEUED FOR REEXECUTION

Explanation: JES2 warm-start processing encountered a job in execution during shutdown. The job was journaled or marked as restartable. (The importance level is 7.)

System Action: The identified job is placed back into the execution queue.

Operator Response: None.

$HASP409 {JOB / STC / TSU} jjj WAS ON READER

Explanation: The operator has warm-started JES2. When the system stopped, the job was in the process of reading. (The importance level does not apply to this message.)

System Action: The job is purged.

Operator Response: Resubmit the job.

$HASP410 JOB jjj WAS PRINTING/PUNCHING

Explanation: The indicated job was printing or punching when the last JES2 checkpoint was taken (prior to this warm start). (The importance level does not apply to this message.)

System Action: The job is requeued, and the output function is continued when print/punch devices are available.

Operator Response: The operator may use the following console commands:

- $H - hold job - to prevent output from occurring until a $A (release) command is entered.
- $C - cancel job - to remove the job from the output queue and pass it to purge.

If neither of these commands is used, the job can be controlled normally when it is started on a device.

$HASP411 MAXIMUM OF 32 SPOOL VOLUMES EXCEEDED

Explanation: The number of direct-access spool volumes defined to JES2 is greater than 32, the maximum number that JES2 supports, or an attempt has been made with the $S SPOOL command to add more than 32 spool volumes.

System Action:

- If this message is issued during a JES2 cold start, JES2 terminates.
- If this message is issued in response to a $S SPOOL command, the command is rejected and normal processing continues.

Operator Response: Probable user error. Check the volume labels of all direct-access volumes and remove all but 32 spool volumes. If necessary, restart JES2.

$HASP412 MAXIMUM OF nnn devtyp EXCEEDED

Explanation: More reader, printer, punch, or RJE line devices are physically online to the processor than JES2 supports. (The importance level does not apply to this message.)

System Action: The first nnn devices of the specified type will be used by JES2; additional devices of the specified type will be ignored.

Programmer Response: Check the OS generation to ensure that the hardware devices correctly reflect the system configuration.

System Action: Processing continues.

Operator Response: None.

$HASP413 JES2 RECONNECT TO FSS fssname FAILED, FSS TERMINATED WITH ABEND 02C-$F06

Explanation: During a JES2 hot start, JES2 failed to reestablish the cross memory interface required to support functional subsystem fssname. See *VS2 System Codes* for an explanation of the 02C abend.

Code	Description
$F06	JES2 failed to reestablish the cross memory interface.

System Action: The functional subsystem abends with an abend code of 02C. All devices are drained that are associated with the functional subsystem.

Operator Response: Notify the system programmer. To restart the functional subsystem issue the $S PRT command. If the functional subsystem devices are also supported directly by JES2, they may be restarted by issuing the $T command with MODE=JES and then starting the device with the $S command.

Programmer Response: Determine the cause of the ATSET system service failure. ATSET was invoked with an authorization index value in the $SVTAXV field of the SSVT ($SVT). See *OS/VS2 Supervisor Services and Macro Instructions* for a description of ATSET.

Problem Determination: Table I, items 2, 7, 16, 29.

$HASP414 OBTAIN FAILED FOR dsn ON ser WITH CC cde

Explanation: The operator warm-, cold-, or format-started JES2, or issued a start spool ($S SPOOL) command. JES2 used the OBTAIN supervisor service to get information about data set dsn on the volume ser, but OBTAIN did not work as expected. OBTAIN issued condition code cde to indicate the problems:

- 04 - The volume was not mounted.
- 08 - Data set dsn was not allocated on the volume ser.
- 12 - A permanent input/output error was found during OBTAIN processing.

(The importance level does not apply to this message.)

System Action: After attempting to verify the remaining spool and checkpoint volumes, JES2 terminates.

- For a cold start, processing continues without the volume.
- For a warm start, processing terminates after attempting to verify the remaining spool and checkpoint volumes.
- For a $S SPOOL command, the command is rejected and processing continues.

Programmer Response: Probable user error. If cde is 08, allocate a data set named dsn on the volume ser and start JES2 again. If cde is 12, use the IBM utility program IEHDASDR or IBCDASDI to reinitialize the volume ser, and then follow the procedure for cde 08.

$HASP415 JES2 FSA PREVIOUSLY DEFINED FOR devname, (UNIT=ddd) is UNDEFINED, FSA TERMINATED WITH ABEND 02C - $F07

Explanation: During a JES2 hot start, no JES2 device control table (DCT) has been defined with the same device name and device address as the active FSA that had been supporting device devname. See *VS2 System Codes* for an explanation of the 02C abend code.

Code	Description
$F07	No JES2 device control table (DCT) has been defined with the same device name and device address as the active FSA that had been supporting device devname.

System Action: The FSA abnormally terminates with an abend code of 02C.

Operator Response: Notify the system programmer. If the device has been defined as being supported by a functional subsystem, it can be started under a new functional subsystem FSA by issuing the $S command to restart the device. If the device has been defined as a JES2 device, it can be started by issuing the $T command with MODE=JES and then the $S command.

Programmer Response: Probable cause is invalid JES2 initialization parameters. If necessary, change the parameters and stop and restart JES2.

Problem Determination: Table I, items 2, 7, 16.

$HASP416 OPERATOR MESSAGE SPACE NOT AVAILABLE

Explanation: JES2 has attempted to reserve tracks from the primary SPOOL volume for remote operator message queueing and has found that:

- The first extent of SYS1.HASPACE was not large enough for the requested number of SPOOL records.
- During JES2 warm start, the SPOOL volume was found incompatible with the loaded copy of JES2.

(The importance level does not apply to this message.)

System Action: JES2 terminates.

Operator Response: During JES2 warm start, match the primary SPOOL volume with the JES2 loaded module used during the cold start. During cold start, consult the system programmer.

Programmer Response: Make sure that the initialization parameter &SPOLMSG has been correctly applied to the system, and check the extents of SYS1.HASPACE on the primary SPOOL volume for requested space.

$HASP417 VOLUME ssss NOT ADDED - COMPLEX NOT DORMANT

Explanation: The operator has warm-started JES2. JES2 has found a candidate for a spool volume (ssss) that is not recorded in the checkpoint record as a member of the current pool. Other system(s) are sharing the checkpoint record; therefore, the new candidate cannot be added to the pool at this time. (The importance level does not apply to this message.)

System Action: JES2 ignores the presence of this volume.

Operator Response: JES2 does not use the volume, but it remains allocated.

$HASP418 PERM I/O ERROR ON ser WHILE FORMATTING

Explanation: JES2 was unable to finish formatting the first extent of SYS1.HASPACE on the SPOOL volume, because a hardware error occurred or because the SPOOL volume is not properly initialized. (The importance level does not apply to this message.)

System Action:

- For a cold start, processing continues without the volume.
- For a warm start, processing terminates after attempting to verify the remaining spool and checkpoint volumes.
- For a $S SPOOL command, the command is rejected and processing continues.

Operator Response: If the error was caused by a hardware malfunction, have it corrected. If not, the SPOOL volume may need to be reinitialized. Reinitialize it using IEHDASDR or IBCDASDI.

$HASP419 REPLY Y OR N TO CONFIRM RESET ON SYSTEM(S) sid,sid,...,sid.

Explanation: JES2 initialization has determined through analysis of the checkpoint record that the documented member(s) of the complex may be inactive. However, since MVS and application programs can remain active even if JES2 has failed, the analysis must be confirmed by the operator. (The importance level does not apply to this message.)

System Action: JES2 waits for the operator to reply.

Operator Response: Determine whether MVS is down on all of the systems documented in the message text. If the system is in 'stop' mode, or if MVS is up but JES2 has abended, the system is still considered active. You must reply 'N' if any of the documented systems is active. JES2 will then attempt to perform a warm start, regardless of the kind of start you specified previously. An incorrect reply might cause JES2 abnormal termination (code $K03) and possible damage to SPOOL and Checkpoint.

You should reply 'Y' if all of the documented systems are inactive. JES2 will then perform a cold start or a warm start, depending on what you specified previously in response to message $HASP426 (SPECIFY OPTIONS).

Programmer Response: This message is issued when the TOD clock on the initializing member is out of tolerance with the time of the last checkpoint write by another member of the complex (the difference between the two values must not exceed the specifications for the &SYNCTOL initialization parameter). The time values may be out of synchronization because:

- The system or JES2 on one of the members has abended.
- One or more of the members have been locked out of the checkpoint data set.
- The difference between the TOD clocks exceeds &SYNCTOL. (If TOD clocks are not synchronized, message $HASP674 or $HASP246 may be received during later processing.)

$HASP420 PERM I/O ERROR {WRITING / READING} JES2 CKPT

Explanation: During JES2 initialization, JES2 could not correctly read or could not correctly format and write the JES2 checkpoint record because of one of the following:

- There is a hardware error on the checkpoint device.
- The MVS system parameters include device parameters that are not compatible with the checkpoint device.
- A JES2 error caused JES2 to write a checkpoint record that is not 4096 bytes long.

(The importance level does not apply to this message.)

System Action: JES2 terminates.

Operator Response: Check the SYS1.LOGREC data set for a hardware error on the checkpoint device. If there is a hardware error, follow your installation's procedures for correcting it. If there is no hardware error on the device, notify the system programmer.

Programmer Response: Be sure that the MVS system parameters in effect for the checkpoint device are compatible with the actual device. Be sure that each checkpoint record is 4096 bytes long.

$HASP421 PREVIOUSLY MOUNTED VOL volser IS UNFORMATTED

Explanation: The operator warm-started JES2 or issued a $S SPOOL command. The length of the first record on the last track of the first extent of SYS1.HASPACE is incorrect, due to overwriting, starting a different JES2 system, or mounting the wrong spool volume. (The importance level does not apply to this message.)

System Action:

- This message is issued during a warm start after attempting to verify the remaining required spool volumes, and JES2 terminates.
- If this message is issued in response to a $S SPOOL command, the command is rejected, and normal processing continues.

Operator Response: Probable user error. If the wrong volume was mounted, mount the correct volume and warm start JES2. Otherwise, cold start JES2; any spool volumes that are not correctly formatted will automatically be reformatted during a JES2 cold start. If the message was issued in response to a start spool ($S SPOOL) command, make sure the correct spool volume is mounted on all systems, and reissue the $S SPOOL command.

$HASP422 DUPLICATE volser VOLUMES

Explanation: Multiple direct-access volumes have been found with identical labels. (The importance level does not apply to this message.)

System Action:

- If this message is issued during initialization processing, JES2 terminates.
- If this message is issued in response to a start spool ($S SPOOL) command, the command is rejected and JES2 does not terminate.

Operator Response: Probable user error. Check the volume labels of all direct-access volumes on the system and remove the duplicate volumes. If necessary, restart JES2.

$HASP423 volser IS BEING FORMATTED

Explanation: The operator cold, or format-started JES2, or issued a $S SPOOL,FORMAT command to JES2. An unformatted spool volume is now being formatted. (The importance level does not apply to this message.)

System Action: JES2 formats all unformatted spool volumes during a cold start, all spool volumes during a format start, and the indicated spool volume in response to a start spool ($S SPOOL) command.

Operator Response: None.

$HASP424 volser IS NOT MOUNTED

Explanation: The operator warm, cold, format-started JES2, or issued a $S SPOOL command, and JES2 could not find a direct-access UCB with the volume serial of the checkpoint volume. The spool volume must be mounted and online when JES2 is started or when a start spool ($S SPOOL) command is issued. (The importance level does not apply to this message.)

System Action:

- If this message is issued for the checkpoint volume, JES2 terminates.
- For spool volumes during a configuration-wide warm start, the $HASP853 message is issued giving the operator options. If this message is issued for any warm start other than a configuration-wide warm start, JES2 terminates.
- If this message is issued in response to a start spool ($S SPOOL) command, the command is rejected and JES2 continues normal processing. If the spool volume had a status of INACTIVE when it was last mounted, the volume remains inactive. If the spool volume had a status of DRAINED, the volume remains drained.

Operator Response: Probable user error. Make sure the volume is mounted, ready, and online.

- If JES2 terminated, restart JES2.
- If the $HASP853 message was issued, reply to the message.
- If a start spool command was issued, reissue the command.

$HASP425 SUBSYSTEM INTERFACE NOT DORMANT

Explanation: The operator attempted to start the JES2 subsystem when the interface created by a previous JES2 is still active. This could be caused by any of the following:

- The previous JES2 is still operating.
- The previous JES2 did not leave the interface in a restartable condition.
- An interface user is still actively using the interface.

(The importance level does not apply to this message.)

System Action: The JES2 subsystem that is attempting to start is terminated.

Operator Response: If there is a JES2 subsystem up and running, stop that subsystem before attempting to start a new JES2; otherwise, re-IPL the system.

$HASP426 SPECIFY OPTIONS - subsystem identification

Explanation: JES2 has been given control and is requesting instructions from the operator. (The importance level does not apply to this message.)

System Action: JES2 waits for the operator to reply.

Operator Response: Enter the options you want. For further information, see the section on starting, stopping, and restarting JES2 in the *Operator's Library: JES2 Commands.*

$HASP427 SYNTAX ERROR - RESPECIFY OPTIONS

Explanation: JES2 does not recognize one or more of the initialization options entered by the operator in response to message $HASP426. (The importance level does not apply to this message.)

System Action: JES2 resets to default responses, and waits for the operator to reply.

Operator Response: Probable user error. Enter the desired options. For further information, see *Operator's Library: JES2 Commands*.

$HASP428 CORRECT THE ABOVE PROBLEMS AND RESTART JES2

Explanation: This message follows one or more messages which indicate why JES2 initialization could not complete normally. (The importance level does not apply to this message.)

System Action: JES2 terminates.

Operator Response: Notify the system programmer. If possible, correct the problems described in the previous message(s) and restart JES2.

Programmer Response: Refer to the messages issued prior to $HASP428, correct the problems described, and restart JES2.

$HASP429 SUBSYSTEM NAME NOT DEFINED

Explanation: The operator attempted to start a procedure for JES2 with a name that was not generated into the operating system. (The importance level does not apply to this message.)

System Action: JES2 terminates.

Operator Response: Notify the system programmer of this message.

$HASP430 INCOMPATIBLE SUBSYSTEM INTERFACE

Explanation: During initialization JES2 determined that the subsystem support module (HASPSSSM) specified, or the related control blocks are not compatible with the version of JES2 being initialized. This can happen as follows:

A JES2 subsystem (that is, a subsystem with the same name as the one now being started) had been active since the last IPL and had abnormally ended. The subsystem support module (HASPSSSM) specified during this initialization is not the same module used by the previously running JES2, or the related control blocks left by that JES2 are not compatible with the JES2 now being initialized.

The subsystem support module's structure and/or contents indicates that it is not compatible with, or at a different level than, the JES2 currently being initialized.

Note: The latter case may also occur if the HASPSSSM module specified resides in a STEPLIB library for the JES2 procedure that is being started. In this instance, the module is loaded into private storage, but it is required that it reside in commonly addressable storage (that is, PLPA).

(The importance level does not apply to this message.)

System Action: JES2 terminates initialization.

Operator Response: Notify system programmer.

Programmer Response: Restart JES2 specifying a compatible HASPSSSM module name via the HASPSSSM initialization parameter, or if required, re-IPL the system and restart JES2. If the error is due to HASPSSSM residing in a STEPLIB library, it is probably necessary to move that module to SYS1.LPALIB and request CLPA during the IPL.

$HASP431 MODULE HASPINIT IS { NOT LOADABLE / INVALID }

Explanation: This message is issued for one of the following reasons:

- NOT LOADABLE - JES2 attempted to load module HASPINIT and failed.
- INVALID - The module entry point could not be found from the Module Information Table assumed to be at the beginning of the module.

(The importance level does not apply to this message.)

System Action: The $HASP428 message is issued and then JES2 terminates.

Operator Response: Notify the system programmer.

Programmer Response: Place a compatible HASPINIT load module in the same data set that contains the HASJES20 load module referenced by the JES2 catalog procedure that is being started.

$HASP432 AVAILABLE STORAGE EXCEEDED WHILE ALLOCATING id

Explanation: During JES2 initialization, the amount of storage required for JES2 processing exceeded the available private virtual storage in the JES2 address space.

'id' can be one of the following values:

BUFFERS - a GETMAIN to allocate JES2 buffers was unsuccessful.

PCEs - a GETMAIN to allocate the JES2 processor control element (PCEs) that must be created during initialization was unsuccessful.

The importance level does not apply to this message.

System Action: JES2 terminates.

Operator Response: Notify the system programmer.

Programmer Response: Reduce the number or size of the JES2 buffers requested, or change other initialization parameters to reduce in some other way the storage required to initialize JES2.

$HASP434 { COLD / WARM } **START DENIED -- INVALID CHECKPOINT RECORD**

Explanation: The checkpoint record is invalid for one of the following reasons:

- Permanent I/O error.
- Field named $HASPID did not contain "JES2."
- Operator has replied "N" to message $HASP436.

(The importance level does not apply to this message.)

System Action: JES2 terminates.

Operator Response: Notify system programmer.

Programmer Response: Ensure that the system being started is the same as or is compatible with the last one run. If gross incompatibilities in HASP parameter values are discovered, the system must be cold-started.

$HASP435 SYSTEM PARAMETER TABLE ERROR

Explanation: The system parameter table as defined by parameter cards &SID, and S1 through S7 is invalid for one of the following reasons:

- The entries in the table are not contiguous.
- The table contains duplicate entries.
- The table does not contain the SMF processor id for this system.
- An attempt was made to change the table on a warm start.
- A multiple-system configuration was defined, but the checkpoint volume or a spool volume was found on a device whose UCB does not indicate shared capability.

(The importance level does not apply to this message.)

System Action: JES2 terminates.

Operator Response: Notify system programmer.

Programmer Response: Analyze parameter cards &SID, and S1 through S7 and correct the problem. Start JES2 again.

$HASP436 REPLY Y OR N TO CONFIRM CHECKPOINT RECORD CHANGE

Explanation: The operator has made a valid request to change the fundamental checkpoint record. The operator is asked to confirm his intent to change the record. (The importance level does not apply to this message.)

System Action: JES2 waits for the operator to reply.

Operator Response: Reply "Y" if the checkpoint record is to be changed (this includes the creation of a new checkpoint data set); otherwise reply "N."

$HASP437 xxxxxxxx VALUE EXCEEDS MAXIMUM

Explanation: The value specified for the initialization parameter xxxxxxxx exceeds the maximum value allowed. (The importance level does not apply to this message.)

System Action: JES2 terminates.

Operator Response: Notify the system programmer.

Programmer Response: Correct the invalid parameter, and restart JES2.

$HASP439 CMBS EXHAUSTED--LAST nnn OPERATOR COMMANDS IGNORED

Explanation: The number of operator commands in the initialization deck has exceeded the number of buffers specified on the &NUMCMBS initialization parameter. (The importance level does not apply to this message.)

System Action: The last nnn commands are ignored, and processing continues.

Programmer Response: Reduce the number of commands, or increase the size specified in the &NUMCMBS parameter.

$HASP441 REPLY 'Y' TO CONTINUE OR 'N' TO TERMINATE

Explanation: JES2 has found an error during initialization, and is asking the operator whether or not initialization should continue. (The importance level does not apply to this message.)

System Action: JES2 waits for the operator to reply.

Operator Response: Notify the system programmer. Reply Y or N. If this message follows message $HASP857 (indicating that EXITnnn is not defined) and you reply Y, JES2 ignores the EXITnnn initialization statement. If this message follows message $HASP858 (indicating that JES2 could not find a particular exit routine specified for EXITnnn) and you reply Y, JES2 ignores the missing exit routine and processes any other exit routines specified for EXITnnn. If you reply Y in other cases, JES2 proceeds, replacing the flagged parameter value with the last previously specified legitimate value or with the JES2 default value. If you reply N, JES2 issues message $HASP428 and then terminates.

Programmer Response: Correct the initialization error described in the preceding $HASP messages.

$HASP441 REPLY Y OR N TO CONTINUE INITIALIZATION

Explanation: JES2 has found an error during initialization, and is asking the operator whether or not initialization should continue. (The importance level does not apply to this message.)

(The importance level does not apply to this message.)

System Action: JES2 waits for the operator to reply.

Operator Response: Notify the system programmer. Reply Y or N. If this message follows message $HASP857 (indicating that EXITnnn is not defined) and you reply Y, JES2 ignores the EXITnnn initialization statement. If this message follows message $HASP858 (indicating that JES2 could not find a particular exit routine specified for EXITnnn) and you reply Y, JES2 ignores the missing exit routine and processes any other exit routines specified for EXITnnn. If you reply Y in other cases, JES2 proceeds, replacing the flagged parameter value with the last previously specified legitimate value or with the JES2 default value. If you reply N, JES2 issues message $HASP428 and then terminates.

Programmer Response: Correct the initialization error described in the preceding $HASP messages.

$HASP442 WARM START DENIED REQUIRED INITIALIZATION PARAMETERS FOLLOW

&BUFSIZE=	**&TGSIZE=**
&NUMTG=	**&SPOOL=**
&MAXJOBS=	**&NUMJOES=**
&RECINCR=	**&TCELSIZ=**
&MINJOES=	**&NUMRJE=**
&SPOLMSG=	**&NUMNODE=**
	&OWNNODE=

Explanation: For a warm start, certain JES2 initialization parameters must have the same values as those already specified for every member of the multi-access spool configuration. This message appears when JES2 denies a warm start because a new value was specified for one or more of those parameters. The parameters that cannot be changed and their current values are listed in the message text. An asterisk appears next to the parameter value that is in error. The value specified in the message is the value that was in the checkpoint data set, and that should be used to successfully warm-start JES2.

Note: The default values for &NUMJOES, &MINJOES and &NUMRJE are calculated using other initialization parameter values. You can avoid a cold start by explicitly defining the indicated parameter with the value specified in this message.

The values for &NUMRJE and &NUMNODE can be increased, but a configuration wide warm start is required. If the values are decreased, a cold start is required. (The importance level does not apply to this message.)

System Action: JES2 terminates.

Operator Response: Notify the system programmer.

Programmer Response: Correct the parameters in conflict, and restart JES2.

$HASP443 xxxxxx NOT ALLOCATED

Explanation: A spool or checkpoint volume has not been allocated. This message was preceded by another JES2 message indicating the problem. (The importance level does not apply to this message.)

System Action: If the volume is a spool volume:

- For a cold start, the volume is ignored and processing continues.
- For a configuration-wide warm start, the operator is queried as to the action to be taken. (The $HASP853 message is issued.)
- For any other type of starts, initialization will terminate.
- If this message is issued in response to a start spool command, the command is rejected, and JES2 processing continues.

Operator Response: Mount the correct volume on the required device.

$HASP444 destid PRINT/PUNCH ROUTE CODE INVALID

Explanation: The routing code that appears in the destid field of the message text was specified on the ROUTECDE parameter of a JES2 initialization statement, but the routing code is invalid for one of these reasons:

- If the routing code is an explicit value, then that value is greater than the maximum allowed. For example, the destid field contains RMT45 when the highest value allowed is RMT20. In this case, RMT20 is the highest value allowed because there was a &NUMRJE=20 initialization statement.
- If the routing code is a symbolic value, then that symbol is not defined in a DESTID or a Nnnnn initialization statement.

(The importance level does not apply to this message.)

System Action: JES2 terminates.

Operator Response: Notify the system programmer.

Programmer Response: Correct the error and restart JES2.

$HASP445 nnnn DUPLICATE NODE NAME DEFINED

Explanation: A duplicate node name nnnn was found on the Nnnnn initialization statement. (The importance level does not apply to this message.)

System Action: JES2 terminates.

Operator Response: Notify the system programmer.

Programmer Response: Correct the initialization parameter Nnn, and restart JES2.

$HASP446 INSUFFICIENT SPACE RESERVED FOR CONNECTIONS

Explanation: The number of NAT entries specified on the &NUMNAT initialization parameter is too small to allow processing of the predefined number of connections specified on the CONNECT initialization statement. (The importance level does not apply to this message.)

System Action: JES2 initialization terminates.

Operator Response: Notify the system programmer.

Programmer Response: Either increase the number of NAT entries on the &NUMNAT parameter, or omit some of the CONNECT statements.

$HASP447 CONFLICTING NODE NAME & DESTID - xxxxxxxx

Explanation: JES2 initialization discovered an entry in the node information table (NIT) whose name (xxxxxxx) is also defined in the remote destination table (RDT), but with a different destination code. (The importance level does not apply to this message.)

System Action: JES2 terminates without completing initialization. This message is accompanied by message $HASP428.

Programmer Response: Correct the DESTID initialization statement that conflicts with the indicated node definition statement and restart JES2.

$HASP448 ILLEGAL BACKSPACE CHARACTER--RESET TO X'00'

Explanation: The backspace character conflicts with the console command character specified in the initialization parameter &CCOMCHR. (The importance level does not apply to this message.)

System Action: The system ignores the backspace character specified, and uses X'00' instead.

Programmer Response: Select another character for the &BSPACE initialization parameter.

$HASP449 xxxxxx MUST BE MOUNTED ON SHAREABLE DEVICE

Explanation: The specified volume has been mounted on a non-shareable device in a shared spool environment. (The importance level does not apply to this message.)

System Action: JES2 terminates if the volume is a required volume; otherwise, processing continues.

Operator Response: Mount the required volume on a shareable device.

$HASP450 OPEN FAILED FOR JES2 PARAMETER LIBRARY

Explanation: JES2 issued an OPEN macro instruction for the parameter library data set and determined that the data set was not opened. (The importance level does not apply to this message.)

System Action: Message $HASP441 follows, requesting operator action.

Programmer Response: Determine the cause of the error and correct it.

$HASP451 ERROR ON JES2 PARAMETER LIBRARY

Explanation: JES2 encountered an error when reading the initialization parameter library. (The importance level does not apply to this message.)

System Action: Message $HASP441 follows, requesting operator action.

Programmer Response: Determine the cause of the error and correct the parameter errors.

$HASP453 dsn ON VOLUME ser HAS ZERO EXTENTS

Explanation: JES2 direct access initialization has determined that data set dsn on volume ser was allocated with zero extents. (The importance level does not apply to this message.)

System Action:

- If the data set is a checkpoint data set, JES2 terminates without completing initialization, otherwise processing continues without the volume.
- If the $S SPOOL command was entered, the command is rejected and processing continues.

Programmer Response: Reallocate data set dsn using a single extent.

$HASP455 JOB nnnn IS PURGED, CONTROL BLOCK READ ERROR

Explanation: During a warm start, JES2 encountered an error while reading the job control table (JCT) or I/O table (IOT) for job nnnn. (The importance level is 7.)

System Action: Job nnnn is purged.

Operator Response: None.

$HASP460 HELD DATA SET COUNT ERROR - OUTPUT MAY BE LOST {jobid jobname time}

Explanation: For the job identified in the message text, JES2 found that the held data set count in the JQE (job queue element) is not the same as the number of held data sets recorded in the IOTs (input/output tables). This message appears during a JES2 warm start. (The importance level is 7.)

System Action: JES2 replaces the JQE count with the count it got from the IOTs. Some output might be lost in the process.

Operator Response: None.

$HASP461 JOB jjjj WAS ON JOB RECEIVER

Explanation: JES2 warm start found that the indicated job was being received for execution when a system failure occurred. (The importance level is 7.)

System Action: The job is queued for purge.

Operator Response: None.

$HASP462 JOB jjjj WAS ON JOB TRANSMITTER

Explanation: JES2 warm start found that the indicated job was being transmitted to another node for execution or being offloaded when a system failure occurred. (The importance level is 7.)

System Action: The job is requeued for transmission.

Operator Response: None.

$HASP463 { JOB / STC / TSU } **jjjj WAS ON SYSOUT RECEIVER**

Explanation: JES2 warm start found that the indicated job's system output was being received from another node when a system failure occurred. (The importance level is 7.)

System Action: The job is queued for purge. Output already received is discarded.

Operator Response: None.

$HASP464 { JOB / STC / TSU } **jjjj WAS ON SYSOUT TRANSMITTER**

Explanation: JES2 warm start found that the indicated job's system output was being transmitted to another node or being offloaded when a system failure occurred. (The importance level is 7.)

System Action: The job's output is requeued for transmission.

Operator Response: None.

$HASP465 RMTnnnn SPECIFIES INVALID LINE VALUE

Explanation: A BSC remote terminal attempted to specify ownership of an SNA line; an SNA remote terminal attempted to specify a BSC line; or a remote terminal (either BSC or SNA) specified a line number greater than the value specified for the &NUMLINES parameter. (The importance level does not apply to this message.)

System Action: The system scans the remaining parameters, flags the errors, and issues a message requesting that JES2 be restarted.

Programmer Response: Correct the line subparameter of the RMTnnn parameter for this terminal, and restart JES2.

$HASP466 initialization parameter statement image

Explanation: This message is issued for each initialization parameter statement having an error when JES2 initialization is not in console mode. All continuation cards pertaining to this initialization parameter statement should be examined for errors because this message displays only the first continuation card, not necessarily the continuation card(s) that have errors (bad parameters). This message...(continuation in existing documentation) is followed by the $HASP467 message which forces JES2 initialization into console mode. The $HASP467 message contains the diagnostic and the $HASP469 reply message gives the operator an opportunity to correct the initialization statement in error. If the initialization statement is not in error but the LOG control parameter is in effect, the message is sent to the system log. (The importance level does not apply to this message.)

System Action: Processing continues.

Operator Response: None. (See message $HASP469.)

$HASP467 initialization parameter statement diagnostic

Explanation: This message is issued following message $HASP466 upon encountering an error in a JES2 initialization statement. Because the initialization error forces JES2 initialization into console mode, this message is followed by message $HASP469. Diagnostic messages are listed in *System Programming Library: JES2 Initialization and Tuning* (The importance level does not apply to this message.)

System Action: Processing continues.

Operator Response: Notify the system programmer. (See message $HASP469.)

Programmer Response: See *System Programming Library: JES2 Initialization and Tuning* for an explanation of the diagnostic message issued.

$HASP468 keyword = { value / text }

Explanation: This message contains the response to the DISPLAY initialization control statement. This message contains either the text of a message in the DISPLAY statement or the specified key word parameter and its associated value. (The importance level does not apply to this message.)

System Action: Processing continues.

Operator Response: None.

$HASP469 REPLY PARAMETER STATEMENT, CANCEL, OR END

Explanation: JES2 initialization is requesting that either an initialization parameter or a control statement be entered by the operator. (The importance level does not apply to this message.)

System Action: Wait for operator reply.

Operator Response: Reply with an initialization parameter, a control statement, CANCEL or END. If an initialization parameter or a control statement is entered, JES2 will reissue this message after processing the parameter or control statement. If END is entered, console mode is terminated and parameter library processing resumes. If CANCEL is entered, message $HASP428 is issued and processing terminates.

$HASP470 { SYSTEM / COMPLEX } **NOT DORMANT**

Explanation: Analysis indicates this system is not dormant or at least one system in the complex is not dormant. (The importance level does not apply to this message.)

System Action: Message $HASP471 follows requesting operator response.

Operator Response: See message $HASP471.

$HASP471 REPLY Y OR N TO CONTINUE {WARM / COLD} START

Explanation: Analysis determined that this system or complex is not dormant. The operator must determine if it is safe to continue. This message is preceded by $HASP470. (The importance level does not apply to this message.)

Note: If another system in the complex is currently being initialized, a reply to this message should not be made until the other system has finished its initialization processing.

System Action: JES2 waits for the operator to reply.

Operator Response: Evaluate the system/complex environment and enter the appropriate reply. If N is entered, message $HASP428 is issued and initialization processing terminates.

$HASP472 volser CHECKPOINT DATA SET SIZE INSUFFICIENT, EXCEEDED BY nnnn BYTES

Explanation: JES2 has determined that the volume (volser) on which the checkpoint data set resides has a track size that is insufficient to contain the control information portion of the JES2 checkpoint data set. The control information must fit on the first track. In the message, nnnn is the number of additional bytes required to accommodate the control information. (The importance level does not apply to this message.)

System Action: JES2 processing terminates.

Operator Response: Notify the system programmer.

Programmer Response: Either change the initialization options that affect the size of the control information (such as &MAXJOBS, &NUMJOES, or &NUMRJE) or use a direct access storage device with a larger track size.

$HASP473 APPL STATEMENT SPECIFIED FOR BSC NODE-xxxxxxxx

Explanation: JES2 initialization discovered that an APPL parameter was supplied for a node (xxxxxxxx) defined by an Nnn initialization parameter which did not specify the SNA subparameter. (The importance level does not apply to this message.)

System Action: JES2 terminates without completing initialization. This message is accompanied by message $HASP428.

Programmer Response: Determine whether the value for the node subparameter of the APPL parameter was incorrect or whether the SNA subparameter was missing from the Nnn parameter. Make the necessary change and restart JES2.

$HASP474 APPL applid DEFINED AT UNDEFINED NJE NODE

Explanation: JES2 initialization discovered an application (applid) defined for a node outside the range of &NUMNODE. (The importance level does not apply to this message.)

System Action: JES2 terminates without completing initialization. This message is accompanied by message $HASP428.

Programmer Response: Correct the node subparameter of the APPL parameter defining the application identified in the message.

$HASP475 NO APPLID AT $OWNNODE DEFINED TO VTAM

Explanation: JES2 initialization discovered that none of the local SNA/NJE applications (that is, applications that exist for $OWNNODE) have an application id that matches the application id supplied on the LOGONx parameter.

This message is also issued if the JES2 parameter &NUMLOGS is zero, its default value.

(The importance level does not apply to this message.)

System Action: JES2 terminates without completing initialization. This message is accompanied by message $HASP428.

Programmer Response: Change the initialization parameters such that the specifications are consistent.

$HASP476 NO LOGICAL SNA LINES DEFINED -- VTAM API NOT ACTIVATED

Explanation: JES2 initialization discovered that although activation of the VTAM API is desired (&NUMLOGS parameter not equal to 0), no logical SNA lines are defined. Therefore, no SNA sessions are possible. (The importance level does not apply to this message.)

System Action: JES2 forces the &NUMLOGS parameter to a value of 0 with the result that no logon DCT (device control table) will be initialized and the VTAM API will not be established.

Programmer Response: If SNA sessions are desired, the LINEnnn parameter with the UNIT=SNA subparameter must be supplied at JES2 initialization.

$HASP477 DEFAULT APPL - applid - NOT BUILT - DUPLICATE ID

Explanation: JES2 initialization discovered an entry in the SNA/NJE application table (APT) whose application id is the same as the application id (applid) in the default APT entry which JES2 is attempting to add to the table. (JES2 attempts to build a default APT entry for nodes defined by an Nnn statement which specifies the SNA subparameter, but for which no APPL parameters are supplied. The value supplied for node name on the Nnn parameter is used as the APPL id in the default APT entry.) (The importance level does not apply to this message.)

System Action: JES2 does not add the default entry to the APT and initialization continues. (Note: The SNA/NJE node for which the default entry was required will not be capable of participating in SNA sessions.)

Programmer Response: Default processing may be avoided by supplying an APPL initialization parameter for the SNA/NJE node.

$HASP478 volser JES2 DATA SET SPACE INSUFFICIENT. kkkk TRACKS REQUIRED

Explanation: The space allocated for the checkpoint data set is not sufficient. In the message, kkkk is the total number of tracks required to accommodate the checkpoint data set. (The importance level does not apply to this message.)

System Action: JES2 processing terminates.

Operator Response: Notify the system programmer.

Programmer Response: Allocate at least kkkk tracks for the checkpoint data set.

$HASP479 UNABLE TO OBTAIN CHECKPOINT DATA SET LOCK -

{I/O ERROR / SID=xxxx / SID=INITIALIZATION}

REPLY Y OR N TO CONTINUE

Explanation: JES2 initialization processing was not able to obtain control of the checkpoint data set. If "I/O ERROR" appears in the message text, an I/O error occurred while JES2 was attempting to obtain the checkpoint data set lock. If "SID=xxxx" appears in the message text, another system in the multi-access spool complex has abnormally terminated without releasing the checkpoint data set lock. xxxx is the system identifier of the system that has not released the lock. If 'SID=INITIALIZATION' appears in the message text, a system failure occurred while the operating system was initializing a JES2 system in the complex. The JES2 system that the operating system was initializing did not release the checkpoint data set lock. (The importance level does not apply to this message.)

Note: If you are doing a cold start and using a new checkpoint data set, or if you are doing a nodal warm start, the system may issue this message as part of normal processing, in which case it does not indicate an error condition. This is also true if doing a configuration-wide warm start, and using the ALTCKPT option to restart JES2.

System Action: If the operator replies Y, JES2 initialization processing continues without the checkpoint data set lock. If the operator replies N, JES2 terminates.

Operator Response: If this is a cold start using a new checkpoint data set or a configuration-wide warm start (no other systems in the multi-access spool complex are running), reply Y. This is also true if doing a configuration-wide warm start, and using the ALTCKPT option to restart JES2. Also, reply Y if you are warmstarting a system that abnormally terminated holding the checkpoint data set lock. If this is not a cold start using a new checkpoint data set or a configuration-wide warm start, reply N and notify the system programmer.

Programmer Response: Determine why the checkpoint data set lock is not being released. Advise the operator whether to use the primary or the secondary checkpoint data set.

$HASP480 INSUFFICIENT CSA -- EVENT TRACE FACILITY NOT INITIALIZED

Explanation: An attempt to acquire storage for the JES2 trace tables has failed. There is insufficient storage in subpool 228 of the CSA. (The importance level does not apply to this message.)

System Action: Initialization of the event trace is terminated.

Operator Response: Notify the system programmer of this message. Reduce the value specified by the &TRCPGS initialization parameter and then restart JES2.

$HASP481 &CHKPT2 - ALTERNATE DATA SET NOT SPECIFIED

Explanation: The JES2 operator has requested use of the alternate checkpoint data set (using the ALTCKPT initialization option), but an alternate checkpoint data set was not specified on the &CHKPT2 initialization parameter. (The importance level does not apply to this message.)

System Action: JES2 processing terminates.

Operator Response: Either omit the ALTCKPT initialization option or have the system programmer change the specification of the &CHKPT2 initialization parameter.

$HASP482 ALTERNATE CHECKPOINT DATA SET INVALID VOLUME

Explanation: One of the following caused the system to issue this message:

1. All systems in a multi-access spool complex are not using the &CHKPT2 (alternate checkpoint) data set that was specified for a complex wide warm start. This is not allowed. All systems in a multi-access spool complex must use the same &CHKPT2 data set.

2. The volume serial numbers for the primary (&CHKPT) and alternate (&CHKPT2) checkpoint data sets specified on the &CHKPT and &CHKPT2 initialization parameters are the same. This duplication is not allowed. The &CHKPT and &CHKPT2 initialization parameters must specify different volume numbers.

(The importance level does not apply to this message.)

System Action: JES2 processing terminates.

Operator Response: Notify the system programmer.

Programmer Response: If reason 1, ensure that all systems have used the &CHKPT2 data set that was specified for the warm start. Do this by specifying it or changing it on all systems before the complex wide warm start or cold start. If reason 2, change the &CHKPT or &CHKPT2 initialization parameter so that one specifies a different volume number than the other.

$HASP483 JOB QUEUE ERROR - REPLY Y OR N TO REBUILD

Explanation: An error has been found in the structure of the JES2 job queue. During system operation, the error could result in unpredictable problems, including JES2 catastrophic errors. (The importance level does not apply to this message.)

System Action: JES2 waits for the operator to reply. Y (yes) indicates that you want JES2 to rebuild the job queue. N (no) indicates that you do not want JES2 to rebuild the job queue. If the operator replies Y, some jobs or output might be lost and JES2 might change job priorities within the queue. If the operator replies N, JES2 issues message $HASP441. This message gives the operator the option of terminating JES2 or continuing with JES2 initialization processing.

Operator Response: Notify the system programmer. Reply Y to allow JES2 initialization processing to rebuild the job queue, unless the system programmer advises a reply of N. The current JES2 warm start will have the 'REQ' option set if the response to the $HASP483 message is Y.

$HASP484 JOT ERROR - OUTPUT MAY BE LOST OR DUPLICATED

Explanation: An error was found in the structure of the JES2 job output table (JOT). (The importance level does not apply to this message.)

System Action: JES2 rebuilds the JOT to correct the error; however, some output might be lost or duplicated in the process.

Operator Response: None.

$HASP485 JOB jjj JOT ERROR -- OUTPUT MAY BE LOST OR DUPLICATED

Explanation: An error has been found in the structure of the job output table (JOT) for job jjj. (The importance level does not apply to this message.)

System Action: JES2 rebuilds the JOT elements for job jjj, but some output might be lost or duplicated in the process. JES2 puts job jjj in the hold state.

Operator Response: Notify the system programmer.

$HASP486 volser DAMAGED CHECKPOINT DATA SET DETECTED - REPLY Y OR N TO CONTINUE

Explanation: JES2 initialization processing found that the previous update made to the checkpoint data set did not complete successfully. The primary checkpoint data set is assumed to be invalid. (The importance level does not apply to this message.)

System Action: JES2 waits for the operator to reply. If the operator replies 'N', JES2 processing terminates. If the operator replies 'Y', JES2 initialization processing continues. Message $HASP483 is issued if the warm start routines detect any invalid job queue data.

Operator Response: Notify the system programmer. See the description of message $HASP483.

$HASP487 ALTCKPT INVALID OPTION - WARM/COLD START DENIED

Explanation: The ALTCKPT initialization option was specified either on a cold start or on a warm start of one system in a multi-access spool configuration while other systems were running. (The importance level does not apply to this message.)

System Action: JES2 processing terminates.

Operator Response: Restart JES2. Either omit the ALTCKPT initialization option or terminate JES2 on all other the multi-access spool configuration and perform a configuration-wide warm start.

$HASP488 WAITING FOR CHECKPOINT DATA SET LOCK

Explanation: JES2 initialization processing has determined (by examining the checkpoint data set lock record) that another system has control of the checkpoint data set lock and has not relinquished that control. (The importance level does not apply to this message.)

System Action: JES2 initialization processing cannot continue until it has exclusive control of the checkpoint data set lock. Initialization processing attempts to obtain the checkpoint data set lock once each second for the next 30 seconds. If JES2 cannot obtain the lock, message $HASP479 is issued. If JES2 can obtain the lock, initialization processing continues.

Operator Response: None.

$HASP489 INITIALIZATION MAY NOT HAVE RELEASED CHECKPOINT DATA SET LOCK

Explanation: JES2 initialization processing has abnormally terminated without releasing the checkpoint data set lock on the first track of the checkpoint data set. (The importance level does not apply to this message.)

System Action: Other systems in the multi-access spool complex issue message $HASP264 when they detect the above condition. Other systems going through initialization processing issue message $HASP479 when they detect the above condition.

Operator Response: See the descriptions of messages $HASP264 and $HASP479.

$HASP490 HOTSTART DENIED -- RE-IPL REQUIRED

Explanation: An invalid hot start is being attempted following a $K03, $K15 or $K16 JES2 catastrophic error. (The importance level does not apply to this message.)

System Action: JES2 initialization processing terminates.

Operator Response: Re-IPL the system and perform a warm start for JES2.

$HASP491 SYSTEM BEING RESTARTED ON xxxx

Explanation: The operator is attempting to perform a warm start for JES2 on this system. The attempt fails because system xxxx has already issued a $E SYS command to restart JES2 on this system. (The importance level does not apply to this message.)

System Action: JES2 initialization terminates.

Operator Response: Re-IPL the system and perform a warm start for JES2.

$HASP492 NEWS PARAMETER IGNORED -- NO LONGER SUPPORTED

Explanation: A JES2 initialization statement included the NEWS parameter, but the NEWS parameter is no longer supported. (The importance level does not apply to this message.)

System Action: JES2 ignores the NEWS parameter. Other JES2 processing continues.

Operator Response: None.

Programmer Response: For information on dynamically creating a JESNEWS data set, see *System Programming Library: JES2 Initialization and Tuning*

$HASP493

jjjj { ALL SYSTEM / SYSTEM-xxx } { COLD-START / WARM-START / HOT-START / QUICK-START } IS IN PROGRESS

Explanation: Subsystem jjjj (JES2, for example) is being initialized. The message text indicates, first, whether the initialization includes all of the systems in the multi-access spool complex or only the system with ID xxx and, second, the type of JES2 initialization (cold-start, for example) that is taking place. (The importance level does not apply to this message.)

System Action: JES2 processing continues.

Operator Response: None.

$HASP494 HOTSTART DENIED -- INVALID SYSTEM ID

Explanation: An attempt was made to hotstart a member of a multi-access spool complex, but the &SID initialization parameter specified a system ID different from the ID in use when the system was last active. (The importance level does not apply to this message.)

System Action: JES2 processing terminates.

Operator Response: Correct the &SID initialization parameter and restart JES2.

$HASP495 PP BUFFER SIZE EXCEEDS 4096

Explanation: The size of the job output element (JOE), when used to calculate the size of the print/punch (PP) buffer, caused the PP buffer size to exceed 4096 bytes, the maximum allowable size. (The importance level does not apply to this message.)

System Action: JES2 processing terminates.

Operator Response: Notify the system programmer.

Programmer Response: See routine NBBLDPP in *OS/VS2 MVS JES2 Logic*, for a description of the formula used to calculate the size of the PP buffer. Ensure that the buffer size does not exceed 4096 bytes.

$HASP500 CONNECTION CONTROL RECEIVED ON line - LINE NOT TRANSPARENT

Explanation: JES2 received an NJE signon connection control record over a line which does not have the text-transparency capability. (Capabilities for lines are defined by JES2 initialization statements.) (The importance level is 3.)

System Action: Reject the signon and continue processing.

Programmer Response: Check line capabilities and if they are incorrect, correctly redefine line capabilities in the initialization parameters. Install text transparency or use alternate lines for NJE communications.

$HASP501 CONNECTION CONTROL RECEIVED ON line - NJE DEVICES UNAVAILABLE

Explanation: JES2 received an NJE signon connection control record over the indicated line. No NJE function device control tables were available to perform data-stream transmission over the connection. (The importance level is 3.)

System Action: Reject the signon and continue processing.

Programmer Response: Increase the value of the &NETLNES JES2 initialization parameter.

$HASP502 CONNECTION CONTROL RECEIVED ON line - INVALID LINE PASSWORD

Explanation: JES2 received an NJE signon connection control record over the indicated line and the line password was not valid. (The importance level is 3.)

System Action: Reject the password and continue processing.

Operator Response: None. The operator at the other end will receive I/O errors and may call to request that JES2 accept a signon without line passwords. The $T LNEn,P= command may be used to change the passwords.

$HASP503 CONNECTION CONTROL RECEIVED ON line - name INVALID NODE NAME

Explanation: JES2 received an NJE signon connection control record on the indicated line and the sending system identified itself to be either the same node as this JES2 subsystem or the name was not recognized as a valid node name. This message may also appear if an NJE notification connection control record is received and the node names are not recognized. (The importance level is 3.)

System Action: Reject the record and continue processing.

Programmer Response: If the name displayed should be valid, check the JES2 Nn initialization parameters to ensure the names are properly specified.

$HASP504 CONNECTION CONTROL RECEIVED ON line - INVALID NODE PASSWORD

Explanation: JES2 received an NJE signon connection control record over the indicated line and the node password was invalid. (The importance level is 3.)

System Action: Reject the signon and continue processing.

Operator Response: None. The operator at the other end will receive I/O errors and may call to request that JES2 accept a signon without node passwords. The $T Nn,P= command may be used to change the password.

$HASP505 CONNECTION CONTROL RECEIVED ON line - INVALID CONNECTION RESISTANCE

Explanation: JES2 received an NJE signon connection control record over the indicated line; the resistance value supplied by the transmitting subsystem, when added to the receiving subsystem resistance value, exceeded the maximum allowable value. (The importance level is 3.)

System Action: Reject the signon and continue processing.

Probable Cause: The subsystems at one or both ends of the connection are not standard JES2 subsystems.

Programmer Response: Check user modifications to ensure the maximum resistance values are not exceeded.

$HASP506 CONNECTION CONTROL RECEIVED ON line - INVALID CONTROL SEQUENCE

Explanation: JES2 received an NJE signon connection control record, but the proper connection protocol was not being followed. One subsystem involved in the connection (but not both) has the connection predefined via the CONNECT JES2 initialization parameter. (The importance level is 3.)

System Action: Reject the record and continue processing.

Programmer Response: Check for consistent connection definitions.

$HASP507 CONNECTION CONTROL RECEIVED ON line - MAXIMUM CONNECTIONS EXCEEDED

Explanation: JES2 received an NJE signon connection control record about a connection and did not have sufficient room in the nodes attached table (NAT) to represent the connection. (The importance level is 3.)

System Action: Reject the record and continue processing.

Programmer Response: Increase the value of the &NUMNAT JES2 initialization parameter.

$HASP508 CONNECTION CONTROL RECEIVED ON LINE - INVALID NCC RECORD

Explanation: JES2 received a network connection control (NCC) record containing an invalid length. The length field contains either a zero value or a length value that extends the current record beyond the end of the data buffer. This message may indicate hardware I/O errors or that an invalid record was built by another node. (The importance level is 3.)

System Action: JES2 purges the data buffer and schedules the line for signoff.

Operator Response: Reestablish the connection with the proper $SN command. See *Operator's Library: JES2 Commands*. If the problem continues, notify the system programmer.

Programmer Response: Examine incoming data buffers on this line to determine if the session partner is violating SNA protocols.

$HASP520 JOB jjjj jobname ON devicename

Explanation: The job transmitter, indicated by devicename, has begun transmitting the indicated job to another node for execution. (The importance level is 3.)

System Action: Processing continues.

Operator Response: None.

$HASP521 JOB jjjj jobname INVALID DATA BLOCK

Explanation: The job transmitter has encountered an error in reading the indicated job's JCL or instream data for transmission to another node. (The importance level is 3.)

System Action: The job is queued for output. Neither transmission for execution nor execution will be attempted.

Operator Response: The occurrence of this message may indicate hardware I/O errors on the JES2 spool file.

$HASP522 JOB jjjj jobname - device RESTARTED [,JOB HELD]

Explanation: The operator has entered a $E command directed to the job transmitter, indicated by devicename, or the transmitter has received an error indication from RTAM. (The importance level is 3.)

System Action: The job transmitter will stop transmitting its current job and will issue an RTAM "negative close" to cause the job receiver to delete the job that it has partially received. The transmitter will requeue the job for transmission. If JOB HELD appears in the message, the transmitter received an error indication from RTAM when sending an end of file. The job is held to avoid immediate retransmission in case the job was actually received correctly.

Operator Response: If JOB HELD appears in the message, determine whether the job was correctly received before releasing it.

$HASP523 JOB jjjj jobname - devicename DELETED

Explanation: The indicated job, which was being transmitted by the job transmitter, indicated by devicename, has been canceled. (The importance level is 3.)

System Action: The job is queued for output.

Operator Response: None.

$HASP524 devicename INACTIVE

Explanation: The job transmitter, indicated by devicename, has completed transmitting its current job and has found no more jobs which it can transmit. (The importance level is 3.)

System Action: The job transmitter waits for a job to be added to the transmission queue.

Operator Response: None.

$HASP526 JOB jjjj jobname TRANSMITTED FOR EXECUTION

Explanation: The indicated job has been transmitted from its system of origin to another node for execution. This message appears on a TSO terminal, not on the operator's console, and only appears if the indicated job specified NOTIFY = userid on its job card.

If apostrophes are imbedded in the jobname, they are replaced by quotation marks.

(The importance level is 7.)

System Action: The job is purged from the originating system and will not be accessible via TSO STATUS/CANCEL/OUTPUT until its output (if any) is received.

User Response: None.

$HASP530 { **JOB** / **STC** / **TSU** } **jjjj jobname ON devicename rrrr**

Explanation: SYSOUT data sets for the indicated job are being transmitted by the SYSOUT transmitter, indicated by devicename. In the message, rrrr is the number of records in the data sets being transmitted. (The importance level is 3.)

System Action: Processing continues.

Operator Response: None.

$HASP531 { **JOB** / **STC** / **TSU** } **jjjj jobname -**

{ **device INVALID DATA BLOCK** / **INVALID DATA BLOCK DETECTED BY TRANSMITTER** / **devicename ON NODE nodename** }

Explanation: The SYSOUT transmitter, indicated by devicename, has encountered an error while reading a SYSOUT data set for transmission. The first form of this message is displayed on the operator's console. (The importance level is 3.)

System Action: The second form of this message is transmitted as the last line of the data set for programmer information. Further reading and transmission of the current data set is halted. The SYSOUT transmitter continues processing with the next data set.

Operator Response: The occurrence of this message may indicate hardware I/O errors on the spool file.

$HASP532 { **JOB** / **STC** / **TSU** } **jjjj jobname - devicename**

RESTARTED [,JOB HELD]

Explanation: The operator has entered a $E command directed to the SYSOUT transmitter, indicated by devicename, or the transmitter has received an error indication from RTAM. (The importance level is 3.)

System Action: The SYSOUT transmitter will stop transmitting data sets for its current job and will issue an RTAM "close" to cause the SYSOUT receiver to delete any output it has already received (that is, purge the received job). The transmitter will place the JOEs it has acquired back in the network JOE (Job Output Element) queue for transmission at a later time. If JOB HELD appears in the message, the transmitter received an error indication from RTAM when sending an end of file. The job is held to avoid immediate retransmission in case the job was actually received correctly.

Operator Response: If JOB HELD appears in the message, determine whether the JOB was correctly received before releasing it.

$HASP533 { **JOB** / **STC** / **TSU** } **jjjj jobname - devicename DELETED**

Explanation: The operator has entered a $C command directed to the SYSOUT transmitter, indicated by devicename, or has canceled the job and specified the purge operand. (The importance level is 3.)

System Action: The SYSOUT transmitter will stop transmitting data sets for its current job and will issue an RTAM "negative close" to cause the SYSOUT receiver to delete any output it has already received (that is, purge the received job). The transmitter will remove the JOEs (Job Output Elements) it has acquired from the network JOE queue. The data sets represented by the JOEs will not be available for output. If, after removing the JOEs, there is no more work to be performed for the job, the job will be queued for purge.

Operator Response: None.

$HASP534 devicename INACTIVE

Explanation: The SYSOUT transmitter indicated by devicename has completed transmitting its current job and has found no more work to send in the network JOE (Job Output Element) queue. (The importance level is 1.)

Operator Response: None.

$HASP540 { **JOB** / **STC** / **TSU** } **jjjj jobname ON devicename rrrr**

Explanation: The SYSOUT receiver, indicated by devicename, has begun to receive system output data for the indicated job. The programmer's name, if present on the job's original job card, is displayed as part of the message. In the message, rrrr indicates the number of records to be received. (The importance level is 1.)

System Action: Processing continues.

Operator Response: None.

$HASP543 { **JOB** / **STC** / **TSU** } **jjjj jobname - devicename DELETED**

Explanation: One the following occurred:

- HASPRTAM has indicated to the SYSOUT receiver or job receiver that an error has occurred.
- The SYSOUT transmitter has indicated an improper CLOSE to the SYSOUT receiver.
- The job transmitter has indicated an improper CLOSE to the job receiver.
- The operator entered a $C or $E directed to either the SYSOUT receiver or job receiver.
- The job receiver encountered errors reading or moving the job header or job trailer.
- The job receiver encountered an invalid job card or invalid input cards.

Note: The jobname and number might be omitted from the message text.

System Action: The SYSOUT receiver or job receiver stops receiving data from the current job and queues the current job for PURGE.

Operator Response: None.

$HASP545 devicename SKIPPING TO END-OF-JOB

Explanation: The operator has entered a $C command directed to the SYSOUT receiver or the job receiver. Devicename is the name of the SYSOUT receiver or the job receiver. This message is accompanied by message $HASP543. (The importance level is 1.)

System Action: The SYSOUT receiver or the job receiver accepts and discards records until the end of the current job is reached. The SYSOUT receiver accepts records from the SYSOUT transmitter, the job receiver accepts input records from HASPRTAM.

Operator Response: None.

$HASP546 jobname SYSTEM OUTPUT RECEIVED AT xxxxxxxx

Explanation: SYSOUT data for the indicated job has been received at its ultimate destination, indicated by the nodename xxxxxxxx. This message appears only if the JCL JOB statement includes the NOTIFY=userid parameter. This message is routed to the terminal where that user is logged on.

If apostrophes are imbedded in the jobname, they are replaced by quotation marks.

(The importance level is 7.)

System Action: Processing continues.

User Response: If the user identified on the NOTIFY parameter is logged on at node xxxxxxxx, that user may issue STATUS, CANCEL, or OUTPUT commands for the job's SYSOUT.

$HASP547 devicename INPUT NOT ACCEPTED - JOB QUEUE FULL

Explanation: The NJE SYSOUT receiver, indicated by devicename, received a request to accept a job from a connected node, but was unable to add the job to the JES2 queue. (The importance level is 7.)

System Action: The SYSOUT transmitter on the connected node will drain after receiving the rejection.

Operator Response: Notify the system programmer that the job queue has become full. If possible, drain JES2 input devices to reduce the load on the job queue.

Programmer Response: Increase the value of the &MAXJOBS initialization parameter at the next JES2 cold start.

$HASP548 FILE TO (nodename/userid) DELETED, INVALID USERID

Explanation: JES2 issues this message to a TSO user who attempted to transmit a file to an invalid userid. In the message text, the nodename and userid are those of the target of the transmitted file. This message is sent only if the TSO user transmitting the file codes NOTIFY= on the JOB statement.

System Action: JES2 invokes a user exit. This exit may be coded so that the file is deleted or sent to a different userid. This exit may also be coded to change the message text "DELETED, INVALID USERID." It may be changed to any appropriate message text of 50 characters or less.

User Response: Transmit the file to a valid userid.

Operator Response: None.

Problem Determination: None.

$HASP549 FILE FROM(nodename/userid) RECORDS(nnnnnn)

Explanation: JES2 sends this message to the TSO user who is about to receive a transmitted message.

System Action: None.

Operator Response: None.

$HASP580 DYNAMIC ALLOCATE FAILED FOR { **DMPn** / **LODn** }

RC=xx ccccc

Explanation: The operator entered the $SDMPn or $SLODn command. Dynamic allocation failed for the data set associated with DMPn or LODn. (The importance level does not apply to this message.)

System Action: JES2 drains the device associated with DMPn or LODn. Other JES2 processing continues.

Operator Response: Notify the system programmer.

Programmer Response: See *System Programming Library: Job Management* for the meanings of the values in the RC=xx ccccc fields of the message text.

$HASP581 ERROR ON ALLOC/OPEN FOR {DMPn / LODn}
RC=xxxx

Explanation: The operator entered $SDMPn or $SLODn command but the open routine for the device associated with DMPn or LODn failed. (The importance level does not apply to this message.)

System Action: JES2 drains the device. Other JES2 processing continues.

Operator Response: Notify the system programmer.

Programmer Response: Find and correct the error. Then ask the operator to reenter the command. The RC=xxxx field contains the return code from OPEN processing and is documented in *OS/VS2 MVS System Programming Library: Job Management.*

$HASP583 SPOOL TRANSFER I/O SUBTASK ABEND -- COMPLETION CODE=xxx

Explanation: While JES2 was processing a $SDMPn or $SLODn command, the spool transfer I/O subtask abnormally terminated or JES2 encountered an unrecoverable I/O error. See *VS2 System Codes* for the meaning of the system completion code in the COMPLETION CODE=xxx field. (The importance level does not apply to this message.)

System Action: JES2 drains the device associated with the command. Other JES2 processing continues.

Operator Response: Notify the system programmer.

Programmer Response: Correct the error and reenter the $SDMPn or $SLODn command.

$HASP586 jjjj - jjjj NO STORAGE AVAILABLE FOR OFFLOADING HELD DATA SETS

Explanation: The operator entered a $DUMP command. During the command processing, JES2 issued a $GETMAIN for storage in subpool 0. The $GETMAIN failed. As a result, JES2 cannot dump held data sets for the range of jobs jjjj - jjjj. (The importance level is 7.)

System Action: Other dump processing continues.

Operator Response: Notify the system programmer.

Programmer Response: Allow dump processing to complete. When there is sufficient storage available, reissue the $DUMP command for the held data sets for the range of jobs jjjj - jjjj.

$HASP600 AUTOMATIC COMMAND LIMIT REACHED

Explanation: The operator entered a $TA command, and all the installation-specified automatic command elements were found to be in use. (The importance level is 7.)

System Action: Processing continues.

Operator Response: Delete some of the current elements or wait until elements are no longer needed. Inform the system programmer of the need for additional elements.

$HASP601 AUTOMATIC COMMANDS HALTED

Explanation: The operator entered a $TA command and the system found that either the operator has halted issuing of automatic commands via a $ZA command, or the system automatically issued the $ZA command. (The importance level is 7.)

System Action: The command is ignored. Processing continues.

Operator Response: Verify that the current automatic command elements are correct and, if desired, enter a $SA command to begin automatic command issuing.

$HASP602 CON ee A=cca F=cca I=cca J=cca N=cca O=cca Q=cca U=cca

Explanation: The operator entered a $TM command. The automatic redirected response settings for the entry console specified by ee are set for the display operands as listed. For example, if the response for A=cca is A=2B, the response of a $DA entered from console ee will be displayed on console 2, out-of-line area B if that area is available for the displaying of JES2 messages. The following list indicates which display commands are affected by the above display items:

item	command(s)
A	$DA
F	$DF
I	$DI
J	$DJ(job), $DS(system task control job), $DT(time sharing user job), $D'jjj' where jjj is the jobname.
N	$DN
O	$DO
Q	$DQ
U	$DU

(The importance level is 7.)

System Action: Processing continues.

Operator Response: None.

$HASP603 ENTRY CONSOLE NOT SUPPORTED

Explanation: The operator entered a $TM command specifying a response console that is unknown to JES2. (The importance level is 7.)

System Action: The command is ignored and processing continues.

Operator Response: Enter the $TM command for the proper console.

$HASP604 ID xxx T=hh.mm.ss T=ssss text

Explanation: The operator entered a $TA command and the response indicates the contents of the command element being created, displayed, modified, or deleted. If the operator is attempting to alter or create an automatic command element and a diagnostic message precedes this message, the element will be deleted. (The importance level is 7.)

System Action: Processing continues.

Operator Response: None.

$HASP605 {1XB} INIT init { STARTING / HALTING / HALTED / DRAINING / DRAINED / ACTIVE / INACTIVE } { ******** / JOB jjjj / monitor name }

c = classes

Explanation: The operator entered a $DI or a $TI command. The specified initiator is in the status indicated.

STARTING An MVS START command has been issued to activate an initiator, but successful creating of the address space has not been verified. The initiator is not processing work and will not do so until a request is made by started task control to start the initiator job.

HALTING The initiator is currently processing a job but will not select new work.

HALTED The initiator is not processing work and will not do so.

DRAINING The initiator is currently processing a job but will not select new work. Upon completion of the job the initiator itself will end execution.

DRAINED The initiator has ended or is in the process of ending execution.

ACTIVE The initiator is currently processing a job and will continue to select eligible work.

INACTIVE The initiator is not processing work, but would do so if work were available to it.

If the initiator is selecting execution batch monitor jobs, XB will be displayed prior to the INIT portion. Initiator status is followed by the job identifier if the initiator is currently processing a batch job, eight asterisks if the initiator is not currently active, or the batch monitor name if the initiator is processing batch monitor jobs and no batch monitor job is currently active. The classes are the job classes, in priority order, that the initiator will use to select jobs when the next job is to be selected. (The importance level is 7.)

System Action: Processing continues.

Operator Response: None.

$HASP606 INSUFFICIENT OPERANDS

Explanation: The operator entered a command without specifying all of the required operands. (The importance level is 7.)

System Action: The command is ignored and processing continues.

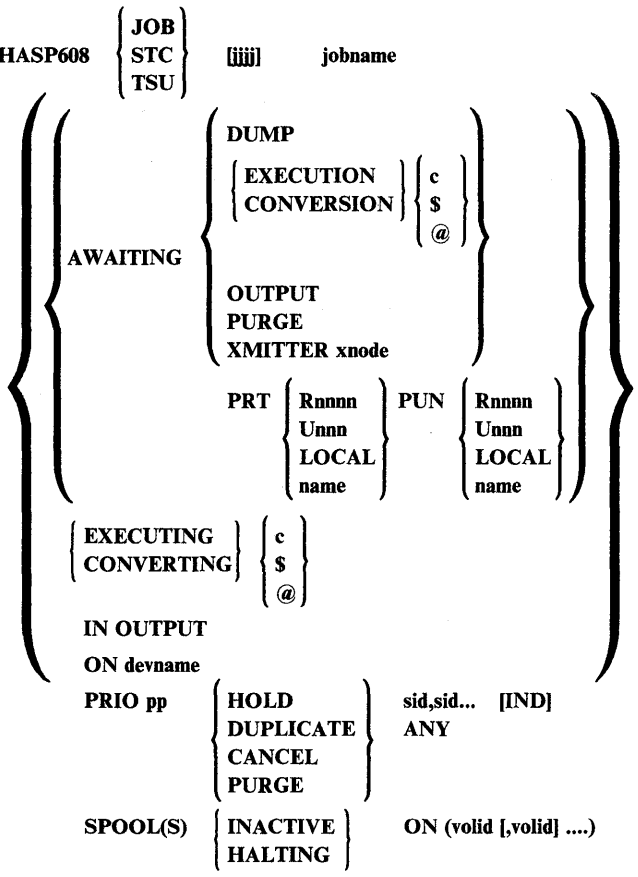
Operator Response: Enter the corrected command. See *Operator's Library: JES2 Commands.*

$HASP607 JES2 NOT DORMANT -- SYSTEM DRAINING

Explanation: The operator entered a $P JES2 command to withdraw JES2 from the system, but not all of JES2's functions have completed. (The importance level is 7.)

System Action: JES2 is not withdrawn and no new functions will be started; however, jobs may continue to be entered.

Operator Response: Stop all JES2 functions (that is, drain all devices, lines, initiators, and stop all jobs), then reenter the $P JES2 command.



Explanation: This display of the job's current status is a response to the $DA, the $DJ, the $DN, or the $D SPOOL,JOBS commands.

JOB The JES2-assigned identification of the batch job.

STC The JES2-assigned identification of the system task.

TSU The JES2-assigned identification of the time-sharing user.

jjjj The job number.

jobname The jobname appearing on the job card or in the start procedure operand.

DUMP	The job is waiting to be offloaded from the spool. (DUMP applies only to pre-execution batch jobs.)
EXECUTION	The job is waiting to be executed.
CONVERSION	The job is waiting for JCL conversion.
c	The execution class (A-Z,0-9)
$	The job is a system task.
@	The job is a time-sharing user.
OUTPUT	The job has finished execution and is waiting to be processed by the output processor.
PRT	The device name or destination that follows is the default printer routing for this job.
PUN	The device name or destination that follows is the default punch routing for this job.
Rnnnn	A remote workstation.
Unnn	A special local device.
LOCAL	Any local device.
name	A destination represented by a symbolic name defined by the installation.
PURGE	The job is waiting to be purged.
OUTPUT	The job is on an output device.
XMITTER	The job is on the XMITTER queue, waiting to be sent to another node for execution.
xnode	The node to which the job will be sent for execution.
EXECUTING	The job is executing.
CONVERTING	MVS is converting the job's JCL.
IN OUTPUT	The job is in OUTPUT processing.
pp	The JES2 scheduling priority.
devname	The JES2 name of the device performing a function for the job.
HOLD	The job is currently held or will be held at the end of the current phase.
DUPLICATE	The job is awaiting execution because another job with the same jobname is currently executing.
CANCEL	The job will be canceled at the end of the current phase.
PURGE	The job will be purged at the end of the current phase.
sid...	The name of the system (up to six systems) on which this job is executing or may execute. ANY indicates the job is eligible for any system in the shared JES2 configuration.
IND	Indicates that the job is eligible only for a system that is in independent mode.
INACTIVE	The job has data on one or more inactive spool volumes. The job cannot be processed until all its spools are available. The $DJ,SPOOL command displays all the spools this job resides on and the $D SPOOL command displays the status of the spools. The $S SPOOL command will make the spool available.
HALTING	The job has data on one or more halting spool volumes. A currently active job with data on a halting spool volume will complete its current phase of processing, but will not be selected for subsequent processing. No new jobs will be selected. The $DJ,SPOOL command will display the spool(s) this job resides on and $D SPOOL will display the status of the spool(s). The $S SPOOL command can be used to start an inactive spool volume.

(The importance level is 7.)

System Action: Processing continues.

Operator Response: None.

$HASP609 NUMBER SET TO jjjj

Explanation: The operator entered a $TNUM command indicating that the job number base is to be reset to the indicated value. (The importance level is 7.)

System Action: The base value for assigning job, started task, and TSO identification numbers is set to the value indicated. The next job, started task, or TSO user entering the system will be assigned that value (assuming no other job, started task, or TSO user currently has the value) and the base will be incremented by 1.

Operator Response: None.

$HASP610 JOB(S) NOT FOUND

Explanation: The operator has entered a job list command and no jobs were found that met the selection criteria. (The importance level is 7.)

System Action: Processing continues.

Operator Response: None.

$HASP611 LIST INCOMPLETE

Explanation: The system was overloaded with console activity at the time of job queue searching and the last job displayed was purged from the system while the JES2 command processor was waiting for system resources to display the message. (The importance level is 7.)

System Action: Processing continues.

Operator Response: Reenter the command when console activity is not high. The command entry should be modified to limit responses to only required information.

$HASP612 NO ACTIVE JOBS

Explanation: The operator entered a $DA command. The JES2 system found that no active jobs in the queues met the specifications given in the $DA command. (The importance level is 7.)

System Action: Processing continues.

Operator Response: None.

$HASP613 NO AUTOMATIC COMMAND FOUND

Explanation: The operator entered a $TA command specifying no operands beyond operand one. No automatic command element was found with the id, if specified, or if one was found, the console has no authority to display it. (The importance level is 7.)

System Action: Processing continues.

Operator Response: Enter the request on a sufficiently authorized console, (one at least as authorized as the console creating the element).

$HASP614 $S xxxx REJECTED - DATA SET IN USE (yyyy)

Explanation: The operator entered a start command to start either the dumper or loader named xxxx, but the corresponding offload data set is currently being used by a dumper or loader named yyyy.

System Action: Processing continues.

Operator Response: Assign another data set to offload device xxxx and reissue the START command, or drain offload device yyyy and reissue the START command for device xxxx.

$HASP615 ACTIVE DATA SETS NOT ROUTED

Explanation: The operator entered a $R command and JES2 is unable to reroute currently active data set(s). (The importance level is 7.)

System Action: JES2 continues processing.

Operator Response: Ensure that the data set(s) to be rerouted are not active and reenter the $R command.

$HASP616 NO JOBS HELD

Explanation: The operator entered a $HA command telling the system to hold all jobs on the the job queue. No jobs were found. (The importance level is 7.)

System Action: JES2 continues processing.

Operator Response: None.

$HASP617 NO JOBS RELEASED

Explanation: The operator entered a $AA command telling the system to release all jobs held by the $HA command and no jobs were found to be held by that command. (The importance level is 7.)

System Action: Processing continues.

Operator Response: If jobs are known to be held, use explicit release commands: $A'jjj', $AJ, $AS, or $AT as appropriate to release the jobs.

$HASP618 NO OPERATOR REQUESTS

Explanation: The operator entered a $DO command and JES2 found no outstanding operator requests. (The importance level is 7.)

System Action: Processing continues.

Operator Response: None.

$HASP619 NO OUTPUT QUEUED

Explanation: The operator entered a $DF command and there was no work in the output forms queue for the operands given in the $DF command. (The importance level is 7.)

System Action: Processing continues.

Operator Response: None.

$HASP620 COMMAND REJECTED - JES2 SHUTDOWN IN PROGRESS -

Explanation: During JES2 shutdown processing, the operator entered a command other than '$PJES2,ABEND' or '$ESYS,RESET=system-id'.

System Action: The command is ignored.

Operator Response: Allow JES2 to complete shutdown processing. JES2 must be restarted before you can issue any further commands.

$HASP621 OUT R= { **Rnnnn** / **Unnn** / **LOCAL** / **name** } **F=ffffffff C=cccc**

T=tttt W= { **(NONE)** / **wwwwwwww** }

[O=overlay name] [B=Y]
CLASS C1=nn1,C2=nn2,...[,DMP=nn]

[PRMODE=cccccccc] [{ **DMND** / **D** }]

Explanation: The operator entered a $D F command to display the output forms queue. The output forms queue contains work for destination R, where:

Rnnnn	A remote device
Unnn	A local device with special routing.
LOCAL	A local device.
name	The symbolic name for a destination specified on the DESTID initialization parameter.

The work requires:

ffffffff	Forms.
cccc	Carriage control tape or FCB image.
tttt	Printer train or UCS image.
wwwwwwww	Writer ID.
NONE	Writer ID not specified.
overlay name	3800 forms overlay name.
B=Y	3800 burster required.

CLASS

C1=nn1,C2=nn2	Number of work elements in each CLASS. An nn value of ** indicates that there are more than 99 work elements queued in that class.
DMP=nn	If any work elements are for spool offload, the message text includes DMP=nn, where nn is the number of work elements placed on the offload queue by the $DUMP command. If the number of work elements on the queue is greater than 99, DMP=** appears. *Note:* Any work elements included in the DMP count are not included in the class counts.
PRMODE=cccccccc	Processing mode, where cccccccc is the 1 to 8 character name for the processing mode required to process the SYSOUT correctly.
DMND or D	This notation appears in the keyword field when the keyword specification requires demand setup, this indicates those characteristics that require demand setup processing.

(The importance level is 7.)

System Action: Processing continues.

Operator Response: None.

$HASP622 RESPONSE LOCATION L=cca UNAVAILABLE [ident]

Explanation: The operator entered a command directing the response to a console area (L=cca) that was not available to JES2. If the console itself is not available, this message appears on the master console. The command entered is displayed immediately preceding this message. If the command causing this message is an automatic command, the identifier of the automatic command is displayed. (The importance level is 7.)

System Action: Processing continues.

Operator Response: Check the condition of the consoles and reenter the command if desired or required.

$HASP623 SYSTEM DRAINING

Explanation: The operator entered a $P command and the system will discontinue scheduling of work. Jobs that would normally be selectable for processing will not be selected for new work. (The importance level is 7.)

System Action: No new functions are started; however, jobs may continue to be entered.

Operator Response: Enter the $S command when it is desired to resume JES2 processing.

$HASP624 cmd jobname MULTIPLE JOBS FOUND

Explanation: The operator entered the cmd command for the job named in the message text, but JES2 found more than one job with that name. JES2 did not execute the command. (The importance level is 7.)

System Action: JES2 issues display messages for the jobs that it found.

Operator Response: Reenter the command, specifying the 4-digit JES2-assigned job number instead of the jobname.

Programmer Response: None.

$HASP625 devname IN USE

Explanation: The operator entered a $S or $T command for the indicated device. The system found the device but could not take the indicated action for one of the following reasons:

- If the command was a $T, the device is currently active and the operands T=, F=, and C= cannot be used until the device is idle or has been halted for a forms, carriage or train setup.

- If the command was a $S 1) the device was already allocated to a non-JES2 function or, 2) the system programmer has caused more than one device to be assigned to more than one logical device and JES2 is currently using the device for another function.

(The importance level is 7.)

System Action: The command is ignored and processing continues.

Operator Response: Determine the use of the device and, in the case of the $T command, wait until the device is idle or JES2 has stopped the device for operator assistance. In the case of the $S command, wait for the jobs or the JES2 function to unallocate the device before reentering the $S command for the device. (JES2 unallocates devices when they go into DRAINED status.)

$HASP626 devname INVALID UNIT

Explanation: The operator entered a $S command for the indicated device (devname). The system found no UCB (unit control block) pointer for that device.

System Action: JES2 continues processing.

Operator Response: Notify the system programmer.

$HASP627 devname NOT AVAILABLE

Explanation: The operator entered a $S command for the indicated device. One of the following is true:

- The device was already allocated to a non-JES2 function.
- The system programmer has assigned the device to a physical unit but JES2 is using that physical unit for a different device function.
- The unit is offline and cannot be allocated.
- The allocation subtask abended.

(The importance level is 7.)

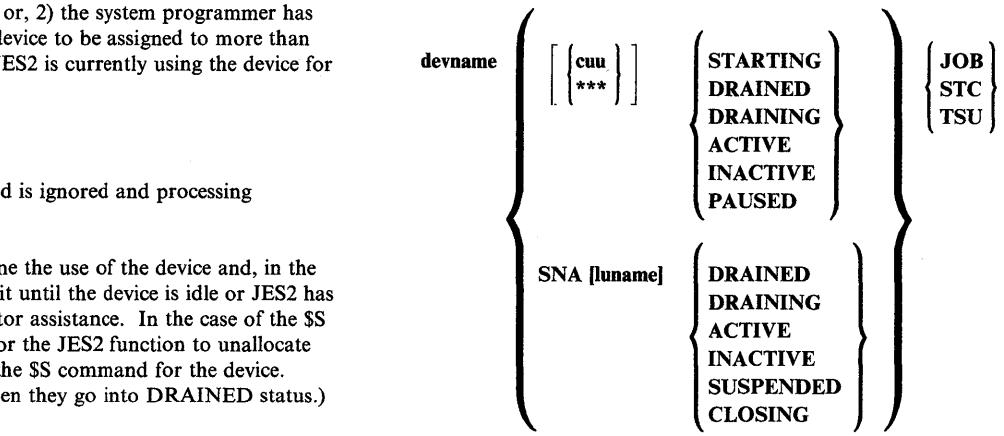
System Action: The command is ignored and processing continues.

Operator Response: Determine the use of the unit assigned to the device. If the unit is offline, place it online and use the VARY command to make it available for allocation before reentering the $S command. If the unit is busy with a JES2 function, wait for it to complete, enter $P for the owning device, and enter the $S command to activate the new function. If the unit is allocated to a non-JES2 function, wait until it becomes available before reentering the $S command. If the unit has one of the following properties:

- The unit is online.
- The unit is not allocated.
- The unit is allocated only to JES2 functions.
- The unit is not busy with a JES2 function.

Notify the system programmer of this message.

$HASP628



jjjj device settings
nnnn of mmmm { LINES | CARDS | PAGES }
CKPTLINE = nnnnn
CKPTPAGE = nnnnn
CKPTSEC = ttttt
CKPTMODE = { SEC | PAGE }
PLIM = m- { n | * }
MODE = { FSS | JES }
FSS = fssname
NPRO = tttt
SEPDS = { Y | N }
PRMODE = (cccccccc[,cccccccc...])
F = cccccccc
W = writer
WS = criteria

Explanation: The operator entered a $DU command for a device. JES2 has responded with information regarding the subsystem assigned to or in control of the device, and the current output selection criteria.

The device is identified as follows:

cuu
The device is a BSC (binary synchronous communication) device at address cuu.

****
There is an initialization statement for device devname, but there is no device by that name attached to the system.

SNA[luname]
The device is a SNA (systems network architecture) device. If luname appears, it is the logical unit name for the device.

The status of the device is indicated as follows:

STARTING
Indicates that the device is in the process of being started. This status is only possible for an FSS owned device.

DRAINED
JES2 is not using the device and will not do so until the device is started via a $S command.

DRAINING
JES2 is currently using the device for the processing of jobs, but will discontinue its use upon completion of the current function.

INACTIVE
JES2 is not using the device but would do so if jobs were available and eligible for that device.

ACTIVE
JES2 is using the device for job processing and will continue to do so as long as there are jobs available and eligible for that device.

HALTED
JES2 has either requested operator assistance or the operator has halted the device ($Z) and is waiting for the device to be started via a $S command.

PAUSED
JES2 has paused between jobs and the device will not be used until it is started via a $S command or the device is brought out of READY and then back into READY status.

SUSPENDED
JES2 has temporarily stopped using the device to allow other processing to continue.

CLOSING
The operator entered the $DU LGNn command. JES2 has stopped using the device, but VTAM processing for the device has not completed.

If the operator has used operands when entering the $DU command, a detailed status of the device will be displayed. If the operator requested display information about lines, remotes, or the JES2/VTAM interface, the status displayed includes the status of the session on any logical (SNA) line. (See the description of session status below.) If JES2 is using the device, the job identification portion of the messages will be displayed. The operator-controllable settings for the device will be displayed following the status or job identification portion of the message.

All devices (except RMTnnnn devices), LOGONn and RJE lines will have tracing (TR) options set as follows:

TR=P
The processor is traced.

TR=I
I/O operation are traced for remote lines and logons.

TR=IP
I/O operations are traced for remote lines and logons and the processors will be traced.

Other operator-controllable settings for specific devices are as follows:

RMTnnnn

D=value
The disconnect interval value currently in effect is displayed. This value is rounded to the next highest multiple of 32.

D=I
The line is being restarted.

D=Q
Signoff is in progress.

A=Y
Automatic logon mode is in effect for this SNA remote terminal.

A=N
Automatic logon mode is not in effect for this remote terminal.

RJE line

E=Y
Channel end logging is in effect.

E=N
Channel end logging is not in effect.

P=SET
The line password has been set.

S=Y
JES2 is attempting to automatically logon this SNA remote terminal.

S=N
Automatic logon is not being attempted for this SNA remote terminal.

LOGONn

E=Y
Channel-end logging is in effect for this JES2-to-VTAM interface.

E=N
Channel-end logging is not in effect for this JES2-to-VTAM interface.

P=set
The application password for the JES2-to-VTAM interface is set.

DUMPERn

DSN=
Data set name of the spool offload data set.

UNITCT=n
Number of devices to be used for mounting volumes for the offload data set.

LOADERn

DSN=
Data set name of the spool offload data set.

UNITCT=n
Number of devices to be used for mounting volumes for the offload data set.

H=Y/N
Jobs loaded by LOADERn will be held (Y) or not held (N).

Remote reader

C=c
Default execution class for jobs read by the reader.

Q=q
Default message class for jobs read by the reader.

H=Y/N
Jobs read by the reader will either be held (Y) or not held (N).

S = sid,sid,...

{ ANY / IND }

The default system affinity for jobs read by the reader is sid,sid... or ANY (for any system in the shared JES2 complex). IND indicates that jobs read by the reader will only be eligible for execution on a system that is in independent mode.

P=dest
The default printer destination for jobs read on the reader.

U=dest
The default punch destination for jobs read on the reader.

X=dest
The default execution node for jobs read on the reader.

Local reader

C=c
Default execution class for jobs read by the reader.

Q=q
Default message class for jobs read by the reader.

H=Y/N
Jobs read by the reader will either be held (Y) or not held (N).

A=DISPLAY
The reader has display command authority only A=0.

A=SYS
The reader has system command authority A=1.

A=DEV
The reader has device command authority A=2.

A=JOB
The reader has job command authority A=4.

A=x+x+x
The reader has authority as indicated, (combination of above).

S = sid,sid...

{ ANY / IND }

The default system affinity for jobs read by the reader is either sid,sid... can be specified a maximum of six times or ANY (indicating any system). IND indicates that jobs read by the reader will only be eligible for a system in independent mode.

P=dest
The default printer destination for jobs read on the reader.

U=dest
The default punch destination for jobs read on the reader.

X=dest
The default execution node for jobs read on the reader.

Internal reader

Owner=Jobid Jobname
The internal reader has been allocated by the indicated job, started task, or TSO logon.

Punch

F=cccccccc
Indicates the 1 to 8 character forms name used by the device.

F=ffff
Indicates the 1 to 4 character forms name used by the device.

P=Y
The punch (local punches only) will pause between units of work and wait for the operator to either enter a $S device command or cause the unit to go "not ready" and then "ready."

P=N
The punch will not pause between units of work.

S=Y
The punch will provide separator cards.

S=N
The punch will not provide separator cards.

LIM=m - { * / n }
The number of records the punch will process ranges from lower limit m to upper limit n. If * is specified, the upper limit is the default value 4,294,967,295.

nnnn
Indicates the original count of cards or pages represented by the job output element.

mmmm
Indicates the last available count of cards or pages as yet unprocessed.

Z=n
specifies the 1 to 8 character compaction table name for SNA remote punches.

CKPTLINE=nnnnn
number of logical lines in a page.

CKPTPAGE=nnnnn
number of logical pages to be punched before an output checkpoint is taken by JES2.

SEPDS = { Y / N }
specifies that page separators are to be turned on (Y) or turned off (N) on an individual data set basis.

PRMODE=(cccccccc[,cccccccc...])
indicates the one to four processing modes specified for the device.

W=writer
indicates the 1 to 8 character writer name specified for the device.

WS=criteria
specifies the current work selection criteria assigned to this device. One slash (/) may precede or follow any number of the selection criteria. The slash separates those criteria (prior to the slash) which must be matched exactly from those criteria (following the slash) which need not match, that is, the job output specifications matching the device setup characteristics. Refer to the *Operator's Library: JES2 Commands* for a full description of the work selection criteria.

Q=classes
The punch will process output of the classes indicated.

R=(dest[,dest[,dest[,dest]]])
The route codes currently assigned to the device.

Printer

F=cccccccc
Indicates the 1 to 8 character forms name used by the device.

F=ffff
Indicates the 1 to 4 character forms name used by the device.

P=Y
The printer (local printers only) will pause between units of work and wait for the operator to either enter a $S device command or cause the unit to go "not ready" and then "ready."

P=N
The printer will not pause between units of work.

C= { cccc / * } **[,STD]**
The printer is or will use carriage control (FCB image if supported) as specified (cccc). Or, if * is specified, the 3800 printer constructs the FCB based on the current forms length. STD indicates that the FCB image has been specified to be a standard image.

T=tttt [,STD]
The printer is or will use printer train (UCS image if supported) as specified. Or, the 3800 printer is using or will use the default character arrangement table as specified. STD indicates that the UCS image has been specified to be a standard image.

K=n
The printer is ignoring any program-supplied carriage control information and is spacing n lines between print lines, where n is 1, 2 or 3.

S=Y
The printer will provide separator pages at the beginning and end of work units. If the printer is a remote, it will also print any operator messages destined for the device.

S=N
The printer will not provide separator pages.

LIM=m - { * / n }
The number of records the printer will print ranges from lower limit m to upper limit n. If * is specified, the upper limit is the default value 4,294,967,295.

nnnn
Indicates the original count of lines, cards, or pages represented by the job output element.

mmmm
Indicates the last available count of lines, cards, or pages as yet unprocessed.

Z=n
specifies a 1 to 8 character compaction table name for SNA remote printers.

CKPTLINE=nnnnn
number of logical lines in a page.

CKPTPAGE=nnnnn
number of logical pages to be printed before an output checkpoint is taken by JES2.

CKPTSEC=ttttt
specifies the checkpoint interval for the device in seconds of elapsed time.

CKPTMODE = { **SEC** | **PAGE** }
specifies the checkpoint interval being used by the functional subsystem.

PLIM=m - { * | n }
the number of pages the printer will print ranges from lower limit m to upper limit n. If * is specified, the upper limit is the default value 4,294,967,295.

MODE = { **JES** | **FSS** }
MODE indicates how the device is being managed or driven. MODE=JES indicates a JES2-managed device. MODE=FSS indicates the device is driven by a functional subsystem/functional subsystem application (FSS/FSA).

FSS=fssname
FSS specifies the name associated with the functional subsystem managing the device. This name is assigned to the functional subsystem via the FSSDEF initialization statement. The functional subsystem name appears only when the device is set to MODE=FSS.

NPRO=tttt
indicates the Non Process Run Out time interval, from 0 to 3600 seconds.

SEPDS = { **Y** | **N** }
specifies that page separators are to be turned on (Y) or turned off (N) on an individual data set basis.

PRMODE=(ccccccccc[,ccccccccc...])
indicates the one to four processing modes specified for the device.

W=writer
indicates the 1 to 8 character writer name specified for the device.

WS=criteria
specifies the current work selection criteria assigned to this device. One slash (/) may precede or follow any number of the selection criteria. The slash separates those criteria (prior to the slash) which must be matched exactly from those criteria (following the slash) which need not match, that is, the job output specifications matching the device setup characteristics. Refer to the *Operator's Library: JES2 Commands* for a full description of the work selection criteria.

Q=classes
The printer will process output of the classes indicated.

R=(dest[,dest[,dest[,dest]]])
The route codes currently assigned to the device.

B=Y
The printed output from the 3800 printer will be burst into separate sheets.

B=N
The printed output from the 3800 printer will be in continuous, fanfold mode.

M=Y
The edge of the separator page in the printed output from the 3800 printer will be marked.

M=N
The edge of the separator page in the printed output from the 3800 printer will not be marked.

O=name
The 3800 printer is using or will use the forms overlay frame specified (name).

X1=id
The 3800 printer is using or will use the specified table as its first character arrangement table.

X2=id
The 3800 printer is using or will use the specified table as its second character arrangement table.

X3=id
The 3800 printer is using or will use the specified table as its third character arrangement table.

X4=id
The 3800 printer is using or will use the specified table as its fourth character arrangement table.

Y=id
The 3800 printer is using the copy modification module as specified by **id**.

(The importance level is 7.)

System Action: Processing continues.

Operator Response: None.

$HASP629 { **JOB** / **STC** / **TSU** } { **jjjj** / **jobname** } **NOT FOUND**

Explanation: The operator entered a command to set a job's priority and/or execution class, but JES2 could not find the job. Either the JES2-assigned job number (jjjj) or the jobname appears, depending on how the operator identified the job on the command. (The importance level is 7.)

System Action: Processing continues.

Operator Response: Enter the correct job identification for the desired job.

$HASP630 VOLUME volser { **ACTIVE** / **STARTING** / **HALTING** / **DRAINING** / **INACTIVE** } **nnn PERCENT**
UTILIZATION [AWAITING SIDN, SIDN...]

Explanation: This message is issued when:

- The operator enters the $D SPOOL command.
- The status of a volume changes.
- A command is issued that will not alter the current status of the spool volume. For example, a $P SPOOL command is reissued against a volume that is already draining.

This message shows the status of a spool volume identified by volser and the percentage of space on the volume that has been allocated.

The spool device is identified with its volser and characterized as:

ACTIVE The spool volume is in use and JES2 can allocate space on it.

STARTING
The spool volume is in the process of dynamic allocation and/or formatting.

HALTING JES2 can no longer allocate space on the spool volume, and no new work will be selected. Currently active jobs will be allowed to complete their current phase of processing.

DRAINING
JES2 can no longer allocate space on the spool volume. The spool volume is in use and will finish processing jobs that have space currently allocated to it. A DRAINING spool volume will result in the $HASP806 message, notifying the issuer of the DRAIN command that the volume is DRAINED. After the volume is drained, its status no longer appears in this message.

INACTIVE JES2 can no longer allocate space on the spool volume. JES2 will not process any jobs that already have space allocated on the spool volume. The volume is no longer allocated to JES2.

AWAITING SIDN, SIDN...
The volume is waiting for processing of a SPOOL command by the indicated system(s).

(The importance level does not apply to this message.)

System Action: JES2 processing continues.

Operator Response: None.

Programmer Response: None.

$HASP631 nnnn DMP

Explanation: The operator entered a $DQ command. This message is the response, where nnnn is the number of jobs not yet executed and awaiting spool offload. (The importance level is 7.)

System Action: Processing continues.

Operator Response: None.

Programmer Response: None.

$HASP632 { **JOB** / **STC** / **TSU** } **[jjjj] jobname NO HELD DATA SETS**

Explanation: The operator entered a $O or $L command to cancel, release, or list any held sysout data sets for a job. However, the job has no held sysout data sets. (The importance level is 7.)

System Action: Processing continues.

Operator Response: None.

$HASP633 { **JOB** / **STC** / **TSU** } **[jjjj] jobname NO READY DATA SETS**

Explanation: The operator entered a $L command to list the ready queued output for the designated job, but the job has no ready data sets. (The importance level is 7.)

System Action: Processing continues.

Operator Response: None.

$HASP634 { **JOB** / **STC** / **TSU** } **[jjjj] jobname NON CANCELABLE**

Explanation: The operator entered a $C or $P command. An STC or TSU job is not eligible for canceling during execution. A batch job that has the non-cancelable attribute is not eligible for canceling during execution. (The importance level is 7.)

System Action: The command is ignored for the specified job and processing continues.

Operator Response: None.

$HASP635 { JOB / STC / TSU } **[jjjj] jobname NOT EXECUTING ON sid**

Explanation: The operator issued a $DM command to write a message on a job's JES2 job log; the specified job was not in execution on system sid. (The importance level is 7.)

System Action: The message is not sent, processing continues.

Operator Response: None.

$HASP636 cmd

Explanation: The message text repeats back to the operator a command the operator entered in an out-of-line area on a console. (The importance level is 7.)

System Action: None.

Operator Response: None.

$HASP637 { JOB / STC / TSU } **[jjjj] jobname NOT HELD**

Explanation: The operator commanded the system to release the job indicated explicitly and the job was not in an operator releasable status. (The importance level is 7.)

System Action: Processing continues.

Operator Response: None.

$HASP638 { JOB / STC / TSU } **[jjjj] jobname NOT RESTARTABLE**

Explanation: The operator entered a $E job command and the specified job was found not to be in execution or not a normal batch job. (The importance level is 7.)

System Action: The command is ignored and processing continues.

Operator Response: None.

$HASP639 { JOB / STC / TSU } **jjjj jobname READY q=m**

q=m...[DMP=nn]

Explanation: The operator entered a $L command to list the ready queued output for the designated job. Following 'READY' are the class(es) and the count in each class of the ready output. If the number of queued data sets for a sysout class exceeds 99, ** will appear in place of the number.

If any work elements are waiting for spool offload, the message text includes DMP=nn, where nn is the number of work elements placed on the offload queue by the $DUMP command. If the number of work elements on the queue is greater than 99, DMP=** appears.

Note: Any work elements included in the DMP count are not included in any of the class counts.

(The importance level is 7.)

System Action: Processing continues.

Operator Response: None.

$HASP640 { JOB / STC / TSU } **[jjjj] jobname HELD q = m q = m**

Explanation: The operator entered a $L command with the HOLD operand to list the held queued output for the designated job.. Following 'HELD' are the class(es) and the count in each class of the held output. (The importance level is 7.)

System Action: Processing continues.

Operator Response: None.

$HASP641 { JOB / STC / TSU } **[jjjj] RELEASED**

Explanation: The operator commanded the system to release the indicated job explicitly and the job was released for further processing. (The importance level is 7.)

System Action: Processing continues.

Operator Response: None.

$HASP642 nnnn HOLD sid [IND]

Explanation: The operator entered a $DQ command. There are nnnn jobs held in system sid. (This includes both active and queued jobs.) If IND appears, system sid is in independent mode. (The importance level is 7.)

System Action: Processing continues.

Operator Response: None.

Programmer Response: None.

$HASP643 nnnn PPU dest ANY

Explanation: The operator entered the $DQ command. There are nnnn jobs waiting for print/punch processing with the routing shown in the dest field. (The importance level is 7.)

System Action: Processing continues.

Operator Response: None.

Programmer Response: None.

$HASP644 nnnn OUT sid [IND]

Explanation: The operator entered a $DQ command. There are nnnn jobs waiting for output processing in system sid. If IND appears, system sid is in independent mode. (The importance level is 7.)

System Action: Processing continues.

Operator Response: None.

Programmer Response: None.

$HASP645 nnnn XMIT dest

Explanation: The operator entered a $DQ command. There are nnnn jobs waiting for transmission to the node identified in the dest field for processing. (The importance level is 7.)

System Action: Processing continues.

Operator Response: None.

Programmer Response: None.

$HASP646 nnn PERCENT SPOOL UTILIZATION

Explanation: The operator entered a $D N, $D Q, or $D SPOOL command. This message gives the total percent of space used from the volumes available for allocation (ACTIVE volumes). Other spool volumes may be known to JES2, but are not included in the total percent utilization (for example, volumes that have a status of DRAINING, HALTING, INACTIVE, etc.).

The percent utilization is the last response to the $D N, $D Q, or $D SPOOL commands and could be used to gauge the quantity of work the output devices have backlogged. Large percentages of utilization tend to increase overhead in handling SYSIN/SYSOUT data. Full utilization of spool space (100%) causes execution and input of jobs to stop and generally undesirable results will follow. (The importance level is 7.)

System Action: Processing continues.

Operator Response: If the utilization appears high as a general rule, inform the installation management so that appropriate action can be taken. Such action would depend on the reasons for high utilization. If the percentage approaches 100%, there are several options that can be taken:

- Stop all readers and initiators, make sure that all available output devices are busy (route output to idle devices when possible), and inform time sharing users to release or delete their data sets.
- Start or restart a spool volume using the $S SPOOL command to increase available spool space.
- Use spool offload to temporarily offload work.

$HASP647 nnn { **CNV** | **XEQ** } [{ **class [HOLD]** | **STC** | **TSU** }] **sid**

Explanation: The operator entered a $DQ command. There are nnn jobs waiting for JCL conversion (CNV appears in the message text) or for execution (XEQ appears). The class field contains the execution class for the jobs, one character in the range A through Z or 0 through 9. For CNV, a value appears in the class field only if the operator specified a particular class on the command. Otherwise, for CNV, the field is blank and nnn is the total number of jobs in all classes awaiting JCL conversion. If HOLD appears in the message text, the execution class is being held by the $HQ command. If STC or TSU appears, the class is the system task or time-sharing user class. (The importance level is 7.)

System Action: Processing continues.

Operator Response: None.

$HASP648 text

Explanation: This message is an informational repeat of a previously-displayed action message. The operator entered a $DO command and JES2 found an outstanding action request. JES2 requests are normally requests to load forms, carriage tapes, and UCS trains on output devices. (The importance level is 7.)

System Action: Processing continues.

Operator Response: Perform the action as indicated or cause the system to abort the function. In the case of setup of devices the operator may override the request by one of the following techniques:

- Misinform the system by issuing a $S command. JES2 will assume the setup as requested and output on the forms, carriage control tape (or image), and UCS image.
- Enter $HJ and $E device commands. JES2 will requeue the output, hold it for later, and select other work for output. This technique is extremely useful when the device is a remote work station that has been left unattended and the central operator desires to free up resources in the system.

$HASP649 cmd INVALID COMMAND

Explanation: The command has been identified as a JES2 command; however, the command has been rejected for one of the following reasons:

- The verb was not recognized as a JES2 command verb.
- The first character of the first operand was not recognized to be a legal qualifier of the verb.
- The entry source was not authorized to enter the command.
- The operator directed that the response to this command be displayed on a supported console and area, but that console or area was not currently available to JES2. The system will attempt to display this response in the normal message area of the requested console.

(The importance level is 7.)

System Action: The command is ignored and processing continues.

Operator Response: See *Operator's Library: JES2 Commands*, for legal verbs, formats, and authority required and reenter the desired command from an authorized console. Reenter the command correctly.

$HASP650 op INVALID OPERAND

Explanation: The operator entered a command with the operand shown in the message text. One of the following is true:

- The operand is not one of the valid operands for the command.
- The operator entered the command on a console that is not authorized to use the operand.
- The operator specified an invalid range on the operand.
- The VOLSER did not match the &SPOOL initialization parameter.

(The importance level is 7.)

System Action: Normally, if one operand is invalid, no action is taken. However, commands that perform actions sequentially as operands are validated, will terminate action upon encountering the invalid operand or character, leaving the action partially complete. Some examples of these commands are: $AQ, $HQ, $C ddd, $E ddd, $F ddd, $I ddd, $N ddd, $P ddd, $S ddd, $T ddd, $TM, $DU and $VS.

Operator Response: See *Operator's Library: JES2 Commands*, for legal verbs, formats, and authority required and reenter the desired command correctly from an authorized console.

$HASP651 INVALID SPECIFICATION

Explanation: The operator entered a $TA command with an invalid operand specification. The automatic command being created or altered (if any) will be displayed and deleted. (The importance level is 7.)

System Action: If the first operand is incorrect, no action is taken. If an operand following the first is incorrect, the automatic command element will be deleted and a response displaying the contents of the element before deletion will follow.

Operator Response: See *Operator's Library: JES2 Commands*, for legal verbs, formats, and authority required and reenter the desired command correctly from an authorized console.

$HASP652 NO DATA SET(S) CANCELED

Explanation: The operator entered a $PQ command, but no data sets were found that could be canceled. (The importance level is 7.)

System Action: Processing continues.

Operator Response: Verify that the proper operands were used with the $PQ command or that the output that is to be canceled does exist ($L).

$HASP653 HASP653 pcetype (description) PCES=yyyyy,zzzzz (TR=t)

Explanation: This message is issued as a result of either a $DPCE or $TPCE command. The information provided is as follows:

- **pcetype** is the processor type for a group of JES2 processors. This value is the NAME operand for an entry in the JES2 or installation PCE table. For a complete list of the JES2 processor types, see the $TPCE command description in *Operator's Library: JES2 Commands*.
- **description** describes the the processor type. This value is the DESC operand for an entry in the JES2 or installation PCE table.
- **yyyyy** indicates the number of defined processors of this type. For many processor types this is the number of devices of a particular type that are numbered (for example, the number of printers).
- **zzzzz** indicates the number of processors of this type that are currently allocated (for which PCEs exist in storage).
- **t** indicates the tracing status for the allocated PCEs for processors of this type.

If zzzzz is zero, TR=t is not displayed.
If t=P, all processors have processor tracing set.
If t=N, no processors have processor tracing set.
If t=M, the tracing status of the processors is mixed and the $DU command should be used to determine the status for individual device processors (for example, $DU,PRT1).

If the operator specified one or more of these processor types on the $DPCE command, this message appears for each of the specified types. If the operator entered the $DPCE command without any processor names, this message appears for each processor type. (The importance level is 7).

System Action: Processing continues.

Operator Response: None.

Programmer Response: None.

$HASP654 NO HELD DATA SETS

Explanation: The operator has entered a $OQ command to either cancel or release held output in the system. However, there is no held output meeting the criteria of the command. (The importance level is 7.)

System Action: Processing continues.

Operator Response: None

$HASP655 NO STORAGE AVAILABLE

Explanation: The operator has entered a $OQ, $DUMP, or $O command but no storage is available to service the request. The request is ignored. (The importance level is 7.)

System Action: Processing continues.

Operator Response: Notify the system programmer that this condition has occurred.

$HASP656 { **JOB** / **STC** / **TSU** } **jjjj jobname DATA SETS CANCELLED**

Explanation: The operator has entered the stop job ($P) command with the Q operand for the designated job, started task, or time sharing userid, and the associated output data sets have been canceled. (The importance level is 7.)

System Action: Processing continues.

Operator Response: None

$HASP657 { **JOB** / **STC** / **TSU** } **[jjjj] jobname NO DATA SETS CANCELED**

Explanation: The operator has entered a $P command with the Q operand for the designated job, but no ready data sets of the desired class were found. (The importance level is 7.)

System Action: Processing continues.

Operator Response: Check the class(es) of ready data sets for the designated job with the $L command and reenter the $P command for the desired class(es).

$HASP658 { **JOB** / **STC** / **TSU** } **[jjjj] jobname NOT EXECUTING ON sid**

Explanation: The operator has entered the $E command for the designated job. However, the job, although in execution, is not executing on the system from which the $E command was entered. (The importance level is 7.)

System Action: Processing continues.

Operator Response: Reenter the $E command on a console attached to system on which the designated job is executing.

$HASP659 devname NOT ACTIVE ON sid

Explanation: The operator has entered a $B, $C, $E, $F, $I, $N, or $Z device command, but the specified device is not actively processing a unit of work on the indicated system. (The importance level is 7.)

System Action: Processing continues.

Operator Response: None.

$HASP660 TASK BUSY RESTARTING sid

Explanation: The operator has entered a $ESYS command, but the system is currently busy restarting the designated system. (The importance level is 7.)

System Action: Processing continues.

Operator Response: Using the $LSYS command, determine when the system is available to restart another system and reenter the $ESYS command.

$HASP661 sid { **ACTIVE** / **DORMANT** / **RESTARTING** / **INACTIVE** } **[INDEPENDENT MODE]**
GMT TIME=hh.mm.ss DATE=yy.dd

Explanation: The operator entered the $LSYS command. This message displays the status of system sid:

ACTIVE
JES2 is currently active on system sid.

DORMANT
A system is considered dormant when its TOD clock (found in the shared queue element (QSE)) plus the tolerance value supplied in the &SYNCTOL initialization parameter is less than or equal to the TOD clock of the system where the command is being entered. From this variance JES2 has determined that the system is not active. This occurs when the system has been locked out of the checkpoint data set, or the system has abended (preventing a normal shutdown), or the system has been initialized with a TOD clock that was not synchronized with the system where the command was entered.

RESTARTING
Another system in the multi-access spool configuration issued the $ESYS command to restart system sid.

INACTIVE
JES2 is not active on system sid.

INDEPENDENT MODE appears when the system on which the command was entered is in independent mode.

Note: The GMT time and date will be displayed for active and dormant systems.

(The importance level is 7.)

System Action: Processing continues.

Operator Response: None.

Programmer Response: If the message indicates a dormant system but the variance is acceptable, increase the &SYNCTOL parameter so that this message will display the system as active.

$HASP662 sid IS ACTIVE AND CANNOT BE RESTARTED

Explanation: The operator has entered a $ESYS command for the designated system (sid), but that system is currently active. (The importance level is 7.)

System Action: Processing continues.

Operator Response: None.

$HASP663 NO JOB(S) REROUTED

Explanation: The operator has entered a $TALL command, but no jobs were found whose system affinity could be changed as specified. (The importance level is 7.)

System Action: Processing continues.

Operator Response: None.

$HASP664 sid IS NO LONGER IN INDEPENDENT MODE

Explanation: The operator has used the $TSYS command to remove his system from independent mode. (The importance level is 7.)

System Action: Processing continues and the system is now available to accept all work that is routed to it.

Operator Response: None.

$HASP665 sid IS NOW IN INDEPENDENT MODE

Explanation: The operator has used the $TSYS command to place his system in independent mode. (The importance level is 7.)

System Action: The system will only begin new jobs that are both routed to it and are designated to execute in independent mode.

Operator Response: None.

$HASP666 NO JOB(S) FOUND

Explanation: The operator has entered a $DN, $DQ, $OQ, $TALL, or $R command, but there were no jobs in the system upon which the specified action could be taken. (The importance level is 7.)

System Action: Processing continues.

Operator Response: None.

$HASP667 INVALID OPERAND(S) DETECTED

Explanation: The operator entered a $DU command in which one or more operands were found to be invalid. Displays requested by any valid operands have been displayed. (The importance level is 7.)

System Action: Processing continues.

Operator Response: Reenter the command with the correct operands.

$HASP668 NO DEVICE(S) FOUND

Explanation: The operator entered the $DU command, but JES2 could not find any devices with the characteristics specified in the command operands. (The importance level is 7.)

System Action: Processing continues.

Operator Response: If necessary, reenter the command with different operands.

Programmer Response: None.

$HASP669 NO BUFFERS TO DETERMINE IF STD { UCS / FCB }

Explanation: The operator entered a $TPRTn command with either a C=xxxx or a T=xxxx operand. There are not enough buffers available for the $GETBUF routine. (The importance level is 7.)

System Action: Processing continues. No determination was made as to whether the FCB or UCS is standard or non-standard. The DCT remains set by the $T command; however, the DCTPPSWU (UCS operand) or DCTPPSWB (FCB) is not set.

Operator Response: You may want to reset the printer. If non-standard FCB or UCS were set by the $TPRTn command, then the DCT is now marked as having standard FCB or UCS and jobs on the device may run incorrectly.

$HASP670 DEVICE { FCB / UCS } IMAGE id NOT FOUND

Explanation: The operator entered the $TPRTn command. If FCB IMAGE id NOT FOUND appears, the command included the C=id operand, where id is a FCB (forms control buffer) image, but the FCB image could not be found in SYS1.IMAGELIB.

If UCS IMAGE id NOT FOUND appears, the command included the T=id operand, where id is a UCS (universal character set) image, but the UCS image could not be found in SYS1.IMAGELIB.

(The importance level is 7.)

System Action: Processing continues. JES2 cannot determine if the image is standard or non-standard. For FCB, DCTPPSWB is off. For UCS, DCTPPSWU is off.

Operator Response: Reenter the command, specifying an image that is in SYS1.IMAGELIB.

Programmer Response: None.

$HASP671 INVALID -- MUST BE SNA/VTAM LINE

Explanation: The operator entered the $SN command to start a SNA session with another node, but the command is invalid. The command included the LNEn operand, but line n is not a SNA/VTAM line. (The importance level is 7.)

System Action: JES2 rejects the command. Other JES2 processing continues.

Operator Response: Start a SNA/VTAM line if necessary. Then reenter the command.

Programmer Response: None.

$HASP672 NODE Nn N=name [P=SET]

Explanation: The operator entered a $TN command and JES2 has responded with a display of its own node.

Nn — The node number.

N=name — The global network name for the node.

P=SET — Indicates that a password will be transmitted when directly connecting to another node. The password is not displayed.

(The importance level is 7.)

System Action: Processing continues.

Operator Response: None.

$HASP673 NODE Nn { **UNCONNECTED** / **VIA LINEn** / **VIA SPOOL** }

N=name [A=list] [H=JR] [S=list] [P=set]

Explanation: The operator entered a $TN command and JES2 has responded with the current conditions of a node other than the node upon which the command was entered.

Nn — The node number.

N=name — The global network name for the node.

A=list — A list of the command authorities (NET, JOB, SYS, DEV) to be applied to any command arriving from the specific node.

H=JR — All jobs that originated at the specified node, and that are to execute at the local node, are to be held prior to execution.

S=list — A list of the JES2 transmitting and receiving components (JR, JT, SR, ST) allowed to function if and when the specified node directly connects.

P=SET — Indicates that a password is required when the specified node attempts to connect to this node. The password is not displayed.

(The importance level is 7.)

System Action: Processing continues.

Operator Response: None.

$HASP674 text - SYSTEM UNCONNECTED

Explanation: This message indicates one of the following:

- The operator entered a node send ($Nn) command, a global networking ($G) command, or a display message ($DM) command that specified transmission of a command or message to a node not currently part of the network.
- The TOD clocks of the sending and receiving members are not synchronized. The difference exceeds the tolerance specified in &SYNCTOL.

The text field contains the command or message the operator tried to send. (The importance level is 7.)

System Action: Processing continues.

Operator Response: Establish connection with the specified node, and reenter the command. If the receiving member is active, ensure synchronization of the TOD clocks for both members.

$HASP675 LINEn DRAINED, LINE MUST BE STARTED

Explanation: The operator has entered a $SN command for the identified line in an attempt to start networking with another JES2 node. The line is currently drained. (The importance level is 7.)

System Action: Processing continues.

Operator Response: Start the line with a $S command and repeat the $SN command.

$HASP676 LINEn UNAVAILABLE DUE TO SYSTEM RESOURCE SHORTAGE

Explanation: The operator entered a $SN command for the identified line in an attempt to start networking with another JES2 node. There is currently a shortage of system resources necessary to establish another network connection. (The importance level is 7.)

System Action: Processing continues.

Operator Response: Try the $SN command later. Notify the system programmer that this condition has occurred.

$HASP677 LINEn IS NOT TRANSPARENT BISYNCH LINE

Explanation: The operator has entered a $SN command for a line that cannot handle binary data.

System Action: Processing continues.

Operator Response: Check line definitions. If the line is a SNA line, the A=applid operand is required.

$HASP678 LINEn BUSY

Explanation: The operator has entered a $SN command for a line which is currently involved in a JES2 NJE or RJE connection. (The importance level is 7.)

System Action: Processing continues.

Operator Response: Wait for the line to complete its current JES2 function, enter a $P command to drain the line, enter a $S command to start the line, and then reenter the $SN command.

$HASP679 $SN, A=applid REJECTED - { **ALREADY IN SESSION WITH cccccccc** / **JES2/VTAM INTERFACE INACTIVE** / **DUE TO SYSTEM RESOURCE SHORTAGE** }

Explanation: The operator attempted to initiate a SNA application-to-application session using the $SN command. The command is rejected for one of the following reasons:

- An application-to-application session exists (or is pending) with application cccccccc.
- The JES2/VTAM interface has not been activated (by using $S LOGONn).
- No idle SNA line is available or the maximum number of SNA sessions has been reached.

(The importance level is 7.)

System Action: Processing continues.

Operator Response: Take appropriate action to correct conditions 2 or 3 and repeat the $SN command.

$HASP680 [text] NODE NOT IDENTIFIED

Explanation: The operator entered the $TN command. The command is invalid for one of these reasons:

- The command included an invalid node name or node number. The invalid node or number appears in the text field.
- The command included an operand (the A= operand, for example) that is valid only if the operator also enters a node name or node number on the command. The operator did not include a node name or node number.

(The importance level is 7.)

System Action: The command is ignored. Processing continues.

Operator Response: Ensure that a valid node name or node number is used and reenter the command.

$HASP681 Nn Mn $GR jobname INVALID
{DESTINATION / REMOTE} NAME

Explanation: The operator has entered a global route job command ($GR) which was accepted by JES2 and transmitted to the appropriate node for action. The destination (or remote) name specified in the command does not appear in the action node's remote destination table. Nn and Mn identify the system where the operator entered the command; Nn identifies the node and Mn is the JES2-assigned multi-access spool member number. (The importance level is 7.)

System Action: Processing continues.

Operator Response: Ensure that the destination (or remote) name used is known to the action node and reenter the command.

$HASP682 Nn Mn $G {D / H / A / C / R} jobname AUTHORITY ERROR

Explanation: The operator has entered a global command ($G) which was accepted by JES2 and transmitted to the appropriate node for action. The action node's node information table does not have the entry node defined as having job authority. Nn and Mn identify the system where the operator entered the command; Nn identifies the entry node and Mn is the JES2-assigned multi-access spool member number. (The importance level is 7.)

System Action: Processing continues.

Operator Response: Instruct the action node to give job authority (via $TN command) to your node and reenter the $G command.

$HASP683 text NO JOBS OR DATA SETS REROUTED

Explanation: The operator has entered a $R command, and, after a search of the job queue for qualifying jobs, no jobs were found which qualified for rerouting. (The importance level is 7.)

System Action: Processing continues.

Operator Response: Make sure the parameters on the $R command are correct and reenter the $R command.

$HASP684 EVENT TRACE FACILITY NOT INITIALIZED

Explanation: The operator entered a $TRACE command to display or change the state of event trace, but event trace has not been initialized. (The initialization parameter &TRCPGS was not set to a value greater than zero.) (The importance level is 7.)

System Action: Processing continues.

Operator Response: Notify the system programmer.

$HASP685 TRACE LOG NOT ACTIVE

Explanation: The operator entered either $TRACE,P=N to stop the trace log processor or $TRACE,P=I to cause an immediate spin-off of the trace log data set but the trace log was not active. (The importance level is 7.)

System Action: Processing continues.

Operator Response: If an immediate spin-off of the trace log data set is desired, the log must first be started. Enter $TRACE,P=Y to start the trace log and then reenter the original command.

$HASP686 UNDEFINED ID[S] DETECTED

Explanation: The operator has entered a $TRACE,ID= command specifying one or more ids which have not been defined. (The importance level is 7.)

System Action: Processing continues. All defined ids specified in the ID= parameter will be processed.

Operator Response: Check the validity of the ID= parameter. Notify the system programmer of the undefined id(s).

$HASP687 TRACE {ON / OFF} P={Y / N} C=a [ID=id...]

Explanation: The operator has entered a $TRACE command to display or to change the state of event trace. The message text shows the current state of event trace: ON/OFF designates whether or not event trace is active, Y/N designates whether or not trace logging is active, C=a indicates the current SYSOUT class of the trace log and ID=id... indicates all defined, active ids. (The importance level is 7.)

System Action: Processing continues.

Operator Response: None.

$HASP688 [jjjj] jobname OUTGRP=grpid.joeid1.joeid2
P=pp S=[Y/N] Q=x [,DMP]

D=[Rnnnn/Unnn/LOCAL/name] RECORDS nnnn OF mmmm
PAGES nnnn OF mmmm

[B=[Y/N]] [F=cccccccc] [O=overlay]
[T=ucs][C=fcb][W=writer]
[PRMODE=cccccccc] [DMND]

Explanation: The operator entered the $L or $TO command. This message displays the current output characteristics for each JOE specified on the command. Asterisks (****) appear in the variable field for any characteristic that is not the same for all the data sets in this JOE. (The importance level is 7.)

The fields in the message text are:

jjjj
The job ID that JES2 assigned.

jobname
The name of the job specified on the JOB statement.

OUTGRP=grpid.joeid1.joeid2
The job output element. Where:

grpid — the group id. This identifier is a 1 to 8 alphameric name that is specified by the user in his JCL, or if not specified by the user, is generated by JES2.

joeid1 — is a number assigned by JES2 and is used to identify how many job output elements there are within the output group.

joeid2 — is a number assigned by JES2 that determines the number of job output elements within the output group identified by groupid (grpid) and the second identifier (joeid1).

P=pp
The JES2 scheduling priority.

S=

Y
SELECT=YES- the output group is selectable for print/punch processing.

N
SELECT=NO- the output group is not selectable for print/punch processing.

Q=
The job class.

DMP
If DMP appears in the message text, the job output element (JOE) is on the spool offload queue.

D=

Rnnnn -- A remote destination at the local node.
Unnn -- A special local device.
LOCAL -- Any local device.
name -- A symbolic name that your installation defined.

RECORDS nnnn OF mmmm
PAGES nnnn OF mmmm

nnnn
The original record or page count represented by this job output element.

mmmm
The count of records or pages still to be printed at the time of the last interruption.

If nnnn and mmmm are not equal, this job output element was partially processed at an earlier time, but that processing was interrupted.

B=
Y if printed output is to be burst into separate sheets.
N if printed output is not to be burst into separate sheets.

F=cccccccc
The 1 to 8 character forms name for this output.

O=overlay
The forms overlay frame for this output.

T=ucs
The universal character set for this output.

C=fcb
The forms control buffer for this output.

W=writer
The external writer specified for this output.

PRMODE=cccccccc
indicates the processing mode of the data set.

DMND
This notation appears in the keyword field when the keyword specification requires demand setup, this indicates those characteristics that require demand setup processing.

System Action: JES2 processing continues.

Operator Response: None.

Programmer Response: None.

$HASP689 [JOB/STC/TSU] [jjjj] jobname OUTGRP NOT FOUND

Explanation: The operator entered a $Cx,OUTGRP, $Lx,ALL, $Cx,ALL, or a $TO command (x=J, S, or T) and the system was unable to find the specified output groups, the specified output

group was being processed, or the output was held or did not exist. (The importance level is 7.)

System Action: The command is ignored for the specified job and processing continues.

Operator Response: None.

$HASP690

{NOT DEFINED / NO ROUTINES}

EXITnnn

{ACTIVE / INACTIVE} {ENABLED / DISABLED} **TRACE=**{ON / OFF}

Explanation: This message displays the status of EXITnnn after the operator enters the $DEXIT or $TEXIT command. (The importance level does not apply to this message.)

The meaning of each field in the message text is:

NOT DEFINED
There is no module loaded that uses the $EXIT macro instruction to invoke EXITnnn.

NO ROUTINES
There are no exit routines named for EXITnnn on the EXITnnn initialization statement.

ACTIVE
One of EXITnnn's exit routines is now executing.

INACTIVE
None of EXITnnn's exit routines are now executing.

ENABLED
EXITnnn is enabled.

DISABLED
EXITnnn is disabled. JES2 will not call EXITnnn's exit routines.

TRACE=ON
JES2 traces EXITnnn if trace id 13 is activated.

TRACE=OFF
JES2 does not trace EXITnnn.

System Action: Processing continues.

Operator Response: None.

Programmer Response: None.

$HASP691 COMMAND TERMINATED - cmd

Explanation: A program check occurred while JES2 was processing the command identified in the message text. JES2 stopped processing that command, and the JES2 command processor recovery routine has received control. (The importance level does not apply to this message.)

System Action: JES2 recovery processing continues.

Operator Response: Notify the system programmer.

Programmer Response: Follow your installation's procedures for identifying and correcting the problem.

$HASP692 Nn Mn $GR jobname INVALID ORIG NODE NAME - nodename

Explanation: The operator at multi-access spool member Mn, node Nn, entered the $GR command with the O=nodename operand. The nodename specified is not defined in the node information table of the node to which the command was sent. (The importance level is 7.)

System Action: JES2 does not execute the command.

Operator Response: Reenter the command with a valid nodename in the O= operand.

Programmer Response: None.

$HASP693 Nn Mn $GR jobname JOB NOT FOUND

Explanation: The operator at multi-access spool member Mn, node Nn, entered the $GR command for the job named in the message text, but JES2 could not find the job. (The importance level is 7.)

System Action: JES2 processing continues.

Operator Response: None.

Programmer Response: None.

$HASP694 Nn Mn $GR jobname MULTIPLE JOBS FOUND

Explanation: The operator at multi-access spool member Mn, node Nn, entered the $GR command for the job named in the message text, but JES2 found more than one job with that jobname. (The importance level is 7.)

System Action: JES2 does not execute the command.

Operator Response: Reenter the command, specifying Jjjjj for a batch job, Sjjjj for a started task, or Tjjjj for a TSO user, where jjjj is the number JES2 assigned the job at the node where it originated.

Programmer Response: None.

$HASP695 [jjjj] jobname {TOO FEW JOES / JOB IS BUSY} **- RETRY LATER**

Explanation: The operator issued a $TO command, and one of the following conditions occurred.

TOO FEW JOES
There were not enough job output elements (JOEs) available to satisfy the request.

JOB IS BUSY
The indicated job is currently being processed by JES2.

System Action: Command processing continues although the indicated job is ignored.

Operator Response: If TOO FEW JOES appeared in the message, do what you can to reduce the number of jobs queued for output processing. Notify the system programmer.

If JOB IS BUSY appeared in the message, retry the request when the current processing is complete.

Programmer Response: If the problem continues, a cold start is required to increase the value specified on the &NUMJOES initialization statement and restart JES2.

$HASP696 { JOB / STC / TSU } jjjj jobname SPOOL(S) NOT AVAILABLE

Explanation: The operator issued a job list command ($C, $D, $L, or $O) for a single job or a range of jobs. If a spool was not available for any of the jobs within the range, those jobs cannot be displayed or processed.

System Action: JES2 processing continues.

Operator Response: Notify the system programmer.

Programmer Response: Determine if the volume should be made available and proceed accordingly.

$HASP697 COMMAND PURGED - SHARED QUEUES UNAVAILABLE

Explanation: The operator entered a command that requires exclusive control of the JES2 shared queues. These queues are not available because recovery processing is occurring on another system in the multi-access spool configuration.

System Action: The command is not executed.

Operator Response: Ensure that another system in the multi-access spool configuration has not failed while holding the checkpoint data set lock. If one has, take corrective action as described under the $ESYS,RESET operator command. If another system has not failed while holding the checkpoint data set lock, reissue the command.

$HASP698 NO name PCE FOUND

Explanation: The operator entered the $TPCE command for the processor named in the message text, but there is no PCE (processor control element) for that processor. At initialization, JES2 determined that the processor was not required and did not create the PCE. (The importance level does not apply to this message.)

System Action: JES2 ignores the command.

Operator Response: None.

Programmer Response: None.

$HASP699 CONFLICTING OPERAND(S) DETECTED

Explanation: The operator entered a JES2 command that is invalid for one of these reasons:

- The command includes operands that are mutually exclusive.
- The command includes operands that are logically inconsistent with conditions in the current JES2 environment. For example, this message appears if the operator enters the $DUMP command for a started task that has not yet executed.

(The importance level does not apply to this message.)

System Action: JES2 ignores the command.

Operator Response: Reenter the command with the correct operands.

Programmer Response: None.

$HASP700 devname NOT STARTED - FSS=fssname -

{ JCL PROCESSING SERVICES UNAVAILABLE / PROCESSING TO START FSS FAILED / FSS FAILED TO CONNECT / START FSA ORDER UNSUCCESSFUL / STORAGE UNAVAILABLE FOR FSACB / START DEVICE ORDER UNSUCCESSFUL / CROSS-MEMORY SERVICES UNAVAILABLE }

Explanation: The indicated device that is controlled by the functional subsystem cannot complete start processing. The device remains in a drained state.

System Action: Normal processing continues with the device drained. If the functional subsystem started, it will remain active.

Operator Response: Notify the system programmer. You can reissue the $S command to start the device. If the problem cannot be corrected, the device can be put into JES mode via the $T command and then started with the $S command as a JES2-managed device.

JCL PROCESSING SERVICES UNAVAILABLE
JES2 previously discovered an error in JCL processing and turned off extended JCL handling.

Operator: This device will be available only as a JES2-managed device. Use the $Tdev,MODE=JES command to put this device in JES2 mode.

System Programmer: Correct the JDT library. After a warm start, this device can be a functional subsystem managed device.

PROCESSING TO START FSS FAILED
SVC 34 via the MGCR macro failed.

System Programmer: Refer to the $HASP703 message for additional error information. Determine why SVC 34 failed using the return code in $HASP703 message. See *OS/VS2 Supervisor Services and Macro Instructions* for a description of the return code.

FSS FAILED TO CONNECT
The functional subsystem did not connect within a predetermined amount of time. This could be caused by a JCL error in the procedure to start the functional subsystem or by problems in the functional subsystem.

System Programmer: This message is accompanied by the $HASP703 message or other messages indicating the error condition.

Problem Determination: Table I, item 2, 7, 13, 29.

START FSA ORDER UNSUCCESSFUL
The functional subsystem could not process the order to start the functional subsystem application (FSA) successfully.

System Programmer: If the device was started under an already active FSA, ensure that the FSS supports multiple FSAs; if not, change JES2 initialization parameters to specify a unique FSS procedure name for this device. Additional information can be found in the $HASP703 message.

Problem Determination: Table I, item 2, 7, 13, 29.

STORAGE UNAVAILABLE FOR FSACB
$GETMAIN for the FSA control block failed.

System programmer: See the return code issued in the $HASP703 message and refer to *OS/VS2 Supervisor Services and Macro Instructions* for an explanation of the return code.

START DEVICE ORDER UNSUCCESSFUL
The functional subsystem could not process the order to start the device successfully.

System Programmer: See the accompanying $HASP703 message for additional information.

Problem Determination: Table I, item 2, 7, 13, 29.

CROSS MEMORY SERVICES UNAVAILABLE
The cross memory authorization index reserve was not successfully set during initialization. Because of the lack of communication services, the functional subsystem cannot be started.

System Programmer: See the $HASP856 message for additional information on the error condition.

$HASP701 devname NOT DRAINED - FSS=fssname -
{STOP DEVICE ORDER UNSUCCESSFUL
STOP FSA ORDER UNSUCCESSFUL
FSA FAILED TO DISCONNECT}

Explanation: The indicated device controlled by the functional subsystem fssname cannot be completely drained. The device remains in the last phase completed successfully. That is, if the functional subsystem application (FSA) is not successfully stopped after the stop device order is successful, the device is not restarted.

STOP DEVICE ORDER UNSUCCESSFUL
The functional subsystem application could not successfully process the order to stop the device.

STOP FSA ORDER UNSUCCESSFUL
The functional subsystem could not successfully process the order to stop the functional subsystem application.

FSA FAILED TO DISCONNECT
The functional subsystem application did not disconnect within a predetermined amount of time after a STOP FSA order was issued.

System Action: Normal operation continues. Nothing is selected by the indicated device. The device is left in the draining state.

Operator Response: Notify the system programmer. The $P command can be issued for the device again. If this message appears during $PJES2 processing the system will not withdraw and a $PJES2,ABEND may be required to withdraw JES2 from the system.

Programmer Response: If this message is accompanied by the $HASP703 message, use the return code issued in $HASP703 and the appropriate FSS documentation to analyze the error. Use the MVS cancel command to cancel the functional subsystem address space with a dump.

Problem Determination: Table I, item 2, 7, 13, 16, 29.

$HASP702 FSS fssname NOT STOPPED -
{STOP FSS ORDER UNSUCCESSFUL
FSS FAILED TO DISCONNECT}

Explanation: The functional subsystem could not be stopped, but all functional subsystem applications (FSAs) associated with this functional subsystem have successfully stopped.

STOP FSS ORDER UNSUCCESSFUL
The functional subsystem could not successfully process the order to stop the functional subsystem.

FSS FAILED TO DISCONNECT
The functional subsystem did not disconnect within a predetermined amount of time after a STOP FSS order was issued.

System Action: JES2 does not withdraw from the system while functional subsystems remain active.

Operator Response: Notify the system programmer. A $PJES2,ABEND is required to withdraw JES2 from the system.

Programmer Response: If this message is accompanied by the $HASP703 message, use the return code issued in $HASP703 and the appropriate FSS documentation to analyze the error. Use the MVS cancel command to cancel the functional subsystem address space with a dump.

Problem Determination: Table I, item 2, 7, 13, 16, 29.

$HASP703 devname FSI ERROR - RT=nn
{MGCR SERVICE FAILED
GETMAIN SERVICE FAILED
ORDID=nnnn REQUEST FAILED
ORDID=nnnn RESPONSE FAILED}

Explanation: JES2 (HASPFSSP) has detected an invalid or unsuccessful return code returned from a system or functional subsystem interface (FSI) service routine during FSI processing. The return code is displayed as the RT= value. The text following the message indicates the service which was detected as failing. If the text indicates an FSI order failure, ORDID= gives the ID of the order that failed.

System Action: The system action depends upon the current processing being performed. If the service failure is detected

during functional subsystem (FSS) start, drain, or stop processing, this message is usually followed by $HASP700, $HASP701, or $HASP702. Refer to this accompanying message for the appropriate system action taken. If the failure is detected during functional subsystem interface (FSI) order (JES2 command) processing, this message is followed by $HASP152, and system operation continues.

Operator Response: Notify the system programmer. If the $HASP703 message is followed by $HASP700, $HASP701, or $HASP702, refer to the operator response for that follow-up message. If the $HASP703 message is followed by $HASP152, reissue the JES2 command.

Programmer Response: Determine the cause of the service failure from the return code displayed in the message. Correct the problem and refer to the action for $HASP700, $HASP701, or $HASP702, if appropriate.

Note: If the return code is from the FSI order service, it can be found in the appropriate FSS documentation. If the FSS is the print services facility, the return code is documented in *Print Services Facility Diagnosis Guide and Reference.*

Problem Determination: Table I, item 2, 7, 13, 16, 29.

$HASP704 jobname DATA SET UNPROCESSABLE-OUTGRP.grpid.joeid1.joeid2 HELD

Explanation: A data set was sent to a functional subsystem application under control of the functional subsystem, but the data set could not be processed. As a result, the output group was marked unselectable and was requeued.

System Action: Processing continues.

Operator Response: Notify the system programmer. After the problem that caused the data set to be unprocessable is fixed, make the data set selectable using the $TO command.

Programmer Response: Correct the problem that caused the data set to be unprocessable (for example, a resource needed by the data set could not be found in library).

Problem Determination: Table I, items 4, 13.

$HASP725 MAXIMUM OF xxx SYSTEM PRMODES HAS BEEN SPECIFIED -- COMMAND REJECTED

Explanation: The operator entered a $T command to add PRMODES to a printer or punch. No storage is available in the system PRMODE table and the command is rejected. The value 'xxx' is the maximum number of PRMODES that can be specified for this system. Before the $T command can be processed, the number of distinct PRMODES assigned to the devices must be reduced. (The importance level is 7.)

System Action: Processing continues.

Operator Response: Issue $T PRTn or $T PUNn commands to reduce the number of currently active PRMODES in the system. For a PRMODE entry in the table to become free, no printer or punch can be using the PRMODE.

$HASP750 JES2 FSI ERROR. CODE=cde, RC=rc (text)

Explanation: A catastrophic error has occurred within the JES2 functional subsystem interface (FSI) support routines (HASPFSSM) for which JES2 has issued a $ERROR macro. The message is issued from the HASPFSSM catastrophic error routine, FSMCATER, invoked via the $ERROR macro.

The code field, reason code, and text are described below: In register 15 the first four digits is the return code (RT), and the last four digits is the reason code (RC). See diagram below:

```
0008|0001
 rt   rc
```

cde	text
$F00	'GETCELL SERVICES ERROR'.

Explanation: An error occurred within the FSMGETQC routine in module HASPFSSM. A reason code is displayed and placed in register 15 indicating one of the following errors:

rc	desc
01	The number of cells to get (passed via $GETQC in R1) is less than or equal to 0 or greater than QCTLIMIT.
02	A SETLOCK RELEASE request failed. Return code from SETLOCK is in bits 0-15 of the reason code.
03	The GETCELL service failed. Return code from GETCELL is in bits 0-15 of the reason code.

cde	text
$F01	'FREECEL SERVICES ERROR'.

Explanation: An error occurred within the FSMFREQC routine in module HASPFSSM. A reason code is set indicating one of the the following errors:

rc	desc
01	The number of cells to get (passed via $FREQC in R1) is less than or equal to 0 or greater than QCTLIMIT.
02	The FREECELL service failed. Return code from FREECELL is in bits 0-15 of the reason code.

cde	text
$F02	'GETCELL EXTENSION ERROR'

Explanation: An error occurred within the FSMBLDQC routine in module HASPFSSM. A reason code is set indicating one of the following errors:

rc	desc
06	The GETMAIN request for the (additional) cell pool failed. Return code from GETMAIN is in bits 0-15 of the reason code.
05	The BLDCPOOL service failed. Return code from BLDCPOOL is in bits 0-15 of the reason code.

cde **text**

$F03 'QUICKCELL INIT ERROR'.

Explanation: An error occurred within the FSMQCT routine in module HASPFSSM. A reason code is set indicating the following error:

rc **desc**

01 A GETMAIN request failed (via $GETMAIN). Return code from GETMAIN is in bits 0-15 of the reason code.

cde **text**

$F04 'SJF REQUEST ERROR ON GETDS'.

Explanation: An error occurred within the FSMSWBRD routine in module HASPFSSM. A reason code is set indicating one of the following errors:

rc **desc**

01 The SJF EXTRACT request (in subroutine FSWBEXT) failed. Return code from the SJF request is in bits 0-15 of the reason code.

02 The SJF UPDATE request failed. Return code from the SJF request is in bits 0-15 of the reason code.

04 The SJF TERMINATE request (in subroutine FSMSJTER) failed. Return code from the SJF request is in bits 0-15 of the reason code.

cde **text**

$F05 'SJF REQUEST ERROR ON RELDS'.

Explanation: An error occurred within the FSMSWBDL routine in module HASPFSSM. A reason code is set indicating one of the following errors:

rc **desc**

03 The SJF DELETE request failed. Return code from the SJF request is in bits 0-15 of the reason code.

04 The SJF TERMINATE request (in subroutine FSMSJTER) failed. Return code from the SJF request is in bits 0-15 of the reason code.

System Action: A SDUMP is requested with the title equal to the $HASP750 message text and ABEND 02C is issued. The functional subsystem (FSS) recovery (ESTAE) routine may attempt recovery or terminate the FSS address space. If the FSS recovers, normal processing resumes from the point of recovery. If the FSS terminates, normal JES2 processing continues but the device operated by the failed functional subsystem/functional subsystem application (FSS/FSA) is drained.

Operator Response: Notify Systems Programmer. Wait for the FSA and/or FSS task to recover, or terminate and the JES2 device to drain. IF the FSS is terminated, attempt tc restart the device which was being operated by the failed FSA/FSS via the $S command. If the device is not restarted or fails again, and if the device can be directly managed by JES2, then the device may be switched to JES mode via the $Tdev,MODE=JES command, followed by the $Sdev commands.

Programmer Response: Analyze the message(s) issued and the dump requested from the JES2 or FSS address space. Look for the reason code and and additional service routine return codes in register 15 at the time of the abend. If the reason code indicates a temporary out of storage condition, take action to alleviate the shortage and restart the device.

Problem Determination: Table I, items 2, 7, 16, 18, 29, 33

Note: Quickcell services return codes are documented under the 6FB abend code in *VS2 System Codes*.

$HASP800 THE JES2 EVENT TRACE LOG IS NOW ACTIVE

Explanation: The JES2 trace log processor has been started, or restarted as the result of either a $TRACE,P=Y operator command, or LOG key word in the TRACE initialization statement. The trace log processor will automatically start up after a JES2 restart if trace data was being processed at the time of failure. (The importance level is 3.)

System Action: The trace table entries being produced by event trace are now being written to the trace log data set for later printing.

Operator Response: None.

$HASP801 JES2 EVENT TRACE LOG QUEUED TO CLASS c [(HELD)]

Explanation: The JES2 trace log data set was "spun-off" because either a $TRACE,P=I or a $TRACE,P=N operator command was issued, or because the line limit (set by the &TRLOGSZ initialization parameter) of the data set was reached. (The importance level is 3.)

System Action: The contents of the event trace log have been written to a SYSOUT data set of SYSOUT class c. The data set is (HELD) if the SYSOUT class was defined as a held class during JES2 initialization. If this message is in response to a $TRACE,P=N command, the $HASP802 message will follow.

Operator Response: None.

$HASP802 THE JES2 EVENT TRACE LOG IS INACTIVE

Explanation: A $TRACE,P=N command was issued after all trace table entries (if any) were written to the trace log data set. Message $HASP801 has been issued. (The importance level is 3.)

System Action: The trace entries produced by event trace will no longer be written to the trace log data set. If event trace is still in effect ($TRACE,ON), then trace entries continue to be added to the JES2 trace tables for subsequent examination in a system dump, if necessary.

Operator Response: None required. To restart the trace log processor, issue the $TRACE,P=Y command.

$HASP803 JES2 EVENT TRACE LOGGING TERMINATED -- INSUFFICIENT STORAGE IN CSA (SP231)

Explanation: An attempt to acquire storage for an input/output table (IOT) has failed. This storage is necessary for the processing of the trace log data set. (The importance level is 3.)

System Action: The same processing occurs as described under message $HASP802. The log processor is terminated. A display of the event trace will indicate P=N.

Operator Response: Notify the system programmer of this message. When it is determined that sufficient storage is available to continue, restart the trace log processor by issuing the $TRACE,P=Y command. All trace table entries that were being processed at the time of the failure will be reprocessed when the trace log processor is restarted.

$HASP804 THE JES2 EVENT TRACE LOG IS EMPTY

Explanation: A $TRACE,P=I command was issued when no trace data was available. (The importance level is 3.)

System Action: Processing continues.

Operator Response: Enter $TRACE,D to display the status of tracing and the active trace IDs. If necessary, change the IDs that are traced or active.

$HASP805 HOSPOOL SUB-TASK ABEND -- COMPLETION CODE=cde

Explanation: An error caused a HOSPOOL subtask to abend with system completion code cde. (The importance level does not apply to this message.)

System Action: The subtask's recovery routine gets control and the sub-task continues processing. If the abend occurred during JES2 initialization, JES2 initialization terminates after all sub-tasks have finished execution. If the abend occurred during normal JES2 BADTRACK processing, JES2 removes from allocation the track group that it was processing. If the abend occurred during processing for a spool command, the volume is unallocated.

Operator Response: Notify the system programmer.

Programmer Response: Probable system error. See *VS2 System Codes* for the meaning of system completion code cde.

$HASP806 VOLUME volser DRAINED

Explanation: The operator issued a $P SPOOL command. The $HASP806 message is sent to the requesting system when JES2 has completed the dynamic deallocation of the spool identified by volser. JES2 no longer keeps a record of the spool volume's existence. (The importance level is 7.)

System Action: JES2 processing continues without the spool volume.

Operator Response: You may remove the volume from the JES2 environment.

$HASP810 VOLUME volser INVALID ON SYSTEM xxxx - REASON CODE = yy

Explanation: This message is issued at the system initiating the start spool ($S SPOOL) command because the system indicated by xxxx cannot start the spool volume identified by volser because of reason code yy. The system that had the error received a full descriptive message explaining the error.

The reason codes that are issued in the message to the command originator indicating an error on another system are:

yy	Description
4	volume not mounted
8	duplicate spool volumes
12	allocation error
16	formerly mounted spool volume not mounted
20	extent error
24	previously mounted spool volume not formatted.

(The importance level does not apply to this message.)

System Action: Returns the volume to its state (drained or inactive) before the command was issued.

Operator Response: When the problem is corrected on the other system, reissue the start spool ($S SPOOL) command.

$HASP811 VOLUME volser REQUIRES MORE CONTIGUOUS SPACE IN THE TGM - REPLY Y or N TO CONTINUE START PROCESSING

Explanation: There is not enough contiguous space in the master TGM (track group map) to map all of the track groups on the volume identified by volser. Message $HASP850 accompanies this message showing how many of the track groups on this volume are mapped in the master TGM. (The importance level does not apply to this message.)

System Action: Normal processing continues, but the $S SPOOL command generates no further action until the operator replies.

Operator Response: Reply Y or N. If the reply is Y, the volume is started using only the number of track groups indicated in the $HASP850 message. If the reply is N, the volume is drained.

$HASP825 SPOOL volser REQUIRES volid [,volid] .... TO PROCESS

Explanation: A $P SPOOL command was issued to drain the spool identified by volser. However, jobs which have space allocated on spool volser also have spool space allocated on inactive (that is, inaccessible) spool volumes (volid,...), and therefore normal processing of those jobs cannot occur. (The importance level does not apply to this message.)

System Action: JES2 processing continues.

Operator Response: Notify system programmer.

Programmer Response: Reactivate the volume(s) needed (volid,...) to DRAIN volser, or issue a different spool command. (See the section on Controlling Spool Volumes in *Operator's Library: JES2 Commands*). Otherwise, the spool identified by volser will remain in a DRAINING state.

$HASP850 nnnn TRACK GROUPS ON volser

Explanation: This message shows that nnnn track groups are mapped in the master TGM (track group map) for the HASPACE data set on spool on spool volume volser.

If message $HASP811 or $HASP854 accompany this message, there was not enough contiguous space in the master TGM to map all of the track groups on spool volume volser. JES2 mapped nnnn of the track groups, but nnnn is less than the total number of track groups on the volume. (The importance level does not apply to this message.)

System Action: Normally, JES2 processing continues. However, if message $HASP811 or $HASP854 accompany this message, JES2 waits for the operator to reply to message $HASP811 or $HASP54.

Operator Response: None.

Programmer Response: None.

$HASP851 nnnn TOTAL TRACK GROUPS MAY BE ADDED

Explanation: There is space in the master TGM (track group map) to map nnnn more track groups. This space is available to map track groups on spool volumes that are added during future warm starts, or using the start spool command. The $HASP850 and $HASP852 messages will give an exact map of how the space is being used. These messages will be written to the system log during JES2 initialization, or when a volume is started or drained. (The importance level does not apply to this message.)

System Action: JES2 processing continues.

Operator Response: None.

Programmer Response: None.

$HASP852 nnnn CONTIGUOUS TRACK GROUPS MAY BE ADDED

Explanation: There is contiguous space in the master TGM to map nnnn more track groups. This space is available to map track groups on spool volumes that are added by the $S SPOOL command. This message will appear for each unallocated section in the track group map. This message is produced in conjunction with $HASP850 and $HASP851 to map out the track group map. (The importance level does not apply to this message.)

System Action: JES2 processing continues.

Operator Response: None

$HASP852 volser IS NOT MOUNTED

$HASP853 REPLY OPTION (U, N, OR PURGE)

Explanation: JES2 issues this pair of messages during a warm start to inform the operator that spool volume volser was mounted during earlier JES2 processing, but it is not mounted and online now. (The importance level does not apply to this message.)

System Action: JES2 waits for the operator to reply.

Operator Response: Notify the system programmer and reply U, or N, or PURGE:

- If you reply U, JES2 processing continues without the volume. JES2 cannot access the jobs on that volume until after you mount the volume and restart JES2.
- If you reply N, JES2 terminates.
- If you reply PURGE, JES2 processing continues without the volume. JES2 purges jobs that are on that volume. (That is, JES2 removes control blocks for those jobs from the checkpoint data set, and so forth.)

Programmer Response: None.

$HASP853 REPLY GO, QUIT OR PURGE

Explanation: JES2 issues this message during a configuration-wide warm start to inform the operator that a spool volume was mounted during earlier JES2 processing, but is not mounted and online now. This message is accompanied by $HASP854. (The importance level does not apply to this message.

System Action: JES2 waits for the operator to reply.

Operator Response: Notify the system programmer and reply GO, QUIT, or PURGE.

- If you reply GO, JES2 continues without the volume, and places the volume in an inactive state are inaccessible until the volume is remounted.
- If you reply QUIT, JES2 terminates.
- If you reply PURGE, JES2 purges all jobs on the volume and drains the volume.

$HASP854 &NUMTG EXCEEDED WHILE ALLOCATING VOLUME volser - REPLY GO, QUIT OR PURGE

Explanation: This message appears during JES2 initialization. There is not enough space in the master track group map (TGM) to map all of the track groups on the spool volume identified by volser. (The importance level does not apply to this message.)

System Action: Message $HASP850 accompanies this message, showing how many of the track groups on this volume are mapped in the master TGM. JES2 waits for the operator to reply.

Operator Response: Reply GO, QUIT, or PURGE.

- If you reply GO, JES2 initialization continues and reduces the extents for the volume in order to fit it into the TGM. If this option is taken, no subsequent volumes will fit in the TGM unless some volumes are subsequently drained.
- If you reply PURGE, JES2 initialization continues, but the volume is not used.
- If you reply QUIT, JES2 terminates.

$HASP854 &NUMTG EXCEEDED WHILE ALLOCATING VOLUME volser - REPLY Y OR N TO CONTINUE

Explanation: This message appears during JES2 initialization. There is not enough space in the master TGM (track group map) to map all of the track groups on spool volume volser. (The importance level does not apply to this message.)

System Action: Message $HASP850 accompanies this message, showing how many of the track groups on volume volser are mapped in the master TGM. JES2 waits for the operator to reply.

Operator Response: Reply Y or N. If you reply Y, JES2 initialization continues, but JES2 will allocate only those track groups that are mapped in the master TGM. If you reply N, JES2 terminates.

Programmer Response: None.

$HASP855 JCL PROCESSING LIMITED DUE TO ERROR IN SYSTEM JDT

Explanation: During JES2 initialization, scheduler JCL facility (SJF) services were invoked that returned a non-zero return code. Due to the error in the JCL definition table (JDT) library, full JCL processing is not allowed by JES2. (The importance level does not apply to this message.)

System Action: JES2 will ask the operator if JES2 initialization should continue, and attempt to take a dump if the SJF service did not take one. If JES2 initialization is continued with the error, then JES2 bypasses all future use of SJF processing, and JES2 will not honor the JCL OUTPUT statement.

Operator Response: Notify the system programmer.

Programmer Response: Correct the JDT library.

$HASP856 JES2 FSS SERVICES PROHIBITED DUE TO CROSS MEMORY AXxxx ERROR, RC=nn

Explanation: JES2 failed to establish the cross memory authorization index (AX) required for support of the functional subsystems. An error with return code nn was indicated during an AXRES or AXSET request.

System Action: Functional subsystem address spaces will not be started by JES2.

Operator Response: Notify the system programmer. If the functional subsystem supported device(s) are also supported in JES mode, you may issue the $T command to set the device(s) to MODE=JES. The device(s) are then available for direct JES2 use.

Programmer Response: Determine the reason for the AXRES or AXSET error and correct it. If desired, stop and restart JES2. See *OS/VS2 Supervisor Services and Macro Instructions* for a description of the return code.

Problem Determination: Table I, items 2, 7, 29.

$HASP857 EXITnnn NOT DEFINED WITHIN CURRENTLY LOADED JES2 MODULES

Explanation: There is a JES2 initialization statement for EXITnnn, but that exit is not defined. That is, there is no module loaded that issues the $EXIT macro instruction for exit point nnn. (The importance level does not apply to this message.)

System Action: JES2 issues message $HASP441 and waits for the operator to reply.

Operator Response: Notify the system programmer and reply to message $HASP441. If you reply Y, JES2 ignores the EXITnnn initialization statement. If you reply N, JES2 issues message $HASP428 and terminates.

Programmer Response: If you want one of the loaded modules to define EXITnnn, change the module so that it issues the $EXIT macro instruction for exit point nnn. If no loaded module is to use EXITnnn, remove the EXITnnn initialization statement.

$HASP858 EXIT ROUTINE name (EXITnnn) NOT FOUND

Explanation: The exit routine name that appears in the message text was specified on the EXITnnn initialization statement, but JES2 could not find that routine. Either there is no LOAD initialization statement for the module containing the routine, or there is no $ENTRY macro instruction defining the routine name as an entry point. (The importance level does not apply to this message.)

System Action: JES2 issues message $HASP441 and waits for the operator to reply.

Operator Response: Notify the system programmer. Reply Y or N to message $HASP441. If you reply Y, JES2 ignores the missing exit routine and processes any other exit routines specified for EXITnnn. If you reply N, JES2 issues message $HASP428 and terminates.

Programmer Response: Determine why the exit routine cannot be found and correct the problem.

$HASP859 &NUMTG INSUFFICIENT FOR INITIALIZATION

Explanation: The master TGM (track group map) is not large enough for the track groups on the primary spool volume. (The importance level does not apply to this message.)

System Action: JES2 terminates.

Operator Response: Notify the system programmer.

Programmer Response: Increase the value specified for &NUMTG, or increase the value specified for &TGSIZE, or decrease the size of the HASPACE data set on the primary spool volume.

$HASP860 &NUMTG EXCEEDED MAXIMUM OF nnnnn

Explanation: The buffer size specified on the &BUFSIZE initialization parameter prevents JES2 from mapping more than nnnnn track groups in the IOT (input output table). The number of track groups specified on the &NUMTG initialization parameter exceeds nnnnn. (The importance level does not apply to this message.)

System Action: JES2 terminates.

Operator Response: Notify the system programmer.

Programmer Response: Increase the value specified for &BUFSIZE, or decrease the value specified for &NUMTG. Restart JES2.

$HASP861
INVALID BADTRACK STATEMENT { VOL volser / ADDR bbcchh }

Explanation: A BADTRACK initialization statement is invalid:

- If VOL volser appears in the message text, the volume serial number (volser) specified on the initialization statement is invalid.
- If ADDR bbcchh appears, the range of track addresses specified on the initialization statement includes a track address that is invalid or is not on the specified volume. The variables are:

bb
The bin identifier, or zero.

cc
The cylinder identifier.

hh
The head identifier.

(The importance level does not apply to this message.)

System Action: JES2 ignores the invalid BADTRACK initialization statement.

Operator Response: Notify the system programmer.

Programmer Response: Correct the invalid BADTRACK initialization statement.

$HASP862 INSUFFICIENT CSA (SP241) FOR OUTPUT INITIALIZATION STATEMENT PROCESSING

Explanation: While JES2 was processing OUTPUT initialization statements, JES2 issued the GETMAIN macro instruction for storage in CSA (subpool 241), but the GETMAIN failed. (The importance level does not apply to this message.)

System Action: JES2 terminates.

Operator Response: Notify the system programmer.

Programmer Response: Increase the amount of storage available in subpool 241 and restart JES2.

$HASP863 INVALID DESTINATION ON OUTPUT cccc INITIALIZATION STATEMENT

Explanation: The OUTPUT initialization statement identified in the message text includes a name in the DEST= parameter, but JES2 cannot resolve that name to an internal route code. (The importance level does not apply to this message.)

System Action: JES2 terminates.

Operator Response: Notify the system programmer.

Programmer Response: Correct the destination name specified and restart JES2.

$HASP864 INITIALIZATION TERMINATED BY USER EXIT xx

Explanation: This message is issued as a result of the pre-initialization exit (0), or the initialization parameter statement exit (19), or the post-initialization exit (24) having made the decision to terminate JES2. (The importance level does not apply to this message.)

System Action: Processing continues and initialization terminates.

Operator Response: Notify the system programmer.

Programmer Response: Correct the problem that the user exit 0 found or change the initialization deck to disable Exit 19 or 24.

$HASP869 mod NOT IN LPA

Explanation: Module mod was selected as the subsystem support module. However, module mod is not resident in the LPA (link pack area).

System Action: The system terminates JES2.

Operator Response: Notify the system programmer.

Programmer Response: Make sure that module mod is in the LPA or select another subsystem support module.

$HASP869 NO VALID HASPSSSM MODULE FOUND

Explanation: JES2 has determined that the module called 'HASPSSSM' and any modules specified via the HASPSSSM initialization statement are not loadable, not in LPA, or invalid. (The importance level does not apply to this message.)

System Action: Issue $HASP428 and terminate JES2.

Operator Response: Notify system programmer.

Programmer Response: Make sure that module HASPSSSM is loadable, valid, in the LPA, or select another subsystem support module.

$HASP871 WARNING - SYS1.IMAGELIB FAILED TO OPEN

Explanation: During JES2 initialization, an error was encountered attempting to open the data set SYS1.IMAGELIB. (The importance level does not apply to this message.)

System Action: Message $HASP872 follows, requesting operator action.

Operator Response: None. See message $HASP872.

Programmer Response: Determine the cause of the error and take corrective action.

Note: Data management message IEC119I may have been issued to aid in problem determination.

$HASP872 REPLY 'Y' TO CONTINUE INITIALIZATION, 'N' TO TERMINATE OR 'R' TO RETRY

Explanation: JES2 encountered an error during initialization while trying to attach a JES2 subtask. This message is prompting the operator to decide if initialization should continue or not.

System Action:

- If the response is Y (yes), JES2 proceeds with initialization. Errors may happen when JES2 tries to process jobs.
- If the response is N (no), JES2 issues message $HASP428 and terminates.
- If the response is R (retry), JES2 tries to attach the subtask again. If the subtask is attached, initialization continues. If the subtask is not attached, JES2 issues message $HASP872 again.

Operator Response: Notify the system programmer. Reply Y or N or R.

Programmer Response: Determine the cause of the error, and take corrective action.

$HASP900 through $HASP949: JES2 does not use these message IDs. They are reserved for customer use.

$HASP955 INCOMPATIBLE RMTGEN MODULES

Explanation: A module has attempted to read logical records beyond the end-of-file on the CARDIN data set and encountered an end-of-file condition without replacing the EODAD exit address in the DCB. (The importance level does not apply to this message.)

System Action: RMTGEN abnormally terminates with a user code of 20.

Programmer Response: Restore the JES2 generation modules using the correct version of the GENRMT module.

$HASP965 ****INVALID SELECTION CARD**

Explanation: A JES2 remote work station generation selection card is invalid for one of the following reasons:

- The program identification card named an unsupported remote.
- The format of the identification card was incorrect.
- The numeric field was not numeric.

The card in error is displayed preceding the error message, and the generation of the requested remote is suppressed. (The importance level does not apply to this message.)

System Action: The generation of the remote is suppressed.

Operator Response: Report this message to the system programmer.

Programmer Response: Correct the selection card and resubmit the remote generation job. (See *System Programming Library: JES2 Initialization and Tuning*.

$HASP966 ****OPTION SPECIFICATION ERROR**

Explanation: A JES2 remote work station generation option specification error occurred for one of the following reasons:

- The specified RMTGEN parameter was misspelled.
- The format of the card was incorrect.
- Card sequence numbers were not in ascending order.
- An invalid ./ card was encountered.
- A $. card, other than $.RMTEND, was encountered during the update process.
- A /* card was encountered within a remote description deck.

(The importance level does not apply to this message.)

System Action: The card in error is displayed preceding the error message, and the generation of the requested remote is suppressed.

Operator Response: Report this message to the system programmer.

Programmer Response: Correct the JES2 remote work station generation deck and resubmit the job.

$HASP967 ****JES2 SOURCE LIBRARY ERROR**

Explanation: A JES2 source library error occurred during a JES2 remote work station program generation for one of the following reasons:

- An internal control card on the GENPDS data set member HRTPOPTS was incorrect or missing.
- An overflow of the GENRMT standard options table has occurred.

(The importance level does not apply to this message.)

System Action: The generation of the requested remote is suppressed.

Programmer Response: Check the spelling on the selection card and, if spelling is correct, recreate the JES2 generation modules and source.

$HASP968 ****UNEXPECTED END OF CARD INPUT**

Explanation: The last card of the CARDIN data set for a JES2 remote work station program generation was not $.RMTEND, or in the case of updating operations ./ENDUP. (The importance level does not apply to this message.)

System Action: The generation of the requested remote is suppressed.

Programmer Response: Supply a $.RMTEND card.

$HASP985 ****REMOTE station EXCEEDS AVAILABLE 1130 STORAGE****

Explanation: The JES2 remote work station program that has just been assembled was found to be too large for the 1130 storage because of remote generation parameter specifications or modifications. (The importance level does not apply to this message.)

System Action: The identified remote work station generation is suppressed.

Programmer Response: Alter parameters or modifications so that less 1130 storage is needed.

$HASP986 ****REMOTE station DECK INCOMPLETE****

Explanation: The END card of the assembler object deck output for the 1130 work station program was not encountered before the end of that data set, thus indicating that the resultant 1130 deck may be incomplete. (The importance level does not apply to this message.)

System Action: The generation of the remote work station program is suppressed.

Programmer Response: Check the remote work station generation job JCL, correct and rerun.

$HASP990 S3CNVT - UNEXPECTED OR MISSING END-OF-DATA

Explanation: During RMTGEN post-assembly processing for a System/3 work station, the post-processor has received an end-of-data before the assembler object deck's END card or has received no end-of-data on a read immediately after the END card. In the latter case, the RMTGEN output deck may be correct. The data definition name is SYSLIN or SYSGO. (The importance level does not apply to this message.)

System Action: Post-processing completes with return code 12.

Programmer Response: Verify the RMTGEN punched output to insure it is correct. The last card should contain EOR in columns 2-4. If necessary, alter the RMTGEN process by punching out the assembly object deck and using it as input (SYSLIN; SYSPUNCH is punched output) to post-processor program SYS3CNVT.

$HASP991 S3CNVT - UNABLE TO OPEN ONE OR BOTH DATA SETS

Explanation: During RMTGEN post-assembly processing for a System/3 work station, the post-processor was unable to open the data set for SYSLIN (or SYSGO) and/or the data set for SYSPUNCH. (The importance level does not apply to this message.)

System Action: Post-processing terminates with return code 16.

Programmer Response: Correct the JCL and resubmit the RMTGEN job.

Power Warning Feature Support Messages (ICF)

Component Name	ICF
Program Producing Message	Power Warning Feature
Audience and Where Produced	For operator: console. For programmer: SYSOUT listing.
Message Format	xx ICFTIMnn text xx Message reply identification (absent, if operator reply not required). TIMnn Message serial number. text Message text.
Associated and Referenced Publications	*OS/VS System Programming Library: Supervisor*, GC28-0628 *IMS/VS Version 1 Operator's Reference Manual*, SH20-9028

ICFTIM11 WARN TIME PARAMETER IS ZERO - REPLY STOP OR GO

Explanation: A time parameter of zero indicates that the Power Warning Feature Support is not operative. Two conditions can cause this, either: 1) The system was generated with a WARN = parameter greater than zero, but the time parameter in the system control blocks has subsequently been modified to be zero, or 2) The system was generated without WARN = parameter being specified, but the alternate power (AP=yes) parameter was specified on any IODEVICE macro.

System Action: Waits for operator reply to STOP or GO.

Operator Response: A reply of STOP will cause a disabled wait (code X'027'). GO will cause the system to continue without Power Warning Feature Support.

- For condition 1 -- specify a WARN = parameter if Power Warning Feature Support is desired, and do not subsequently modify it.
- For condition 2 -- if AP = YES is specified on any IODEVICE macro during system generation, the WARN = parameter must be also specified. The parameter value must be one, or greater than one, for functional Power Warning Feature Support.

ICFTIM12 WARN TIME PARAMETER IS ONE - REPLY STOP OR GO

Explanation: A time parameter of one indicates that the Power Warning Feature Support is operative, but when a power warning is received, action to transfer main storage to a warn data set will occur immediately.

System Action: Waits for operator reply of STOP or GO.

Operator Response: Reply GO if it is desired to dump immediately on the first warning message. ICFTIM51 will be issued confirming this choice. STOP will cause a disabled wait (X'027').

Programmer Response: Ordinarily a time parameter should be specified to minimize system termination due to transient, nondamaging power fluctuations.

ICFTIM13 LOCATE/OBTAIN FAILED FOR SYS1.WARNx. - REPLY STOP OR GO

Explanation: The data set (x) is not cataloged.

System Action: Waits for STOP or GO reply.

Operator Response: GO will cause the system to continue with the Power Warning Feature Support inoperative. STOP will cause a disabled wait (X'027').

Programmer Response: Catalog the data set(s).

ICFTIM14 SYS1.WARNx RESIDES ON MORE THAN 1 VOLUME - REPLY STOP OR GO

Explanation: Data set has not been allocated contiguous cylinders.

System Action: Waits for STOP or GO reply.

Operator Response: GO will cause the system to continue with the Power Warning Feature Support inoperative. STOP will cause a disabled wait (X'027').

Programmer Response: Allocate the data set as a set of contiguous cylinders.

ICFTIM15 BOTH SYS1.WARN DATA SETS ON SAME VOLUME - REPLY STOP OR GO

Explanation: See message.

System Action: Waits for STOP or GO reply.

Operator Response: GO will cause the system to continue with the Power Warning Feature Support inoperative. STOP will cause a disabled wait (X'027').

Programmer Response: Properly allocate data sets on separate volumes.

ICFTIM16 VOLUME xxxxxx FOR SYS1.WARNx NOT MOUNTED - REPLY STOP OR GO

Explanation: The volume (x) specified by the catalog to contain the data set is not mounted.

System Action: Waits for STOP or GO reply.

Operator Response: GO will cause the system to continue with the Power Warning Feature Support inoperative. STOP will cause a disabled wait (X'027').

Programmer Response: Allocate the data sets on volumes that will be mounted before IPL.

ICFTIM17 VOLUME xxxxxx ON UNPOWERED DEVICE - REPLY STOP OR GO

Explanation: The IODEVICE macro at sysgen did not specify that the device would be powered by alternate power in the event of a utility outage.

System Action: Waits for STOP or GO reply.

Operator Response: GO will cause the system to continue with the Power Warning Feature Support inoperative. STOP will cause a disabled wait (X'027'). Move volume to powered drive and re-IPL.

Programmer Response: None.

ICFTIM18 WARN DATA SETS ON DIFFERENT DEVICE TYPES - REPLY STOP OR GO

Explanation: See message.

System Action: Waits for STOP or GO reply.

Operator Response: GO will cause the system to continue with the Power Warning Feature Support inoperative. STOP will cause a disabled wait (X'027').

Programmer Response: Allocate both data set(s) on devices of the same type.

ICFTIM19 COULD NOT OPEN SYS1.WARNx - REPLY STOP OR GO

Explanation: An indeterminate error has occurred attempting to access the data set.

System Action: Waits for STOP or GO reply.

Operator Response: GO will cause the system to continue with the Power Warning Feature Support inoperative. STOP will cause a disabled wait (X'027').

Programmer Response: A detailed examination of the circumstances is necessary.

ICFTIM20 SYS1.WARNx TOO SMALL FOR STORAGE SIZE - REPLY STOP OR GO

Explanation: The amount of main storage indicated at Sysgen or found at IPL exceeds the capacity of the data set.

System Action: Waits for STOP or GO reply.

Operator Response: GO will cause the system to continue with the Power Warning Feature Support inoperative. STOP will cause a disabled wait (X'027').

Programmer Response: Allocate data sets of the appropriate size.

ICFTIM21 VALID DUMP IN SYS1.WARNx -- REPLY FORM OR REST

Explanation: The data set contains a storage dump.

System Action: Waits for reply of FORM or REST.

Operator Response: FORM causes control to be passed to the user exit, if one has been provided, and causes the data set to be erased and formatted. REST causes the contents of the data set to be restored to main storage. If the restore is successful, a wait state code of X'026' is loaded. When wait state X'026' is issued, re-IPL the system. IMS/VS users should see *IMS/VS Version 1 Operator's Reference Manual* for the power warning termination procedure. If the restore is not successful, the system enters the wait state with a code of X'027'.

Programmer Response: None in case of wait state X'026'. A detailed examination of the circumstances is necessary in case of wait state X&eq.027'.

ICFTIM22 PATH NOT AVAILABLE FOR WARN DATA SET - REPLY STOP OR GO

Explanation: The system has no path to one data set. Operator may have varied all paths to the WARN data set offline.

System Action: Waits for STOP or GO reply.

Operator Response: GO will cause the system to continue with the Power Warning Feature Support inoperative. STOP will cause a disabled wait (X'27'). The operator must make sure that the WARN data sets are not varied offline.

Programmer Response: None.

ICFTIM23 SYS1.WARNx RESIDES ON UNSUPPORTED DEVICE - REPLY STOP OR GO

Explanation: The warn data set has been incorrectly assigned to a device or a volume not supported by the Power Warning Feature Support. (For example: device assignment of IBM 2305 drum, or a volume assignment on the system residence volume.

System Action: Waits for STOP or GO reply.

Operator Response: GO will cause the system to continue with the Power Warning Feature Support inoperative. STOP will cause a disabled wait (X'027').

Programmer Response: Allocate data sets on the appropriate devices.

ICFTIM31 I/O ERROR READING SYS1.WARNx -- REPLY STOP OR GO

Explanation: The status of this data set cannot be determined because of error conditions. It may contain a storage dump; retrieval would require special actions by the user. This message will always appear the first time after allocation (unformatted data set).

System Action: Waits for STOP or GO reply.

Operator Response: GO will cause the system to erase and format the data set. STOP will cause a disabled wait (X'027').

Note: You should reply GO only if data set has just been allocated.

Programmer Response: It may be desirable to copy data set despite the error condition, or use other methods to extract critical information. This data set should be reallocated to avoid future problems.

ICFTIM32 I/O ERROR WRITING SYS1.WARNx -- REPLY STOP OR GO

Explanation: Data set cannot be formatted.

System Action: Waits for STOP or GO reply.

Operator Response: GO will cause the system to continue with the Power Warning function inoperative. STOP will cause a disabled wait (X'027').

Programmer Response: Reallocate the data set.

ICFTIM51 WARN WILL DUMP AT FIRST WARNING

Explanation: No time delay was specified at Sysgen.

System Action: Delay is no greater than that required by engineering considerations.

Operator Response: None.

Programmer Response: Review appropriateness of a time delay specification of one.

ICFTIM59 POWER WARNING FEATURE - INITIALIZATION COMPLETE

Explanation: Power Warning Feature Warning Support has been initialized.

System Action: Continue normal system activity with the Power Warning Feature Support operative.

Operator Response: None.

Programmer Response: None.

ICFTIM90 POWER WARNING FEATURE - UNEXPECTED ERROR

Explanation: An unexpected error condition was detected by the ESTAE mechanism.

System Action: Issues message ICFTIM99 and returns to the system with the Power Warning Feature inoperative.

Operator Response: Take a stand alone dump and contact the system programmer.

Programmer Response: Search the stand alone dump for the cause of the abend condition. The abend condition can be caused by user-inserted code.

ICFTIM91 WARNING DETECTED BEFORE PWF INITIALIZATION

Explanation: A power line disturbance was detected during IPL before the Power Warning Feature was initialized. Power Warning Feature Support cannot complete its initialization, and real storage has not been transferred to a warn data set.

System Action: Issues message ICFTIM98 and enters a wait state with code X'027'.

Operator Response: Re-IPL the system when utility power returns.

Note: If you have a full UPS and utility power has not returned, it might be necessary to temporarily disable the Power Line Disturbance Detector before you re-IPL the system.

Programmer Response: None.

ICFTIM96 ERROR DURING EXECUTION OF LRA INSTRUCTION

Explanation: A Load Real Address instruction did not execute correctly.

System Action: Issues message ICFTIM98 and enters a wait state with code X'027'.

Operator Response: None.

Programmer Response: Find the cause of the addressing problem by reviewing control register 1, and control program page and segment tables. (If this error was caused by a hardware failure, a machine check should have occurred.)

ICFTIM97 INVALID STORAGE CONFIGURATION FOR RESTORE

Explanation: At restore time it is found that the storage configuration is different than it was when main storage was transferred to the warn data set.

System Action: Enters a disabled wait state with a code X'027'.

Operator Response: Reconfigure storage exactly as it was when main storage was transferred to the warn data set.

Programmer Response: None.

ICFTIM98 CORRECT PROBLEM AND RE-IPL

Explanation: This message is issued if the operator replied STOP to message 1 through 97.

System Action: Enters a disabled wait state with code X'027'.

Operator Response: Explained in the message that printed just before this one.

Programmer Response: Explained in the message that printed just before this one.

ICFTIM99 POWER WARNING FEATURE - FUNCTION INOPERATIVE

Explanation: For reasons described in the preceding messages to which the operator has replied GO, Power Warning Feature Support has been deactivated. When a warning machine check occurs, main storage is not saved.

System Action: Continue normally without the Power Warning Feature Support.

Operator Response: None.

Programmer Response: None.

Resource Access Control Facility (RACF) Messages (ICH)

Component Name	ICH
Program Producing Message	Resource Access Control Facility (RACF)
Audience and Where Produced	For operator: console. For programmer: user console.
Message Format	ICHxnns text For RACF operator messages and data set initialization messages ICH8nnns text For RACF data set initialization messages ICHccnnns text For RACF command messages and RACF manager, utility, report writer, and miscellaneous x RACF function: 0 SAF initialization 3 RACF RACINIT processing 4 RACF processing 5 RACF initialization 6 RACF data set extend processing 7 RACF status cc RACF command or program: 00 ADDGROUP command 01 ADDUSER command 02 CONNECT command 03 REMOVE command 04 DELUSER command 05 DELGROUP command 06 PERMIT command 08 PASSWORD command 09 ADDSD AND DELSD commands 10 RDEFINE command 11 RALTER command 12 RDELETE command 13 RLIST command 14 SETROPTS command 15 RVARY command 20 ALTGROUP command 21 ALTUSER command 22 ALTDSD command 30 LISTUSER command 31 SEARCH command 32 LISTGRP command 35 LISTDSD command 51 RACF manager 61 Cross reference utility program 62 Data set verification utility program 63 Block update utility program 64 Report writer program 65 Data set split/merge utility program 70 Miscellaneous nn or 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 and Referenced Publications	*RACF Command Language Reference*, SC28-0733 *SPL: RACF*, SC28-1343

ICH

ICH001E SAF IS NOT ACTIVE, DUMP TAKEN

Explanation: The system authorization facility (SAF) is not active. The preceding message, which is ICH002I, ICH003I, or ICH004I, explains why.

System Action: The SAF error routine requests a dump and issues message ICH006D.

Operator Response: None.

ICH002I UNABLE TO OBTAIN STORAGE FOR SAF INITIALIZATION

Explanation: The system authorization facility (SAF) issued a GETMAIN macro for storage in the system queue area (SQA), which is subpool 265, to build the ICHSAFV control block. The GETMAIN failed.

System Action: The SAF error routine issues message ICH001I.

Operator Response: None.

ICH003I UNABLE TO LOCATE SAF ROUTER (ICHSFR00) IN LPA

Explanation: The system cannot locate the system authorization facility (SAF) load module, ICHSFR00, in the link pack area (LPA).

System Action: The SAF error routine issues message ICH001I.

Operator Response: None.

ICH004I SYSTEM ERROR DURING SAF INITIALIZATION

Explanation: During initialization of the system authorization facility (SAF), a program check occurred. The SAF error routine was invoked.

System Action: The SAF error routine issues message ICH001I.

Operator Response: None.

ICH005I ACTIVE SAF EXIT: ICHRTX00

Explanation: The system authorization facility (SAF) installation exit, module ICHRTX00, is in use.

System Action: System initialization proceeds.

Operator Response: None.

ICH006D RE-IPL OR REPLY U TO CONTINUE WITHOUT SAF

Explanation: The system authorization facility (SAF) error routine issues this message after ICH001E to let the operator decide whether to continue without SAF or to re-IPL.

System Action: System initialization stops until the operator replies.

Operator Response: Reply U to continue initialization without SAF. Otherwise, correct the problem and re-IPL the system, so that SAF can be included.

ICH007E ICHSFI00 NOT FOUND. REPLY 'U' TO CONTINUE

Explanation: During RACF initialization, the system cannot find the system authorization facility (SAF) initialization module, ICHSFI00, in SYS1.LINKLIB.

System Action: System initialization stops until the operator replies.

Operator Response: Reply U to continue initialization without SAF. Otherwise, correct the problem and re-IPL the system, so that SAF can be included.

Input/Output Configuration Program Messages (ICP)

Component Name	ICP
Program Producing Message	Input/Output Configuration Program (IOCP)
Audience and Where Produced	For the operator: on the system console. For the programmer: see comments below.
Message Format	xx ICPnnns text (on console) xx Message reply identification (absent, if operator reply not required). nnn Message serial number. s Type code: D Decision; the operator must choose an alternative. I Information; no operator action is required. text Message text.
Comments	Only the ICP messages for the operator are given here. ICP messages for the programmer are written in the system output listing and are documented in *Input/Output Configuration Program User's Guide and Reference.*
Associated and Referenced Publication	*Input/Output Configuration Program User's Guide and Reference*, GC28-1027

ICP050D SHOULD jobname WRITE TO LEVEL xxx IOCDS? REPLY 'YES', 'NO', OR 'CANCEL'

Explanation: The job named in the message is executing the input/output configuration program (IOCP) with a WRTCDS option other than NO on the PARM parameter of the EXEC statement. IOCP issues this message to request permission from the system operator for the job to write to the level xxx input/output configuration data set (IOCDS) in the processor controller.

Note: If two or more jobs are allowed to concurrently update, that is, write to, the level xxx IOCDS, the outcome could be an IOCDS that is logically inconsistent with the input from any one job. Using this IOCDS at power-on reset or SYSIML CLEAR could produce undesirable results.

System Action: An operator reply of 'YES' allows the job to continue executing and, if no errors are encountered, to replace the input/output configuration data in the level xxx IOCDS in the processor controller with the input/output configuration data generated by this job. The operator should use the IOCDSM frame to ensure the level xxx IOCDS is not write-protected.

A reply of 'NO' allows the job to continue generating input/output configuration data in storage and to produce reports, but does not permit the job to replace the input/output configuration data in the level xxx IOCDS in the processor controller.

A reply of 'CANCEL' terminates the job immediately with system completion code 222.

Operator Response: Contact your system programmer, and respond as instructed.

Programmer Response: Follow your installation procedures, and advise the operator.

ICP056I IOCP JOB jobname FAILED. DID NOT BUILD LEVEL xxx IOCDS.

Explanation: The job named in the message was executing the input/output configuration program (IOCP) with the WRTCDS = xxx option on the PARM parameter of the EXEC statement. IOCP issues this message to inform the system operator, who had previously responded to message ICP050D, that this job failed to build the level xxx input/output configuration data set (IOCDS).

System Action: IOCP terminates the job with return code 8.

Operator Response: Tell your system programmer that the job failed.

Programmer Response: Review the messages on the job listing, and take the necessary actions.

ICP057I IOCP JOB jobname SUCCESSFUL. LEVEL xxx IOCDS REPLACED.

Explanation: The job named in the message was executing the input/ouput configuration program (IOCP) with the WRTCDS=xxx option on the PARM parameter of the EXEC statement. IOCP issues this message to inform the system operator, who had previously granted permission to write the IOCDS in response to message ICP050D, that this job successfully replaced the level xxx input/output configuration data set (IOCDS).

System Action: IOCP terminates the job with return code 0 or 4.

Operator Response: Follow your installation procedures.

Programmed Cryptographic Facility Messages (ICT)

Component Name	ICT
Program Producing Message	Programmed Cryptographic Facility
Audience and Where Produced	For operator and security administrator: on console. For programmer: in SYSPRINT or SYSOUT data set.
Message Format	ICTnnns text ICTnnnn text ICT Identifies the message as a Programmed Cryptographic Facility message. nnn Message serial number, which indicates the class of message: 010 - 019 General informational messages associated with the key generator utility program. 020 - 029 Messages associated with the key manager function. 030 - 039 Messages associated with initialization processing. 040 - 049 Messages associated with the commands used to start and stop the Programmed Cryptographic Facility. nnnn Message serial number of detailed informational messages associated with the key generator utility program. s Type code: I Information; no operator action is required. text Message text.
Associated and Referenced Publications	*OS/VS1 and OS/VS2 MVS Programmed Cryptographic Facility General Information Manual*, GC28-0942 *OS/VS2 MVS Programmed Cryptographic Facility Installation Reference Manual*, SC28-0956 *OS/VS2 MVS Programmed Cryptographic Facility Program Logic Manual*, LY28-0958 *OS/VS2 MVS Data Management Macro Instructions*, GC26-3873 *OS/VS2 Supervisor Services and Macro Instructions*, GC28-0683 *OS/VS Virtual Storage Access Method (VSAM) Programmer's Guide*, GC26-3838 *OS/VS2 Access Method Services*, GC26-3841

ICT010I CRYPTOGRAPHY SYSTEM MASTER KEY HAS BEEN SET

Explanation: The key generator utility program has successfully set the host master key. If there are any control statements requesting updates to the secondary key-encrypting keys, these statements are processed at this time.

Note: The security administrator must ensure that the key generator utility program was executed in response to a request from an authorized person. More information about the requester is recorded in SMF record type 82.

System Action: Key generator utility processing continues.

Operator Response: None.

ICT011I CRYPTOGRAPHY KEY UPDATE STARTED

Explanation: The key generator utility program, has successfully updated the cryptographic key data set (CKDS) to reflect a new, changed, or deleted secondary key-encrypting key. This message is issued only for the first update to the CKDS for a secondary key-encrypting key although the job may contain several update requests.

Note: The security administrator must ensure that the key generator utility program was executed in response to a request from an authorized person. More information about the requester is recorded in SMF record type 82.

System Action: Key generator utility processing continues.

Operator Response: None.

ICT012I ERROR IN EXECUTING KEY GENERATOR UTILITY

Explanation: The key generator utility program did not complete successfully. A message identifying the nature of the problem is routed to the data set defined by the SYSPRINT DD statement.

Note: The security administrator must ensure that the key generator utility program was executed in response to a request from an authorized person. More information about the requester is recorded in SMF record type 82.

System Action: Key generator utility processing terminates.

Operator Response: None.

Programmer Response: Respond to the problem identified by the message appearing in the data set defined by the SYSPRINT DD statement.

ICT020I synad message from VSAM while processing CKDS

Explanation: A physical I/O error occurred while the key manager was attempting to read the cryptographic key data set (CKDS). The format and explanation of the accompanying VSAM physical I/O error message is given in *OS/VS Virtual Storage Access Method (VSAM) Programmer's Guide.*

Operator Response: Notify the system programmer.

Programmer Response: See *OS/VS Storage Access Method (VSAM) Programmer's Guide* for the explanation of the accompanying VSAM physical I/O error message. If the volume caused the error, use a backup copy of the CKDS on a different volume. (If you do not want to re-IPL the system, be sure the new copy of the CKDS uses the same host master key as the old copy.) If the device caused the error, move the volume containing the CKDS to an alternate device. To change the volume or device, stop the Programmed Cryptographic Facility (via IPL or an operator STOP command) and restart it (via an operator START command), specifying an alternate data set name on the START command, if required. Rerun the job.

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

ICT021I VIOLATION ON RETKEY BY { **USER (userid) GROUP (groupid)** / **JOB (jjj) STEP (sss)** }

Explanation: An unauthorized program has issued the RETKEY SVC requesting that a data-encrypting key enciphered under a cross key be reenciphered under the host master key. The RACF (Resource Access Control Facility) user (userid) and group name (groupid) are given if they are available. Otherwise, the job name (jjj) and step name (sss) are supplied. The REMKEY field in SMF record type 82 contains the label of the cross key.

Note: The security administrator must determine if an attempted security violation occurred. Follow the security procedures established by your installation.

System Action: Key manager processing terminates.

Operator Response: None.

ICT022I xxx ABEND DURING { **GENKEY** / **RETKEY** } **PROCESSING**

Explanation: An error occurred during processing of either the GENKEY or RETKEY function of the key manager. In the message, xxx indicates the system completion code.

System Action: Key manager processing terminates.

Operator Response: Notify the system programmer.

Programmer Response: Respond to the problem identified by the system completion code.

Problem Determination: Table I, items 5a, 13, 18, and 29.

ICT023I KEY label HAS INCORRECT PARITY

Explanation: The key-encrypting key identified by label has been read from the cryptographic key data set (CKDS) by the key manager and the key manager has determined that the clear form of the key has bad parity.

This situation can occur if there is a problem with the CKDS. It can also occur when the CKDS used to initialize the host master key in storage has been replaced by a CKDS that contains a different host master key but storage was not reinitialized. Storage is initialized the first time you start the Programmed Cryptographic Facility or run the key generator utility program after an IPL. It is reinitialized when the key generator utility program is used to change the host master key (CHGM function).

System Action: Key manager processing terminates.

Operator Response: Notify the system programmer.

Programmer Response: If the CKDS was replaced, compare the two output listings from the executions of the key generator utility program that set the host master key in the CKDS that is currently on the system and that set the host master key in the CKDS that was used to initialize storage.

If the listings indicate that the host master key values are not the same, do one of the following:

1. Replace the CKDS on the system with a CKDS that contains the same host master key as the one in storage. To replace the data set, stop the Programmed Cryptographic Facility and restart it with an operator START command that specifies the name of the CKDS that contains the correct value for the host master key. Rerun the job that failed.

2. Reinitialize storage so that the value of the host master key in storage matches the value in the CKDS currently on the system. To reinitialize storage, you can re-IPL the system and restart the Programmed Cryptographic Facility with an operator START command that specifies the name of the CKDS currently on the system. Or, you can reinitialize storage with the key generator utility program, using the CHGM function and specifying a host master key value that matches the value on the current CKDS. To run the key generator utility program, stop the Programmed Cryptographic Facility, run the utility when there are no cryptographic sessions or jobs running on the system, and restart the facility. Rerun the job that failed.

If host master keys are identical, or if the CKDS was not replaced, use a backup copy of the CKDS. Stop the Programmed Cryptographic Facility and restart it specifying the name of the backup CKDS in the START command. Do not use the original data set again. Rerun the job that failed.

Problem Determination: None.

ICT024I UNEXPECTED VSAM ERROR CODE rc [FDBK code]

Explanation: An error occurred when the key manager attempted to read the cryptographic key data set (CKDS). In the message, rc is the return code that identifies the error. If rc identifies a logical error, then FDBK code indicates the specific logical error that has occurred. The explanation of the return code and feedback code for a VSAM request is provided in *OS/VS Virtual Storage Access Method (VSAM) Programmer's Guide*.

System Action: Key manager processing terminates.

Operator Response: Notify the system programmer.

Programmer Response: See *OS/VS Virtual Storage Access Method (VSAM) Programmer's Guide* for the appropriate response to the return code and, if applicable, the feedback code given in the message. Correct the problem and rerun the job.

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

ICT030I CRYPTOGRAPHY INITIALIZATION UNABLE TO LOCATE name in LPA

Explanation: The Programmed Cryptographic Facility installation process invoked by the operator START command or the key generator utility program was unable to locate the routine specified by name in a search of the active link pack area queue and the link pack area directory.

System Action: Programmed Cryptographic Facility initialization processing terminates.

Operator Response: Notify the system programmer.

Programmer Response: Determine if the GENKEY or RETKEY installation exit routine (module ICTMGR90 or ICTMGR95) is properly link edited into SYS1.LPALIB. If the module has been replaced since the Programmed Cryptographic Facility was installed, check the linkage editor output from the most recent change. If it has not been replaced, check the output of the install process (SMP or SYSGEN) to see that the module was properly installed. Correct the problem and reissue the operator START command or rerun the key generator utility program.

Problem Determination: Table I, items 2 and 4.

ICT031I INVALID CRYPTOGRAPHY USER SVC NUMBER SPECIFIED

Explanation: The Programmed Cryptographic Facility initialization process invoked by the operator START command or the key generator utility program has determined that the options module, ICTOPTNS, contains an invalid user SVC number.

System Action: Programmed Cryptographic Facility initialization processing terminates.

Operator Response: Notify the system programmer.

Programmer Response: Update the installation options module, ICTOPTNS, to reflect a valid user SVC number in the range of 200 through 255. See the Programmed Cryptographic Facility Program Directory for information on how to modify the options module. When the update is complete, reissue the operator START command or rerun the key generator utility program.

Problem Determination: Table I, items 2 and 4.

ICT032I CRYPTOGRAPHY INITIALIZATION UNABLE TO OPEN ddname

Explanation: The Programmed Cryptographic Facility initialization process invoked by the operator START command or the key generator utility program was unable to open the data set identified by ddname. For a VSAM data set, this message is accompanied by a VSAM error message that further identifies the problem.

System Action: Programmed Cryptographic Facility initialization processing terminates.

Operator Response: Notify the system programmer.

Programmer Response: Verify that the specified ddname has been included in the JCL for the START procedure or in the JCL for the key generator utility program. For a VSAM data set, see the accompanying VSAM error message for additional information. Correct the problem and reissue the operator START command or rerun the key generator utility program.

Problem Determination: Table I, items 2 and 4.

ICT033I LOAD FAILED FOR CRYPTOGRAPHY INSTALLATION OPTIONS MODULE

Explanation: The Programmed Cryptographic Facility initialization process invoked by the operator START command or the key generator utility program was unable to load the installation options module, ICTOPTNS.

System Action: Programmed Cryptographic Facility initialization processing terminates.

Programmer Response: Check the output of the install process (SMP or SYSGEN) to verify that the installation options module was properly installed in SYS1.LINKLIB. Correct the problem and reissue the operator START command or rerun the key generator utility program.

Problem Determination: Table I, items 2 and 4.

ICT034I CRYPTOGRAPHY INITIALIZATION UNABLE TO ESTABLISH ESTAE CODE xxx

Explanation: The Programmed Cryptographic Facility initialization process invoked by the operator START command or the key generator utility program was unable to establish an ESTAE recovery environment. The code from ESTAE processing is specified by xxx. See *OS/VS2 Supervisor Services and Macro Instructions* for an explanation of the return code.

System Action: Programmed Cryptographic Facility initialization processing terminates.

Operator Response: Notify the system programmer.

Programmer Response: If the code is 14, reissue the operator START command or rerun the key generator utility program. For all other codes, contact IBM for programming support. When the problem is corrected, reissue the START command or rerun the utility program.

Problem Determination: Table I, items 2 and 4.

ICT035I synad message from VSAM while processing CKDS

Explanation: A physical I/O error occurred during Programmed Cryptographic Facility initialization processing while reading the host master key from the cryptographic key data set (CKDS). The format and explanation of the accompanying VSAM physical I/O error message is given in *OS/VS Virtual Storage Access Method (VSAM) Programmer's Guide.*

System Action: Programmed Cryptographic Facility initialization processing terminates.

Operator Response: Notify the system programmer.

Programmer Response: See *OS/VS Virtual Storage Access Method (VSAM) Programmer's Guide* for the explanation of the accompanying VSAM physical I/O error message. If the volume caused the error, use a backup copy of the CKDS on a different volume. (If you do not want to re-IPL the system, be sure the new copy of the CKDS uses the same host master key as the old copy.) If the device caused the error, move the volume containing the CKDS to an alternate device. To change the volume or device, stop the Programmed Cryptographic Facility, if it is active (via IPL or an operator STOP command). Make the required change and then reissue the START command or rerun the key generator utility program. If applicable, specify the alternate data set name.

Problem Determination: Table I, items 2 and 4.

ICT036I UNEXPECTED VSAM ERROR PROCESSING CKDS CODE rc [FDBK code]

Explanation: An error occurred during Programmed Cryptographic Facility initialization processing while reading the host master key from the cryptographic key data set (CKDS). In the message, rc is the return code that identifies the error. If rc identifies a logical error, then FDBK code indicates the specific logical error that has occurred. The explanation of the return code and feedback code for a VSAM request is provided in *OS/VS Virtual Storage Access Method (VSAM) Programmer's Guide.*

System Action: Programmed Cryptographic Facility initialization processing terminates.

Operator Response: Notify the system programmer.

Programmer Response: See *OS/VS Virtual Storage Access Method (VSAM) Programmer's Guide* for the appropriate response to the return code and, if applicable, the feedback code given in the message. Correct the problem and reissue the operator START command or rerun the key generator utility program.

Problem Determination: Table I, items 2 and 4.

ICT040I CRYPTOGRAPHY FACILITY HAS BEEN DEACTIVATED: REQUESTS FOR NEW CRYPTOGRAPHY SESSIONS WILL BE REJECTED

Explanation: An operator STOP command has successfully deactivated the Programmed Cryptographic Facility. All current sessions or jobs using the the EMK or CIPHER functions of the facility can continue processing. All new sessions or jobs requesting the facility (using a GENKEY or RETKEY macro instruction) will be rejected.

System Action: System processing continues.

Operator Response: None.

ICT041I CRYPTOGRAPHY FACILITY HAS BEEN ACTIVATED

Explanation: An operator START command has successfully activated the Programmed Cryptographic Facility. All functions of the facility are currently operational.

System Action: The Programmed Cryptographic Facility is active.

Operator Response: None.

ICT042I START CRYPTO TERMINATED

Explanation: The START command procedure terminated abnormally when attempting to start the Programmed Cryptographic Facility. Another message that explains the nature of the error precedes this message.

System Action: START command processing terminates. The Programmed Cryptographic Facility is not active.

Operator Response: Notify the system programmer.

Programmer Response: Respond to the problem described by the preceding message.

ICT043I UNABLE TO OPEN SYSCKDS

Explanation: The START command procedure used to start the Programmed Cryptographic Facility was not able to open the cryptographic key data set (CKDS) defined by the SYSCKDS DD statement. This message is accompanied by a VSAM error message that further identifies the problem.

System Action: START command processing terminates.

Operator Response: Notify the system programmer.

Programmer Response: Verify that a DD statement has been included in the START procedure for the CKDS with the ddname SYSCKDS. Check the accompanying VSAM error message for additional information. Correct the problem and reissue the operator START command.

Problem Determination: Table I, items 2 and 4.

ICT044I START CRYPTO UNABLE TO ESTABLISH ESTAE CODE xxx

Explanation: The START procedure used to start the Programmed Cryptographic Facility was unable to establish an ESTAE recovery environment. The return code from ESTAE processing is specified by xxx. See *OS/VS2 Supervisor Services and Macro Instructions* for an explanation of the return code.

System Action: START command processing terminates.

Operator Response: Notify the system programmer.

Programmer Response: If the code is 14, reissue the operator START command. For all other codes, contact IBM for programming support. When the problem is corrected, reissue the START command.

Problem Determination: Table I, items 2 and 4.

ICT045I START CRYPTO OR KEY GENERATOR ALREADY IN PROGRESS

Explanation: An operator START command was issued to start the Programmed Cryptographic Facility but the facility has already been started, the START command procedure currently executing, or the key generator utility program is executing

System Action: The START command is ignored.

Operator Response: If a START command was issued when the Programmed Cryptographic Facility is already active or the START command procedure is already executing, an operator STOP command must be issued before another START command can be accepted. If the key generator utility program is currently executing, reissue the START command when the utility program terminates.

ICT046I STOP CRYPTO IN PROGRESS

Explanation: An operator STOP for the Programmed Cryptographic Facility has been accepted. STOP command processing waits until all outstanding requests to access the cryptographic key data set (CKDS) are finished before closing the CKDS and terminating the Programmed Cryptographic Facility task. (Requests to access the CKDS are made by the GENKEY or the RETKEY macro instructions.) Once the STOP command is accepted, all new sessions or jobs requesting the Programmed Cryptographic Facility are rejected.

System Action: STOP command processing waits until the CKDS is not being used.

Operator Response: None.

ICT1001 WEAK KEY SPECIFIED

Explanation: A weak clear key value was specified on a LOCAL, REMOTE, or CROSS control statement for the key generator utility program. The control statement containing the weak key precedes this message.

System Action: Processing terminates for this control statement. Processing continues for any other control statements.

Programmer Response: Supply a new clear key value on the control statement or remove the KEY parameter completely to let the key generator utility program generate a clear key value. See "Security Highlights and Requirements" in *OS/VS1 and OS/VS2 MVS Programmed Cryptographic Facility: Installation Reference Manual* for a description of weak key values. Rerun the utility program, specifying the CHGK function on the EXEC statement and providing the corrected control statement as input.

ICT1002 INVALID VERB

Explanation: An invalid verb was specified on a control statement for the key generator utility program. The control statement containing the invalid verb precedes this message.

System Action: Processing terminates for this control statement. Processing continues for any other control statements.

Programmer Response: Correct the verb on the control statement. The valid verbs are LOCAL, REMOTE, CROSS, EXTRA-LOCAL, EXTRA-REMOTE, EXTRA-CROSS, and INSTDAT. The verb must be preceded and followed by a blank. Rerun the key generator utility program, specifying the CHGK function on the EXEC statement and providing the corrected control statement as input.

ICT1003 SYNTAX ERROR IN KEY

Explanation: An invalid clear key value was specified on a LOCAL, REMOTE, or CROSS control statement for the key generator utility program. The control statement containing the invalid clear key value precedes this message.

System Action: Processing terminates for this control statement. Processing continues for any other control statements.

Programmer Response: Supply a valid clear key value on the control statement. A valid value consists of 16 hexadecimal digits. (Valid hexadecimal digits are 0 through 9 and A through F.) Rerun the key generator utility program, specifying the CHGK function on the EXEC statement and providing the corrected control statement as input.

ICT1004 SYNTAX ERROR IN LABEL

Explanation: An invalid label was specified on a LOCAL, REMOTE, or CROSS control statement for the key generator utility program. The control statement containing the invalid label precedes this message.

System Action: Processing terminates for this control statement. Processing continues for any other control statements.

Programmer Response: Supply a valid label on the control statement. A valid label consists of 1 to 8 alphameric characters. Valid alphameric characters are A through Z and 0 through 9. Rerun the key generator utility program, specifying the CHGK function on the EXEC statement and providing the corrected control statement as input.

ICT1005 INVALID OR REDUNDANT KEYWORD SPECIFIED

Explanation: An invalid or redundant keyword parameter was specified on a LOCAL, REMOTE, or CROSS control statement for the key generator utility program. The control statement containing the error precedes this message.

System Action: Processing terminates for this control statement. Processing continues for any other control statements.

Programmer Response: Correct the invalid keyword parameter or remove the redundant keyword parameter on the control statement. Rerun the key generator utility program, specifying the CHGK function on the EXEC statement and providing the corrected control statement.

ICT1006 INVALID VALUE SPECIFIED ON EXTRA STATEMENT

Explanation: One of the following conditions was encountered on an EXTRA-LOCAL, EXTRA-CROSS, or EXTRA-REMOTE control statement for the key generator utility program:

- The first through fourth characters of the value for label-base were not alphameric.
- The fifth through eighth characters of the value for label-base were not numeric.
- An invalid number of additional keys was requested.

The control statement containing the error precedes this message.

System Action: Processing terminates for this control statement. Processing continues for any other control statements.

Programmer Response: If the alphameric portion of the label-base is incorrect, supply a valid value on the control statement. A valid value consists of 4 alphameric characters. Valid alphameric characters are A through Z and 0 through 9.

Otherwise, correct the numerical portion of the label-base and/or the number of additional keys requested on the control statement. The sum of these two values must not exceed 9999.

Rerun the key generator utility program, specifying the CHGK function on the EXEC statement and providing the corrected control statement.

ICT1007 STATEMENT REJECTED BY INSTALLATION EXIT

Explanation: A control statement was rejected by the key generator utility program installation exit routine. The rejected control statement precedes this message.

System Action: Processing terminates for this control statement. Processing continues for any other control statements.

Programmer Response: Follow local procedures for errors detected by the key generator utility program installation exit routine. Correct the error and, if necessary, rerun the utility program. Specify the CHGK function on the EXEC statement and provide the corrected control statement.

ICT1008 REQUIRED PARAMETER INFORMATION MISSING

Explanation: The key generator utility program found that the value for the SETM, CHGM, or SEED parameter on the EXEC statement is missing.

System Action: Key generator utility processing terminates.

Programmer Response: Supply the missing value in the PARM field of the EXEC statement and rerun the key generator utility program.

Problem Determination: Table I, items 1 and 13.

ICT1009 DUPLICATE LABEL; KEY NOT ADDED

Explanation: A user requested the key generator utility program to add a label and its associated secondary key-encrypting key to the cryptographic key data set (CKDS), but the specified label was already defined in the CKDS. The rejected control statement precedes this message.

System Action: Processing terminates for this control statement. Processing continues for any other control statements.

Programmer Response: Assign a unique label to the key and rerun the key generator utility program, specifying the CHGK function on the EXEC statement and providing the corrected control statement.

ICT1010 LABEL NOT FOUND; NOT PROCESSED

Explanation: A user requested the key generator utility program to update a secondary key-encrypting key or to delete a label and its associated key from the cryptographic key data set (CKDS), but the specified label was not defined in the CKDS. The rejected control statement precedes this message.

System Action: Processing terminates for this control statement. Processing continues for any other control statements.

Programmer Response: Supply the correct label and rerun the key generator utility program, specifying the CHGK function on the EXEC statement.

ICT1011 synad I/O error message from VSAM

Explanation: A physical I/O error occurred when the key generator utility program attempted to access the SYSCKDS or SYSNCKDS data set. The format and explanation of the accompanying VSAM physical I/O error message is given in *OS/VS Virtual Storage Access Method (VSAM) Programmer's Guide*.

System Action: Key generator utility processing terminates.

Programmer Response: See *OS/VS Virtual Storage Access Method (VSAM) Programmer's Guide* for the explanation of the accompanying VSAM physical I/O error message. If the volume caused the error, use a backup copy of the CKDS on a different volume. (If you do not want to re-IPL the system, be sure the new copy of the CKDS uses the same host master key as the old copy.) If the device caused the error, move the volume containing the CKDS to an alternate device.

Rerun the key generator utility program as follows. If the SETM or CHGM function was requested and the host master key was not set (message ICT010I was not issued), rerun the entire job. Otherwise, use this listing to determine which control statements were processed successfully. Then rerun the utility program using the CHGK function to process the remaining control statements.

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

ICT1012 PROCESSING TERMINATES DUE TO INSTALLATION EXIT REQUEST

Explanation: The key generator utility program has terminated because the installation exit routine requested termination. If the problem occurred while the utility program was processing a change to the host master key, the contents of the PARM field of the EXEC statement precede this message. If the problem occurred while the utility program was processing a SYSIN control statement, the control statement precedes this message.

System Action: Key generator utility processing terminates.

Programmer Response: Follow local procedures.

ICT1013 PROCESSING ENDED DUE TO ESTAE OR STAE RETURN CODE xxx

Explanation: The key generator utility program attempted to use the ESTAE system service, but the error code xxx was returned. See *OS/VS2 Supervisor Services and Macro Instructions* for an explanation of the return code.

System Action: Key generator utility processing terminates. No control statements are processed.

Programmer Response: If the code is 14, rerun the key generator utility program. For all other codes, contact IBM for programming support. When the problem is corrected, rerun the utility program.

Problem Determination: Table I, items 4, 7a, 13, and 29.

ICT1014 SYSIN DATA SET EMPTY; NO PROCESSING OCCURRED

Explanation: The CHGK function of the key generator utility program was requested but no control statements could be found.

System Action: Key generator utility processing terminates.

Programmer Response: Add the desired control statements to the SYSIN data set and rerun the key generator utility program.

Problem Determination: None.

ICT1015 UNABLE TO { OPEN / CLOSE } ddname [CODE rc]

Explanation: The key generator utility program was unable to open or close the data set defined by the DD statement identified by ddname.

If the data set is a VSAM data set (SYSCKDS or SYSNCKDS), the VSAM return code rc is included to help identify the error. See *OS/VS Virtual Storage Access Method (VSAM) Programmer's Guide* for the explanation of the return code. This message is accompanied by a VSAM error message that further identifies the problem.

System Action: Key generator utility processing terminates.

Programmer Response: If the problem occurred while trying to open a data set, check the JCL. Be sure the required DD statements were included, that they have the correct ddnames, and that they define the correct data sets. The following ddnames are valid: SYSCKDS, SYSNCKDS, SYSIN, and SYSMKDS.

An open failure can also occur if the SYSCKDS or SYSNCKDS data set was defined without the proper parameters. See "Defining Storage for the CKDS and the MKDS" in *OS/VS1 and OS/VS2 MVS Programmed Cryptographic Facility: Installation Reference Manual* for instructions on using the access method services DEFINE CLUSTER command. If the message contains a VSAM return code, see *OS/VS Virtual Storage Access Method (VSAM) Programmer's Guide* for the appropriate response to the return code and the VSAM section of this manual for the explanation of the accompanying VSAM error message.

Correct the problem and rerun the key generator utility program as follows. If the SETM or CHGM function was requested and the host master key was not set, (message ICT010I was not issued), rerun the entire job. Otherwise, use this listing to determine which control statements were processed successfully. Then rerun the utility program using the CHGK function to process the remaining control statements.

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

ICT1016 INSUFFICIENT SPACE ON CKDS

Explanation: The key generator utility program could not complete a request to update the cryptographic key data set (CKDS) because there is insufficient space on the target data set. The target data set is defined by the SYSNCKDS DD statement if the CHGK function was requested.

If the problem occurred while the utility program was processing a change to the host master key, the contents of the PARM field of the EXEC statement precede this message. If the problem occurred while the utility program was processing a SYSIN control statement, the control statement precedes this message.

System Action: Key generator utility processing terminates.

Programmer Response: If the SETM or CHGM function was requested and the host system master key was not set (the contents of the PARM field precede this message), define a larger target data set for the CKDS and rerun the job. Otherwise, the key generator utility program failed while processing a SYSIN control statement and one of the following must be done:

- Reorganize the target CKDS to force more efficient space utilization.
- Define a larger data set for use as the new target CKDS and copy the contents of the original target CKDS to the larger data set.

Then, use this listing to determine which control statements were processed successfully and rerun the key generator utility program using the CHGK option to process the remaining control statements.

For information on defining and reorganizing the CKDS, see "Defining Storage for the CKDS and MKDS" in *OS/VS1 and OS/VS2 MVS Programmed Cryptographic Facility: Installation Reference Manual.* The commands needed to define, reorganize and copy the data set are described in *OS/VS2 Access Method Services* and *OS/VS Virtual Storage Access Method (VSAM) Programmer's Guide.*

Notify the security administrator.

Problem Determination: Table I, items 13 and 29.

ICT1017 CRYPTOGRAPHY STARTED; INVALID KEY GENERATOR REQUEST

Explanation: The key generator utility program was unable to execute because the Programmed Cryptographic Facility was active.

System Action: Key generator utility processing terminates.

Programmer Response: When the Programmed Cryptographic Facility is stopped and there are no cryptographic sessions or jobs running in the system, rerun the key generator utility program to change the host master key. Restart the Programmed Cryptographic Facility by entering an operator START command.

ICT1018 KEY GENERATION NOT ALLOWED -
{TOD CLOCK ERROR / SEED NOT SUPPLIED}

Explanation: An error was encountered when the key generator utility program attempted to read the time-of-day (TOD) clock, the TOD clock was inoperative, or a seed value was not supplied on the EXEC statement. Processing continues; however, no keys can be generated.

System Action: Key generator utility processing continues.

Programmer Response: If the problem involves the TOD clock, contact your IBM service representative. If a seed value was not supplied, ignore this message unless message ICT1025 also appears. If message ICT1025 appears, see the description of message ICT1025.

ICT1019 CRYPTOGRAPHY SYSTEM MASTER KEY HAS BEEN SET

Explanation: The key generator utility program has successfully set the host master key. If there are any control statements requesting updates to the secondary key-encrypting keys, they are processed at this time.

System Action: Key generator utility processing continues.

Programmer Response: None.

ICT1020 INVALID KEYWORD SPECIFIED IN PARM FIELD

Explanation: An invalid keyword parameter was specified in the PARM field of the EXEC statement for the key generator utility program.

System Action: Key generator utility processing terminates.

Programmer Response: Supply a valid keyword parameter in the PARM field. The valid keyword parameters are SETM, CHGM, CHGK, and SEED. Rerun the key generator utility program.

Problem Determination: Table I, items 1 and 13.

ICT1021 WEAK SYSTEM MASTER KEY SPECIFIED

Explanation: A weak value for the new host master key was specified in the PARM field of the EXEC statement for the key generator utility program.

System Action: Key generator utility processing terminates.

Programmer Response: Supply a new host master key value and its complement in the PARM field of the EXEC statement. See "Security Highlights and Requirements" in *OS/VS1 and OS/VS2 MVS Programmed Cryptographic Facility: Installation Reference Manual* for a description of weak key values. Rerun the key generator utility program.

Problem Determination: Table I, items 1 and 13.

ICT1022 INVALID SYNTAX FOR
{CURRENT MASTER KEY / NEW MASTER KEY / NEW MASTER KEY COMPLEMENT / SEED}

Explanation: An invalid value for the SETM, CHGM, or SEED parameter was found in the PARM field of the EXEC statement for the key generator utility program.

System Action: Key generator utility processing terminates.

Programmer Response: Correct the value in the PARM field of the EXEC statement. A valid value consists of 16 hexadecimal digits. (Valid hexadecimal digits are 0 through 9 and A through F.) Rerun the key generator utility program.

Problem Determination: Table I, items 1 and 13.

ICT1023 INVALID RETURN CODE FROM INSTALLATION EXIT; PROCESSING TERMINATES

Explanation: The key generator utility program installation exit routine returned an invalid return code to the key generator utility program. If the problem occurred while the utility program was processing a change to the host master key, the contents of the PARM field of the EXEC statement precede this message. If the problem occurred while the utility program was processing a SYSIN control statement, the control statement precedes this message.

System Action: Key generator utility processing terminates.

Programmer Response: Check the installation exit routine to determine if there are any problems in the module and make any necessary corrections. Link edit the key generator utility program with the corrected exit routine. (See "Adding User-Written Exit Routines" in *OS/VS1 and OS/VS2 MVS Programmed Cryptographic Facility: Installation Reference Manual.*) Rerun the key generator utility program as follows. Rerun the entire job if the SETM or CHGM function was requested and the host master key was not set (the contents of the PARM field precede this message).

Otherwise, use this listing to determine which control statements were processed successfully. Then rerun the utility program using the CHGK function to process the remaining control statements.

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

ICT1024 REQUIRED OPERAND[S] MISSING; STATEMENT IGNORED

Explanation: While scanning a SYSIN control statement, the key generator utility program could not find one or more required parameters. LOCAL, REMOTE, and CROSS control statements require a label. EXTRA-LOCAL, EXTRA-REMOTE, and EXTRA-CROSS control statements require a number and a label-base. The REASGN control statement requires an existing label and a new label. The control statement containing the error precedes this message.

System Action: Processing terminates for this control statement. Processing continues for any other control statements.

Programmer Response: Correct the control statement Rerun the key generator utility program, specifying the CHGK function on the EXEC statement and providing the corrected control statement.

ICT1025 REQUIRED INPUTS FOR KEY GENERATION NOT AVAILABLE

Explanation: The key generator utility program attempted to generate a key for a control statement and either a problem occurred with the time-of-day (TOD) clock or a valid seed value was not supplied on the EXEC statement. Message ICT1018, which identifies the specific problem, and the control statement being processed when the problem occurred, precede this message.

System Action: Processing terminates for this control statement. Processing continues for any other control statements.

Programmer Response: Respond as follows:

- If message ICT1018 stated that there is a problem involving the TOD clock, contact your IBM service representative.
- If message ICT1018 stated that a seed value was supplied, add a seed value to the EXEC statement.

Rerun the key generator utility program specifying the CHGK function on the EXEC statement and providing the control statement that was being processed when the problem occurred.

ICT1026 UNEXPECTED VSAM ERROR CODE rc [FDBK code]

Explanation: An error occurred when the key generator utility program attempted to read from or write to the cryptographic key data set (CKDS). In the message, rc is the return code that identifies the error. If rc identifies a logical error, then FDBK code indicates the specific logical error that has occurred. The explanation of the return code and feedback code for a VSAM request is provided in *OS/VS Virtual Storage Access Method (VSAM) Programmer's Guide.*

System Action: Key generator utility processing terminates.

Programmer Response: See *OS/VS Virtual Storage Access Method (VSAM) Programmer's Guide* for the appropriate response to the return code and, if applicable, the feedback code given in the message. Correct the problem and rerun the utility program as follows. If the SETM or CHGM function was requested and the host master key was not set (message ICT010I was not issued), rerun the entire job. Otherwise, use this listing to determine which control statements were processed successfully. Then rerun the utility program using the CHGK function to process the remaining control statements.

Notify the security administrator.

Problem Determination: Table I, items 1, 3, and 29.

ICT1027 SYSTEM MASTER KEY PREVIOUSLY SET; INVALID KEY GENERATOR REQUEST

Explanation: An attempt was made to use the SETM function of the key generator utility program to set host master key, but the host master key has already been set. Any change to it must be requested using the CHGM function of the utility program.

System Action: Key generator utility processing terminates.

Programmer Response: If you want to change the host master key and secondary key-encrypting keys, rerun the key generator utility program specifying CHGM on the EXEC statement. If you want to change secondary key-encrypting keys only, rerun the utility program specifying CHGK on the EXEC statement.

ICT1028 SYSTEM MASTER KEY

Explanation: When attempting to change the host master key, the key generator utility program encountered an invalid current host master key value in the PARM field of the EXEC statement.

System Action: Key generator utility processing terminates.

Programmer Response: Correct the value of the current host master key in the EXEC statement and rerun the key generator utility program.

Problem Determination: Table I, items 1 and 13.

ICT1029 INVALID PARITY IN NEW MASTER KEY

Explanation: An invalid new host master key value was specified in the PARM field of the EXEC statement for the key generator utility program.

System Action: Key generator utility processing terminates.

Programmer Response: Supply a valid value for the new host master key and the complement of the value in the EXEC statement. The new key value must contain odd parity in each byte. Rerun the key generator utility program.

Problem Determination: Table I, items 1 and 13.

ICT1030 INVALID SMF DATA LENGTH FROM INSTALLATION EXIT; PROCESSING TERMINATES

Explanation: The key generator installation exit routine returned the SMF buffer with a value greater than 64 in the length field.

System Action: The key generator utility program does not include the installation-defined data in the SMF record. The program writes the SMF record to the SMF data set and terminates processing.

Programmer Response: Check the installation exit routine to determine if there are any problems in the module and make any necessary corrections. Link edit the key generator utility

program with the corrected exit routine. (See "Adding User-Written Exit Routines" in *OS/VS1 and OS/VS2 MVS Programmed Cryptographic Facility: Installation Reference Manual.*) Rerun the key generator utility program as follows. If the SETM or CHGM function was requested and the host master key was not set (message ICT010I was not issued), rerun the entire job. Otherwise, use this listing to determine which control statements were processed successfully. Then rerun the utility program using the CHGK function to process the remaining control statements. Notify the security administrator.

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

ICT1031 INVALID DELIMITER IN PARM FIELD

Explanation: While scanning the PARM field of the EXEC statement, the key generator utility program did not find an expected delimiter or encountered an unexpected delimiter.

System Action: Key generator utility processing terminates.

Programmer Response: The valid delimiters are comma, right and left parentheses, and blank. Correct the error and rerun the key generator utility program.

Problem Determination: Table I, items 1 and 13.

ICT1032 CRYPTOGRAPHY EMK FUNCTION FAILED - CODE xx

Explanation: An error occurred during execution of an EMK macro instruction issued by the key generator utility program. In the message text, xx is the error return code from the EMK macro. The values of xx and their meanings are as follows:

Return Code	Meaning
4	The Programmed Cryptographic Facility has not been initialized.
8	An invalid operation was requested; the macro was not EMK.
12	An ESTAE recovery environment could not be established.
32	The address of the clear key-encrypting key or the address of the enciphered key-encrypting key was specified as zero.

System Action: Key generator utility processing terminates.

Programmer Response: Contact IBM for programming support. When the problem has been corrected, rerun the key generator utility program as follows. If the SETM or CHGM function was requested and the host master key was not set, (message ICT010I was not issued), rerun the entire job. Otherwise, use this listing to determine which control statements were processed successfully. Then rerun the utility program using the CHGK function to process the remaining control statements.

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

ICT1033 CRYPTOGRAPHY CIPHER FUNCTION FAILED - CODE xx

Explanation: An error occurred during the execution of a CIPHER macro instruction issued by the key generator utility program. In the message text, xx is the error return code from the macro. The values of xx and their meanings are as follows:

Return Code	Meaning
4	The Programmed Cryptographic Facility has not been initialized. The data could not be enciphered or deciphered.
8	An invalid operation was requested; the macro was not CIPHER.
12	An ESTAE recovery environment could not be established.
16	The length of the data to be enciphered or deciphered was specified as zero or as a negative number.
20	The BRANCH = YES parameter was specified, but the program issuing the macro is not executing in supervisor state.
32	The address of the clear data or the enciphered data was specified as zero.

System Action: Key generator utility processing terminates.

Programmer Response: Contact IBM for programming support. When the problem has been corrected, rerun the key generator utility program as follows. If the SETM or CHGM function was requested and the host master key was not set (message ICT010I was not issued), rerun the entire job. Otherwise, use this listing to determine which control statements were processed successfully. Then rerun the utility program using the CHGK function to process the remaining control statements.

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

ICT1034 CRYPTOGRAPHY KEY TRANSLATION FAILED - CODE xx

Explanation: An error has occurred during key translation processing. The translation was requested by the key generator utility program. In the message text, xx is the error return code from the key translation process. The values of xx and their meanings are as follows:

Return Code	Meaning
4	The Programmed Cryptographic Facility has not been initialized.
8	An invalid operation was requested.
12	An ESTAE recovery environment could not be established.

24 Bad parity was detected in the local, remote, or cross key.

28 The program requesting the key translation function is not APF-authorized or in supervisor state or executing under storage protect key 0 through 7.

32 The address of the enciphered data-encrypting key or the address of the enciphered key-encrypting key was specified as zero.

System Action: Key generator utility processing terminates.

Programmer Response: Contact IBM for programming support. When the problem has been corrected, rerun the key generator utility program as follows. If the SETM or CHGM function was requested and the host master key was not set (message ICT010I was not issued), rerun the entire job. Otherwise, use this listing to determine which control statements were processed successfully. Then rerun the utility program using the CHGK function to process the remaining control statements.

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

ICT1035 synad message for non-VSAM

Explanation: An I/O error occurred while the key generator utility program was processing the non-VSAM data set defined by the SYSMKDS or SYSIN DD statement. The format and explanation of the message is in the SYNADAF macro instruction description in *OS/VS2 MVS Data Management Macro Instructions*.

System Action: Key generator utility processing terminates.

Programmer Response: See *OS/VS2 MVS Data Management Macro Instructions* for the explanation of the message. Correct the problem and rerun the key generator utility program as follows. If the SETM or CHGM function was requested and the host master key was not set (message ICT010I was not issued), rerun the entire job. Otherwise, use this listing to determine which control statements were processed successfully. Then rerun the utility program using the CHGK function to process the remaining control statements. Notify the security administrator.

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

ICT1036 CKDS ENTRY SUCCESSFULLY DELETED

Explanation: The key generator utility program has successfully deleted an entry from the cryptographic key data set (CKDS). The control statement that was processed precedes this message.

System Action: Processing continues.

Programmer Response: None.

ICT1037 INVALID VALUE FOR NEW SYSTEM MASTER KEY COMPLEMENT

Explanation: An incorrect new host master key or its complement value was specified on the PARM field of the EXEC statement for the key generator utility program.

System Action: Key generator utility processing terminates.

Programmer Response: Check both the new host master key and its complement value to determine which one was not correct. Supply the correct new host master key value or its complement value on the EXEC statement and rerun the key generator utility program.

Problem Determination: Table I, items 1 and 13.

Cryptographic Unit Support (ICU)

Component Name	ICU
Program Producing Message	Cryptographic Unit Support
Audience and Where Produced	For operator and security administrator: on console. For programmer: in SYSPRINT or SYSOUT data set.
Message Format	ICUnnns text ICUnnnn text ICU Identifies the message as a Cryptographic Unit Support message. nnn Message serial number, which indicates the class of message: 010 - 019 General informational messages associated with the key generator utility program. 020 - 029 Messages associated with the key manager function. 030 - 039 Messages associated with initialization processing. 040 - 049 050 - 059 Messages associated with key verification procedures. 060 - 069 Messages associated with commands used to start and stop the Cryptographic Unit Support and to modify the configuration of cryptographic units. 070 - 079 Messages associated with the cryptographic unit buffer tests. 080 - 089 Messages associated with the cryptographic unit I/O initialization. nnnn Message serial number of detailed informational messages associated with the key generator utility program. s Type code: I Information; no operator action is required. text Message text.
Associated and Referenced Publications	*OS/VS1 and OS/VS2 MVS Cryptographic Unit Support General Information Manual*, GC28-1015 *OS/VS2 MVS Cryptographic Unit Support Installation Reference Manual*, SC28-1016 *OS/VS2 MVS Cryptographic Unit Support Program Logic Manual*, LY28-1017 *OS/VS2 MVS Data Management Macro Instructions*, GC26-3873 *OS/VS2 Supervisor Services and Macro Instructions*, GC28-0683 *OS/VS Virtual Storage Access Method (VSAM) Programmer's Guide*, GC26-3838 *OS/VS2 Access Method Services*, GC26-3841

ICU010I CRYPTOGRAPHY SYSTEM MASTER KEY HAS BEEN SET

Explanation: The key generator utility program has successfully set the host master key. If there are any control statements requesting updates to the secondary key-encrypting keys, these statements are processed at this time.

Note: The security administrator must ensure that the key generator utility program was executed in response to a request from an authorized person. More information about the requester is recorded in SMF record type 82.

System Action: Key generator utility processing continues.

Operator Response: None.

ICU011I CRYPTOGRAPHY KEY UPDATE STARTED IN KEY GENERATOR UTILITY job name

Explanation: The key generator utility program, identified by job name, has successfully updated the cryptographic key data set (CKDS) to reflect a new, changed, or deleted secondary key-encrypting key. This message is issued only for the first update to the CKDS for a secondary key-encrypting key although the job may contain several update requests.

Note: The security administrator must ensure that the key generator utility program was executed in response to a request from an authorized person. More information about the requester is recorded in SMF record type 82.

System Action: Key generator utility processing continues.

Operator Response: None.

ICU012I ERROR IN EXECUTING KEY GENERATOR UTILITY job name

Explanation: The key generator utility program, identified by job name, did not complete successfully. A message identifying the nature of the problem is routed to the data set defined by the SYSPRINT DD statement.

Note: The security administrator must ensure that the key generator utility program was executed in response to a request from an authorized person. More information about the requester is recorded in SMF record type 82.

System Action: Key generator utility processing terminates.

Operator Response: None.

Programmer Response: Respond to the problem identified by the message appearing in the data set defined by the SYSPRINT DD statement.

ICU013I KEY GENERATOR UTILITY job name STARTED AT time

Explanation: The key generator utility job, indicated by job name, began executing at the time shown in the message.

Note: The security administrator must ensure that the key generator utility program was executed in response to a request from an authorized person. More information about the requester is in SMF record type 82.

System Action: Key generator utility processing continues.

Operator Response: None

ICU014I KEY GENERATOR UTILITY job name ENDED AT time

Explanation: The key generator utility job, indicated by job name, completed executing at the time shown in the message.

Note: The security administrator must ensure that the key generator utility program was executed in response to a request from an authorized person. More information about the requester is in SMF record type 82.

System Action: Key generator utility processing terminates.

Operator Response: None.

Programmer Response: Respond to any error messages that were issued during execution.

ICU020I synad message from VSAM while processing CKDS

Explanation: A physical I/O error occurred while the key manager was attempting to read the cryptographic key data set (CKDS). The format and explanation of the accompanying VSAM physical I/O error message is given in *OS/VS Virtual Storage Access Method (VSAM) Programmer's Guide*.

Operator Response: Notify the system programmer.

Programmer Response: See *OS/VS Storage Access Method (VSAM) Programmer's Guide* for the explanation of the accompanying VSAM physical I/O error message. If the volume caused the error, use a backup copy of the CKDS on a different volume. (If you do not want to re-IPL the system, be sure the new copy of the CKDS uses the same host master key as the old copy.) If the device caused the error, move the volume containing the CKDS to an alternate device. To change the volume or device, stop the Cryptographic Unit Support (via IPL or an operator STOP command) and restart it (via an operator START command), specifying an alternate data set name on the START command, if required. Rerun the job.

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

ICU021I VIOLATION ON RETKEY BY { **USER (userid) GROUP (groupid)** / **JOB (jjj) STEP (sss)** }

Explanation: An unauthorized program has issued the RETKEY SVC requesting that a data-encrypting key enciphered under a cross key be reenciphered under the host master key. The RACF (Resource Access Control Facility) user (userid) and group name (groupid) are given if they are available. Otherwise, the job name (jjj) and step name (sss) are supplied. The REMKEY field in SMF record type 82 contains the label of the cross key.

Note: The security administrator must determine if an attempted security violation occurred. Follow the security procedures established by your installation.

System Action: Key manager processing terminates.

Operator Response: None.

ICU022I xxx ABEND DURING { **GENKEY** / **RETKEY** } **PROCESSING**

Explanation: An error occurred during processing of either the GENKEY or RETKEY function of the key manager. In the message, xxx indicates the system completion code.

System Action: Key manager processing terminates.

Operator Response: Notify the system programmer.

Programmer Response: Respond to the problem identified by the system completion code.

Problem Determination: Table I, items 5a, 13, 18, and 29.

ICU024I UNEXPECTED VSAM ERROR CODE rc [FDBK code]

Explanation: An error occurred when the key manager attempted to read the cryptographic key data set (CKDS). In the message, rc is the return code that identifies the error. If rc identifies a logical error, then FDBK code indicates the specific logical error that has occurred. The explanation of the return code and feedback code for a VSAM request is provided in *OS/VS Virtual Storage Access Method (VSAM) Programmer's Guide*.

System Action: Key manager processing terminates.

Operator Response: Notify the system programmer.

Programmer Response: See *OS/VS Virtual Storage Access Method (VSAM) Programmer's Guide* for the appropriate response to the return code and, if applicable, the feedback code given in the message. Correct the problem and rerun the job.

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

ICU025I ENTRY xxxxxxxx FAILS AUTHENTICATION TEST

Explanation: The key manager has determined that the secondary key-encrypting key, stored in the cryptographic key data set (CKDS) entry indicated by xxxxxxxx, has been changed since it was stored in the CKDS. The key authentication procedure, using the test pattern in the CKDS entry, detected the problem.

System Action: Processing terminates for this request.

Operator Response: Notify the system programmer.

Programmer Response: Ensure that the CKDS and MKDS that are mounted are the current versions of the data sets. Rerun the job.

ICU030I CRYPTOGRAPHY INITIALIZATION UNABLE TO LOCATE name IN LPA

Explanation: The Cryptographic Unit Support installation process invoked by the operator START command or the key generator utility program was unable to locate the routine specified by name in a search of the active link pack area queue and the link pack area directory.

System Action: Cryptographic Unit Support initialization processing terminates.

Operator Response: Notify the system programmer.

Programmer Response: Determine if the GENKEY or RETKEY installation exit routine (module ICUMGR90 or ICUMGR95) is properly link edited into SYS1.LPALIB. If the module has been replaced since the Cryptographic Unit Support was installed, check the linkage editor output from the most recent change. If it has not been replaced, check the output of the install process (SMP or SYSGEN) to see that the module was properly installed. Correct the problem and reissue the operator START command or rerun the key generator utility program.

Problem Determination: Table I, items 2 and 4.

ICU031I INVALID CRYPTOGRAPHY USER SVC NUMBER SPECIFIED

Explanation: The Cryptographic Unit Support initialization process invoked by the operator START command or the key generator utility program has determined that the options module, ICUOPTN2, contains an invalid user SVC number.

System Action: Cryptographic Unit Support initialization processing terminates.

Operator Response: Notify the system programmer.

Programmer Response: Update the installation options module, ICUOPTN2, to reflect a valid user SVC number in the range of 200 through 255. See the Cryptographic Unit Support Program Directory for information on how to modify the options module. When the update is complete, reissue the operator START command or rerun the key generator utility program.

Problem Determination: Table I, items 2 and 4.

ICU033I LOAD FAILED FOR CRYPTOGRAPHY INSTALLATION OPTIONS MODULE

Explanation: The Cryptographic Unit Support initialization process invoked by the operator START command or the key generator utility program was unable to load the installation options module, ICUOPTN2.

System Action: Cryptographic Unit Support initialization processing terminates.

Programmer Response: Check the output of the install process (SMP or SYSGEN) to verify that the installation options module was properly installed in SYS1.LINKLIB. Correct the problem and reissue the operator START command or rerun the key generator utility program.

Problem Determination: Table I, items 2 and 4.

ICU034I CRYPTOGRAPHY INITIALIZATION UNABLE TO ESTABLISH ESTAE CODE xxx

Explanation: The Cryptographic Unit Support initialization process invoked by the operator START command or the key generator utility program was unable to establish an ESTAE recovery environment. The code from ESTAE processing is specified by xxx. See *OS/VS2 Supervisor Services and Macro Instructions* for an explanation of the return code.

System Action: Cryptographic Unit Support initialization processing terminates.

Operator Response: Notify the system programmer.

Programmer Response: If the code is 14, reissue the operator START command or rerun the key generator utility program. For all other codes, contact IBM for programming support. When the problem is corrected, reissue the START command or rerun the utility program.

Problem Determination: Table I, items 2 and 4.

ICU041I CRYPTOGRAPHY FACILITY HAS BEEN ACTIVATED

Explanation: An operator START command has successfully activated the Cryptographic Unit Support. All functions of the facility are currently operational.

System Action: The Cryptographic Unit Support is active.

Operator Response: None.

ICU042I START job name TERMINATED

Explanation: The START command procedure, identified by job name, terminated abnormally when attempting to start the Cryptographic Unit Support. One or more messages that explain the nature of the error precede this message.

System Action: START command processing terminates. The Cryptographic Unit Support is not active.

Operator Response: Notify the system programmer.

Programmer Response: Respond to the problem described by the preceding message.

ICU043I UNABLE TO OPEN SYSCKDS

Explanation: The START command procedure used to start the Cryptographic Unit Support was not able to open the cryptographic key data set (CKDS) defined by the SYSCKDS DD statement. This message is accompanied by a VSAM error message that further identifies the problem.

System Action: START command processing terminates.

Operator Response: Notify the system programmer.

Programmer Response: Verify that a DD statement has been included in the START procedure for the CKDS with the ddname SYSCKDS. Check the accompanying VSAM error message for additional information. Correct the problem and reissue the operator START command.

Problem Determination: Table I, items 2 and 4.

ICU044I START job name UNABLE TO ESTABLISH ESTAE CODE xxx

Explanation: The START procedure used to start the Cryptographic Unit Support, identified by job name, was unable to establish an ESTAE recovery environment. The return code from ESTAE processing is specified by xxx. See *OS/VS2 Supervisor Services and Macro Instructions* for an explanation of the return code.

System Action: START command processing terminates.

Operator Response: Notify the system programmer.

Programmer Response: If the code is 14, reissue the operator START command. For all other codes, contact IBM for programming support. When the problem is corrected, reissue the START command.

Problem Determination: Table I, items 2 and 4.

ICU045I CRYPTOGRAPHIC UNIT SUPPORT OR KEY GENERATOR OR PROGRAMMED CRYPTOGRAPHIC FACILITY ALREADY IN PROGRESS

Explanation: An operator START command was issued to start the Cryptographic Unit Support but a cryptographic function is already in progress. The cryptographic function could be the Cryptographic Unit Support, the key generator for the Cryptographic Unit Support, the Programmed Cryptographic Facility, or the key generator for the Programmed Cryptographic Facility.

System Action: The START command is ignored.

Operator Response: If a START command was issued when the Cryptographic Unit Support is already active or the START command procedure is already executing, an operator STOP command must be issued before another START command can be accepted. If the key generator utility program is currently executing, reissue the START command when the utility program terminates.

ICU047I MODIFY CRYPTOGRAPHY COMMAND REJECTED

Explanation: An operator MODIFY command was issued to change the configuration of cryptographic units, but the configuration established by the MODIFY command does not include any cryptographic units available to the Cryptographic Unit Support.

System Action: MODIFY command processing terminates. System processing continues with the configuration that existed before the MODIFY command was issued.

Operator Response: Ensure that the cryptographic units specified in the command are physically online. Reissue the MODIFY command.

ICU048I MODIFY CRYPTOGRAPHY -- NEW DEVICE CONFIGURATION IS device-addr

Explanation: An operator MODIFY command has successfully changed the configuration of cryptographic units. In the message, device-addr identifies the cryptographic unit now available to the Cryptographic Unit Support.

Operator Response: None.

ICU050I USER-SUPPLIED KEY AND DEVICE device-addr KEY DO NOT MATCH

Explanation: The host master key supplied as input to the key generator does not have the same value as the host master key installed in the cryptographic unit identified by device-addr.

System Action: Processing continues if another cryptographic unit is available. Otherwise, processing terminates.

Operator Response: Notify the system programmer.

Programmer Response: Ensure that the host master key installed in the cryptographic unit and the value supplied in the PARM field of the EXEC statement are the same. If a cryptographic unit was not available to continue processing, rerun the key generator utility program. Notify the security administrator.

ICU051I KEY USED TO CREATE DATA SET ddname AND DEVICE device-addr KEY DO NOT MATCH

Explanation: The host master key installed in the cryptographic unit, identified by device-addr, is not the same value as the host master key whose variants were used to encipher entries on the cryptographic key data set (CKDS), identified in the message by ddname.

System Action: If another cryptographic unit is available, processing continues. Otherwise, processing terminates.

Operator Response: Notify the system programmer.

Programmer Response: Ensure that the CKDS, defined by the specified ddname, is the current version of the data set. If a cryptographic unit was not available to continue processing, rerun the key generator utility program. Notify the security administrator.

ICU052I DATA SETS ddname-1 AND ddname-2 NOT CREATED WITH SAME MASTER KEY

Explanation: The entries on the cryptographic key data set (CKDS), identified in the message by ddname-1, were not enciphered under the host master key variants that are stored on the master key variant data set (MKDS), identified in the message by ddname-2.

System Action: Key generator utility processing terminates.

Operator Response: Notify the system programmer.

Programmer Response: Ensure that the CKDS and MKDS that are defined on the specified DD statements are the current versions of the data sets. Rerun the key generator utility program. Notify the security administrator.

ICU053I USER-SUPPLIED KEY AND KEY USED TO CREATE ddname DO NOT MATCH

Explanation: The value supplied to the key generator as the old host master key (for a CHGM request) is not the value whose variants were used to encipher the entries on the cryptographic key data set (CKDS), identified in the message by ddname.

System Action: Key generator utility processing terminates.

Operator Response: Notify the system programmer.

Programmer Response: Ensure that the CKDS that is defined on the specified DD statement is the current version of the data set. Ensure that the value supplied to the key generator is the value that was in the cryptographic unit just before the most recent change. Rerun the key generator utility program. Notify the security administrator.

ICU054I KEY VERIFICATION NOT EXECUTED. INVALID INPUT.

Explanation: The code that indicates which of the key verification tests is to be performed was invalid. The code did not indicate any of the defined key verification tests.

System Action: The program that requested key verification (either the key generator utility, START command processing, or MODIFY command processing) terminates.

Operator Response: Notify the system programmer.

Programmer Response: Contact IBM for programming support. When the problem has been corrected, rerun the key generator utility or reissue the START or MODIFY command.

ICU055I KEY VERIFICATION TEST FAILED DUE TO I/O ERROR

Explanation: A cryptographic unit failed the key verification test because of an I/O error. This error can occur following the invocation of the cryptographic unit access routine.

System Action: If another cryptographic unit is available, processing continues. Otherwise, processing terminates.

Operator Response: Contact your IBM service representative. Notify the security administrator.

Problem Determination: Table I, items 2, 18, 24.

ICU061I CRYPTOGRAPHY FACILITY HAS BEEN TERMINATED

Explanation: An operator STOP command has successfully deactivated the Cryptographic Unit Support. All current sessions and all new sessions will fail.

System Action: System processing continues.

Operator Response: None.

ICU062I INITIALIZATION OF CRYPTOGRAPHY FACILITY AND OPEN SYSCKDS SUCCESSFUL

Explanation: An operator START command has successfully initialized the Cryptographic Unit Support and has opened the cryptographic key data set defined by the SYSCKDS DD statement. Key verification must still be performed on the cryptographic unit(s) before all functions of the Cryptographic Unit Support are operational.

System Action: System processing continues.

Operator Response: None.

ICU070I INTERNAL BUFFER BAD ON DEVICE device-addr

Explanation: The internal buffer of the cryptographic unit identified by device-addr is not functioning properly.

System Action: If at least one other cryptographic unit is available, processing continues. Otherwise, processing terminates.

Operator Response: Contact your IBM service representative. Notify the security administrator.

Problem Determination: Table I, items 2, 4, 24, 30.

ICU071I I/O PROCESSING FAILED ON DEVICE device-addr

Explanation: The cryptographic unit, identified by device-addr, was unable to process input/output data because of a hardware error.

System Action: If another cryptographic unit is available, processing continues. Otherwise, processing terminates.

Operator Response: Contact your IBM service representative. Notify the security administrator.

Problem Determination: Table I, items 2, 4, 24, 29.

ICU072I NO DEVICE PATH TO DEVICE device-addr

Explanation: There is no physical I/O path to the cryptographic unit identified by device-addr.

System Action: If another cryptographic unit is available, processing continues. Otherwise, processing terminates.

Operator Response: Notify the system programmer.

Programmer Response: Ensure that the cryptographic unit is physically online and logically online (by means of a VARY command) and that the cryptographic unit's physical key is locked. Then issue a MODIFY command to add this unit to the

configuration of cryptographic units, or issue a START command after the Cryptographic Unit Support is stopped.

Problem Determination: Table I, items 2, 4, 29.

ICU073I INTERNAL LINE BUFFER TEST UNABLE TO GETMAIN STORAGE

Explanation: The test to determine if the internal buffer is functioning properly could not be performed because the routine could not obtain sufficient storage.

System Action: If another cryptographic unit is available, processing continues. Otherwise, processing terminates.

Operator Response: Notify the system programmer.

Programmer Response: Ensure that sufficient storage is available in subpool 252. Reissue the START command or rerun the key generator utility program.

Problem Determination: Table I, items 2, 4.

ICU074I UNABLE TO DYNAMICALLY ALLOCATE DEVICE device-addr CODE xxxx

Explanation: Dynamic allocation failed with code xxxx while attempting to allocate or deallocate the cryptographic unit identified by device-addr.

System Action: If another cryptographic unit is available, processing continues. Otherwise, processing terminates.

Operator Response: Notify the system programmer.

Programmer Response: See *OS/VS2 MVS SPL: Job Management* for the explanation of the error code. Correct the problem and reissue the START command or rerun the key generator utility.

Problem Determination: Table I, items 2, 4, 29.

ICU077I DEVICE device-addr PREVIOUSLY ALLOCATED TO ANOTHER JOB OR TASK

Explanation: The Cryptographic Unit Support attempted to allocate the cryptographic unit identified by device-addr, but the unit is allocated to another job or task in the system.

System Action: If another cryptographic unit is available, processing continues. Otherwise, processing terminates.

Operator Response: Notify the system programmer and security administrator.

Programmer Response: Ensure that all access to any cryptographic unit is controlled by the Cryptographic Unit Support to benefit from the authorization checks it performs to ensure the security of the cryptographic unit.

Problem Determination: Table I, items 2, 4, 29.

ICU078I DEVICE device-addr UNAVAILABLE - OFFLINE AND IN USE BY A SYSTEM COMPONENT

Explanation: The Cryptographic Unit Support attempted to allocate the cryptographic unit identified by device-addr, but the unit was designated as not allocatable (UCBNALOC=ON).

System Action: If another cryptographic unit is available, processing continues. Otherwise, processing terminates.

Operator Response: Notify the system programmer and security administrator.

Programmer Response: Ensure that all access to any cryptographic unit is controlled by the Cryptographic Unit Support to benefit from the authorization checks it performs to ensure the security of the cryptographic unit.

Problem Determination: Table I, items 2, 4, 29.

ICU080I I/O INITIALIZATION UNABLE TO ESTABLISH ESTAE CODE xxx

Explanation: The Cryptographic Unit Support I/O initialization routine, invoked by the operator START command or the key generator utility program, was unable to establish a recovery environment. The return code from ESTAE processing is specified by xxx. See *OS/VS2 Supervisor Services and Macro Instructions* for an explanation of the return code.

System Action: The Cryptographic Unit Support I/O initialization or key generator utility terminates.

Operator Response: Notify the system programmer.

Programmer Response: If the code is 4, reissue the operator START command or rerun the key generator utility program. For all other codes, contact IBM for programming support. When the problem is corrected, reissue the START command or rerun the key generator.

Problem Determination: Table I, items 2 and 4.

ICU081I I/O INITIALIZATION UNABLE TO GETMAIN SP227 STORAGE

Explanation: The Cryptographic Unit Support I/O initialization routine, invoked by the operator START command or the key generator utility program, was unable to obtain sufficient storage from subpool 227.

System Action: START command or key generator utility program processing terminates.

Operator Response: Notify the system programmer.

Programmer Response: Ensure that sufficient storage is available in subpool 227. Reissue the START command or rerun the key generator utility program.

Problem Determination: Table I, items 2, 4.

ICU082I NO 3848 CRYPTOGRAPHIC UNITS SYSGENED INTO ELIGIBLE DEVICE TABLE

Explanation: No entries with UNITNAME=3848 were found in the eligible device table, which is created during an IOGEN or an EDTGEN. An entry with UNITNAME=3848 must exist for each cryptographic unit defined in the configuration, and at least one such entry must exist for successful initialization of the Cryptographic Unit Support.

System Action: START command or key generator utility processing terminates.

Operator Response: Notify the system programmer.

Programmer Response: Ensure that at least one cryptographic unit is defined during system generation. Reissue the START command or rerun the key generator utility program.

Problem Determination: Table I, items 2, 4.

ICU084I IEFAB4UV UNABLE TO GETMAIN SP230 STORAGE

Explanation: The allocation unit verification routine (IEFAB4UV) that is used by the I/O initialization routine, invoked by the operator START command or the key generator utility program, was unable to obtain sufficient storage from subpool 230.

System Action: START command or key generator utility processing terminates.

Operator Response: Notify the system programmer.

Programmer Response: Ensure that sufficient storage is available in subpool 230. Reissue the START command or rerun the key generator utility program.

Problem Determination: Table I, items 2, 4.

ICU085I NO CRYPTOGRAPHIC UNITS AVAILABLE

Explanation: All cryptographic units failed with one of the following errors:

- Key verification test failed
- Internal buffer test failed
- Sufficient storage to perform the internal buffer test could not be obtained.
- The cryptographic unit could not be opened.

One or more messages that explain the error precede this message.

System Action: START command or key generator processing terminates.

Operator Response: Notify the system programmer.

Programmer Response: Respond to the problem described by the preceding message.

ICU1001 WEAK KEY SPECIFIED

Explanation: A weak clear key value was specified on a LOCAL, LOCAL-GROUP, REMOTE, or CROSS control statement for the key generator utility program. The control statement containing the weak key precedes this message.

System Action: Processing terminates for this control statement. Processing continues for any other control statements.

Programmer Response: Supply a new clear key value on the control statement or remove the KEY parameter completely to let the key generator utility program generate a clear key value. See "Security Highlights and Requirements" in *OS/VS1 and OS/VS2 MVS Cryptographic Unit Support: Installation Reference Manual* for a description of weak key values. Rerun the utility program, specifying the CHGK function on the EXEC statement and providing the corrected control statement as input.

ICU1002 INVALID VERB

Explanation: An invalid verb was specified on a control statement for the key generator utility program. The control statement containing the invalid verb precedes this message.

System Action: Processing terminates for this control statement. Processing continues for any other control statements.

Programmer Response: Correct the verb on the control statement. The valid verbs are LOCAL, LOCAL-GROUP, REMOTE, CROSS, EXTRA-LOCAL, EXTRA-REMOTE, EXTRA-CROSS, REASGN, and INSTDAT. The verb must be preceded and followed by a blank. Rerun the key generator utility program, specifying the CHGK function on the EXEC statement and providing the corrected control statement as input.

ICU1003 SYNTAX ERROR IN KEY

Explanation: An invalid clear key value was specified on a LOCAL, LOCAL-GROUP, REMOTE, or CROSS control statement for the key generator utility program. The control statement containing the invalid clear key value precedes this message.

System Action: Processing terminates for this control statement. Processing continues for any other control statements.

Programmer Response: Supply a valid clear key value on the control statement. A valid value consists of 16 hexadecimal digits. (Valid hexadecimal digits are 0 through 9 and A through F.) Rerun the key generator utility program, specifying the CHGK function on the EXEC statement and providing the corrected control statement as input.

ICU1004 SYNTAX ERROR IN LABEL

Explanation: An invalid label was specified on a LOCAL, LOCAL-GROUP, REMOTE, CROSS, or REASGN control statement for the key generator utility program. The control statement containing the invalid label precedes this message.

System Action: Processing terminates for this control statement. Processing continues for any other control statements.

Programmer Response: Supply a valid label on the control statement. A valid label consists of 1 to 8 alphameric characters. Valid alphameric characters are A through Z and 0 through 9. Rerun the key generator utility program, specifying the CHGK function on the EXEC statement and providing the corrected control statement as input.

ICU1005 INVALID OR REDUNDANT KEYWORD SPECIFIED

Explanation: An invalid or redundant keyword parameter was specified on a LOCAL, LOCAL-GROUP, REMOTE, CROSS, or REASGN control statement for the key generator utility program. The control statement containing the error precedes this message.

System Action: Processing terminates for this control statement. Processing continues for any other control statements.

Programmer Response: Correct the invalid keyword parameter or remove the redundant keyword parameter on the control statement. Rerun the key generator utility program, specifying the CHGK function on the EXEC statement and providing the corrected control statement.

ICU1006 INVALID VALUE SPECIFIED ON EXTRA STATEMENT

Explanation: One of the following conditions was encountered on an EXTRA-LOCAL, EXTRA-CROSS, or EXTRA-REMOTE control statement for the key generator utility program:

- The first through fourth characters of the value for label-base were not alphameric.
- The fifth through eighth characters of the value for label-base were not numeric.
- An invalid number of additional keys was requested.

The control statement containing the error precedes this message.

System Action: Processing terminates for this control statement. Processing continues for any other control statements.

Programmer Response: If the alphameric portion of the label-base is incorrect, supply a valid value on the control statement. A valid value consists of 4 alphameric characters. Valid alphameric characters are A through Z and 0 through 9.

Otherwise, correct the numerical portion of the label-base and/or the number of additional keys requested on the control statement. The sum of these two values must not exceed 9999.

Rerun the key generator utility program, specifying the CHGK function on the EXEC statement and providing the corrected control statement.

ICU1007 STATEMENT REJECTED BY INSTALLATION EXIT

Explanation: A control statement was rejected by the key generator utility program installation exit routine. The rejected control statement precedes this message.

System Action: Processing terminates for this control statement. Processing continues for any other control statements.

Programmer Response: Follow local procedures for errors detected by the key generator utility program installation exit routine. Correct the error and, if necessary, rerun the utility program. Specify the CHGK function on the EXEC statement and provide the corrected control statement.

ICU1008 REQUIRED PARAMETER INFORMATION MISSING

Explanation: The key generator utility program found that the value for the SETM, CHGM, or SEED parameter on the EXEC statement is missing.

System Action: Key generator utility processing terminates.

Programmer Response: Supply the missing value in the PARM field of the EXEC statement and rerun the key generator utility program.

Problem Determination: Table I, items 1 and 13.

ICU1009 DUPLICATE LABEL; KEY NOT ADDED

Explanation: A user requested the key generator utility program to add a label and its associated secondary key-encrypting key to the cryptographic key data set (CKDS), but the specified label was already defined in the CKDS. The rejected control statement precedes this message.

System Action: Processing terminates for this control statement. Processing continues for any other control statements.

Programmer Response: Assign a unique label to the key and rerun the key generator utility program, specifying the CHGK function on the EXEC statement and providing the corrected control statement.

ICU1010 LABEL NOT FOUND; NOT PROCESSED

Explanation: A user requested the key generator utility program to update a secondary key-encrypting key or to delete a label and its associated key from the cryptographic key data set (CKDS), but the specified label was not defined in the CKDS. The rejected control statement precedes this message.

System Action: Processing terminates for this control statement. Processing continues for any other control statements.

Programmer Response: Supply the correct label and rerun the key generator utility program, specifying the CHGK function on the EXEC statement.

ICU1011 synad I/O error message from VSAM

Explanation: A physical I/O error occurred when the key generator utility program attempted to access the SYSCKDS or SYSNCKDS data set. The format and explanation of the accompanying VSAM physical I/O error message is given in *OS/VS Virtual Storage Access Method (VSAM) Programmer's Guide*.

System Action: Key generator utility processing terminates.

Programmer Response: See *OS/VS Virtual Storage Access Method (VSAM) Programmer's Guide* for the explanation of the accompanying VSAM physical I/O error message. If the volume caused the error, use a backup copy of the CKDS on a different volume. (If you do not want to re-IPL the system, be sure the new copy of the CKDS uses the same host master key as the old copy.) If the device caused the error, move the volume containing the CKDS to an alternate device.

Rerun the key generator utility program as follows. If the SETM or CHGM function was requested and the host master key was not set (message ICU010I was not issued), rerun the entire job. Otherwise, use this listing to determine which control statements were processed successfully. Then rerun the utility program using the CHGK function to process the remaining control statements.

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

ICU1012 PROCESSING TERMINATES DUE TO INSTALLATION EXIT REQUEST

Explanation: The key generator utility program has terminated because the installation exit routine requested termination. If the problem occurred while the utility program was processing a change to the host master key, the contents of the PARM field of the EXEC statement precede this message. If the problem occurred while the utility program was processing a SYSIN control statement, the control statement precedes this message.

System Action: Key generator utility processing terminates.

Programmer Response: Follow local procedures.

ICU1013 PROCESSING ENDED DUE TO ESTAE OR STAE RETURN CODE xxx

Explanation: The key generator utility program attempted to use the ESTAE system service, but the error code xxx was returned. See *OS/VS2 Supervisor Services and Macro Instructions* for an explanation of the return code.

System Action: Key generator utility processing terminates. No control statements are processed.

Programmer Response: If the code is 14, rerun the key generator utility program. For all other codes, contact IBM for programming support. When the problem is corrected, rerun the utility program.

Problem Determination: Table I, items 4, 7a, 13, and 29.

ICU1014 SYSIN DATA SET EMPTY; NO PROCESSING OCCURRED

Explanation: The CHGK function of the key generator utility program was requested but no control statements could be found.

System Action: Key generator utility processing terminates.

Programmer Response: Add the desired control statements to the SYSIN data set and rerun the key generator utility program.

Problem Determination: None.

ICU1015 UNABLE TO { OPEN / CLOSE } ddname [CODE rc]

Explanation: The key generator utility program was unable to open or close the data set defined by the DD statement identified by ddname.

If the data set is a VSAM data set (SYSCKDS or SYSNCKDS), the VSAM return code rc is included to help identify the error. See *OS/VS Virtual Storage Access Method (VSAM) Programmer's Guide* for the explanation of the return code. This message is accompanied by a VSAM error message that further identifies the problem.

System Action: Key generator utility processing terminates.

Programmer Response: If the problem occurred while trying to open a data set, check the JCL. Be sure the required DD statements were included, that they have the correct ddnames, and that they define the correct data sets. The following ddnames are valid: SYSCKDS, SYSNCKDS, SYSIN, and SYSMKDS.

An open failure can also occur if the SYSCKDS or SYSNCKDS data set was defined without the proper parameters. See "Defining Storage for the CKDS and the MKDS" in *OS/VS1 and OS/VS2 MVS Cryptographic Unit Support: Installation Reference Manual* for instructions on using the access method services DEFINE CLUSTER command. If the message contains a VSAM return code, see *OS/VS Virtual Storage Access Method (VSAM) Programmer's Guide* for the appropriate response to the return code and the VSAM section of this manual for the explanation of the accompanying VSAM error message.

Correct the problem and rerun the key generator utility program as follows. If the SETM or CHGM function was requested and the host master key was not set, (message ICU010I was not issued), rerun the entire job. Otherwise, use this listing to determine which control statements were processed successfully. Then rerun the utility program using the CHGK function to process the remaining control statements.

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

ICU1017 CRYPTOGRAPHY STARTED; INVALID KEY GENERATOR REQUEST

Explanation: The key generator utility program was unable to execute because the Cryptographic Unit Support was active.

System Action: Key generator utility processing terminates.

Programmer Response: When the Cryptographic Unit Support is stopped and there are no cryptographic sessions or jobs running in the system, rerun the key generator utility program to change the host master key. Restart the Cryptographic Unit Support by entering an operator START command.

ICU1018 KEY GENERATION NOT ALLOWED - { TOD CLOCK ERROR / SEED NOT SUPPLIED }

Explanation: An error was encountered when the key generator utility program attempted to read the time-of-day (TOD) clock, the TOD clock was inoperative, or a seed value was not supplied on the EXEC statement. Processing continues; however, no keys can be generated.

System Action: Key generator utility processing continues.

Programmer Response: If the problem involves the TOD clock, contact your IBM service representative. If a seed value was not supplied, ignore this message unless message ICU1025 also appears. If message ICU1025 appears, see the description of message ICU1025.

ICU1019 CRYPTOGRAPHY SYSTEM MASTER KEY HAS BEEN SET

Explanation: The key generator utility program has successfully set the host master key. If there are any control statements requesting updates to the secondary key-encrypting keys, they are processed at this time.

System Action: Key generator utility processing continues.

Programmer Response: None.

ICU1020 INVALID KEYWORD SPECIFIED IN PARM FIELD

Explanation: An invalid keyword parameter was specified in the PARM field of the EXEC statement for the key generator utility program.

System Action: Key generator utility processing terminates.

Programmer Response: Supply a valid keyword parameter in the PARM field. The valid keyword parameters are SETM, CHGM, CHGK, and SEED. Rerun the key generator utility program.

Problem Determination: Table I, items 1 and 13.

ICU1021 WEAK SYSTEM MASTER KEY SPECIFIED

Explanation: A weak value for the new host master key was specified in the PARM field of the EXEC statement for the key generator utility program.

System Action: Key generator utility processing terminates.

Programmer Response: Supply a new host master key value and its complement in the PARM field of the EXEC statement. See "Security Highlights and Requirements" in *OS/VS1 and OS/VS2 MVS Cryptographic Unit Support: Installation Reference Manual* for a description of weak key values. Rerun the key generator utility program.

Problem Determination: Table I, items 1 and 13.

ICU1023 INVALID RETURN CODE FROM INSTALLATION EXIT; PROCESSING TERMINATES

Explanation: The key generator utility program installation exit routine returned an invalid return code to the key generator utility program. If the problem occurred while the utility program was processing a change to the host master key, the contents of the PARM field of the EXEC statement precede this message. If the problem occurred while the utility program was processing a SYSIN control statement, the control statement precedes this message.

System Action: Key generator utility processing terminates.

Programmer Response: Check the installation exit routine to determine if there are any problems in the module and make any necessary corrections. Link edit the key generator utility program with the corrected exit routine. (See "Adding User-Written Exit Routines" in *OS/VS1 and OS/VS2 MVS Cryptographic Unit Support: Installation Reference Manual.*) Rerun the key generator utility program as follows. Rerun the entire job if the SETM or CHGM function was requested and the host master key was not set (the contents of the PARM field precede this message).

Otherwise, use this listing to determine which control statements were processed successfully. Then rerun the utility program using the CHGK function to process the remaining control statements.

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

ICU1024 REQUIRED OPERAND[S] MISSING; STATEMENT IGNORED

Explanation: While scanning a SYSIN control statement, the key generator utility program could not find one or more required parameters. LOCAL, LOCAL-GROUP, REMOTE, and CROSS control statements require a label. EXTRA-LOCAL, EXTRA-REMOTE, and EXTRA-CROSS control statements require a number and a label-base. The REASGN control statement requires an existing label and a new label. The control statement containing the error precedes this message.

System Action: Processing terminates for this control statement. Processing continues for any other control statements.

Programmer Response: Correct the control statement. Rerun the key generator utility program, specifying the CHGK function on the EXEC statement and providing the corrected control statement.

ICU1025 REQUIRED INPUTS FOR KEY GENERATION NOT AVAILABLE

Explanation: The key generator utility program attempted to generate a key for a control statement and either a problem occurred with the time-of-day (TOD) clock or a valid seed value was not supplied on the EXEC statement. Message ICU1018, which identifies the specific problem, and the control statement being processed when the problem occurred, precede this message.

System Action: Processing terminates for this control statement. Processing continues for any other control statements.

Programmer Response: Respond as follows:

- If message ICU1018 stated that there is a problem involving the TOD clock, contact your IBM service representative.
- If message ICU1018 stated that a seed value was supplied, add a seed value to the EXEC statement.

Rerun the key generator utility program specifying the CHGK function on the EXEC statement and providing the control statement that was being processed when the problem occurred.

ICU1030 INVALID SMF DATA LENGTH FROM INSTALLATION EXIT; PROCESSING TERMINATES

Explanation: The key generator installation exit routine returned the SMF buffer with a value greater than 64 in the length field.

System Action: The key generator utility program does not include the installation-defined data in the SMF record. The program writes the SMF record to the SMF data set and terminates processing.

Programmer Response: Check the installation exit routine to determine if there are any problems in the module and make any necessary corrections. Link edit the key generator utility program with the corrected exit routine. (See "Adding User-Written Exit Routines" in *OS/VS1 and OS/VS2 MVS Cryptographic Unit Support: Installation Reference Manual.*) Rerun the key generator utility program as follows. If the SETM or CHGM function was requested and the host master key was not set (message ICU010I was not issued), rerun the entire job. Otherwise, use this listing to determine which control statements were processed successfully. Then rerun the utility program using the CHGK function to process the remaining control statements. Notify the security administrator.

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

ICU1031 INVALID DELIMITER IN PARM FIELD

Explanation: While scanning the PARM field of the EXEC statement, the key generator utility program did not find an expected delimiter or encountered an unexpected delimiter.

System Action: Key generator utility processing terminates.

Programmer Response: The valid delimiters are comma, right and left parentheses, and blank. Correct the error and rerun the key generator utility program.

Problem Determination: Table I, items 1 and 13.

ICU1032 CRYPTOGRAPHY EMK FUNCTION FAILED - CODE xx

Explanation: An error occurred during execution of an EMK macro instruction issued by the key generator utility program. In the message text, xx is the error return code from the EMK macro. The values of xx and their meanings are as follows:

Return Code	Meaning
4	The Cryptographic Unit Support has not been initialized.
8	An invalid operation was requested; the macro was not EMK.
12	An ESTAE recovery environment could not be established or an unrecoverable I/O error occurred.
32	The address of the clear key-encrypting key or the address of the enciphered key-encrypting key was specified as zero.

System Action: Key generator utility processing terminates.

Programmer Response: Contact IBM for programming support. When the problem has been corrected, rerun the key generator utility program as follows. If the SETM or CHGM function was requested and the host master key was not set, (message ICU010I was not issued), rerun the entire job. Otherwise, use this listing to determine which control statements were processed successfully. Then rerun the utility program using the CHGK function to process the remaining control statements.

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

ICU1033 CRYPTOGRAPHY CIPHER FUNCTION FAILED - CODE xx

Explanation: An error occurred during the execution of a CIPHER macro instruction issued by the key generator utility program. In the message text, xx is the error return code from the macro. The values of xx and their meanings are as follows:

Return Code	Meaning
4	The Cryptographic Unit Support has not been initialized. The data could not be enciphered or deciphered.
8	An invalid operation was requested; the macro was not CIPHER.
12	An ESTAE recovery environment could not be established or an unrecoverable I/O error occurred.
16	The length of the data to be enciphered or deciphered was specified as zero or as a negative number, or exceeded the maximum specified in the installation options module.
20	The BRANCH = YES parameter was specified, but the program issuing the macro is not executing in supervisor state.
32	The address of the clear data or the enciphered data was specified as zero.
40	A retry of the CIPHER request was required but could not be performed because the input area and output area overlapped.

System Action: Key generator utility processing terminates.

Programmer Response: Contact IBM for programming support. When the problem has been corrected, rerun the key generator utility program as follows. If the SETM or CHGM function was requested and the host master key was not set (message ICU010I was not issued), rerun the entire job. Otherwise, use this listing to determine which control statements were processed successfully. Then rerun the utility program using the CHGK function to process the remaining control statements.

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

ICU1034 CRYPTOGRAPHY KEY TRANSLATION FAILED - CODE xx

Explanation: An error has occurred during key translation processing. The translation was requested by the key generator utility program. In the message text, xx is the error return code from the key translation process. The values of xx and their meanings are as follows:

Return Code	Meaning
4	The Cryptographic Unit Support has not been initialized.
8	An invalid operation was requested.
12	An ESTAE recovery environment could not be established or an unrecoverable I/O error occurred.
24	Bad parity was detected in the local, remote, or cross key.
28	The program requesting the key translation function is not APF-authorized or in supervisor state or executing under storage protect key 0 through 7.
32	The address of the enciphered data-encrypting key or the address of the enciphered key-encrypting key was specified as zero.

System Action: Key generator utility processing terminates.

Programmer Response: Contact IBM for programming support. When the problem has been corrected, rerun the key generator utility program as follows. If the SETM or CHGM function was

requested and the host master key was not set (message ICU010I was not issued), rerun the entire job. Otherwise, use this listing to determine which control statements were processed successfully. Then rerun the utility program using the CHGK function to process the remaining control statements.

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

ICU1035 synad message for non-VSAM

Explanation: An I/O error occurred while the key generator utility program was processing the non-VSAM data set defined by the SYSMKDS or SYSIN DD statement. The format and explanation of the message is in the SYNADAF macro instruction description in *OS/VS2 MVS Data Management Macro Instructions*.

System Action: Key generator utility processing terminates.

Programmer Response: See *OS/VS2 MVS Data Management Macro Instructions* for the explanation of the message. Correct the problem and rerun the key generator utility program as follows. If the SETM or CHGM function was requested and the host master key was not set (message ICU010I was not issued), rerun the entire job. Otherwise, use this listing to determine which control statements were processed successfully. Then rerun the utility program using the CHGK function to process the remaining control statements.

Notify the security administrator.

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

ICU1036 CKDS ENTRY SUCCESSFULLY DELETED

Explanation: The key generator utility program has successfully deleted an entry from the cryptographic key data set (CKDS). The control statement that was processed precedes this message.

System Action: Processing continues.

Programmer Response: None.

ICU1038 NO CRYPTOGRAPHIC UNITS ARE AVAILABLE WITH A VERIFIED KEY

Explanation: The key generator has determined that either key verification has not completed successfully for any of the cryptographic units that are online or that key verification has completed successfully for a cryptographic unit but the master key in the cryptographic unit has been changed.

System Action: The key generator utility processing terminates.

Programmer Response: Notify the security administrator. Determine if message ICU050I, ICU051I, ICU052I, ICU053I, ICU054I, or ICU055I was issued; if so, refer to that message for the appropriate response and rerun the job. If not, then the cryptographic unit was tampered with while the key generator was executing. Ensure that the master key in the cryptographic unit is properly installed. Then rerun the key generator as follows. If the SETM or CHGM function was requested and the host master key was not set (message ICU010I was not issued), rerun the entire job. Otherwise, use this listing to determine which control statements were processed successfully. Then rerun the utility program using the CHGK function to process the remaining control statements.

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

ICU1039 LABEL IS A RESERVED KEY WORD

Explanation: The label supplied for a cryptographic key data set (CKDS) entry is invalid. The following key words cannot be used for labels: LOCAL, REMOTE, CROSS, REASGN, ADD, UPDATE, DELETE, KEY, IKEY, KEYLOC, IKEYLOC, KEYREM, IKEYREM. The control statement containing the error precedes this message.

System Action: Processing terminates for this control statement. Processing continues for any other control statements.

Programmer Response: Correct the label on the control statement. Rerun the key generator utility program, specifying the CHGK function on the EXEC statement providing the corrected control statement.

ICU1040 LOCAL-GROUP STATEMENT CONTAINS TOO MANY LABELS

Explanation: The maximum number of labels that can be specified on a LOCAL-GROUP control statement is 64. The control statement containing the error precedes this message.

System Action: Processing terminates for this control statement. Processing continues for any other control statements.

Programmer Response: Rerun the key generator utility program, specifying the CHGK function on the EXEC statement. Provide more than one LOCAL-GROUP control statement as necessary so that each does not specify more than 64 labels.

ICU1041 CONTINUATION CARD EXPECTED AND NOT FOUND

Explanation: A LOCAL-GROUP or CROSS control statement was expected to continue (that is, it ended with a comma) but did not. The control statement containing the error precedes this message.

System Action: Processing terminates for this control statement. Processing continues for any other control statements.

Programmer Response: Correct the format of the control statement or add the continuation card. Rerun the key generator utility program, specifying the CHGK function on the EXEC statement and providing the corrected control statement.

ICU1042 INVALID CHANGE REQUESTED

Explanation: A control statement requests a change to an entry in the cryptographic key data set (CKDS); however, the change conflicts with the existing entry. For a REASGN control statement, if the new label already exists on the CKDS, it must contain the same type of key-encrypting key as the existing label entry. For a LOCAL, REMOTE, or CROSS control statement, the updated or deleted entry must have the same type of key-encrypting key as the old CKDS entry. That is, to update or delete a local key, use a LOCAL control statement; to update or delete a remote key, use a REMOTE control statement; and to update or delete cross keys, use a CROSS control statement. The control statement containing the error precedes this message.

System Action: Processing terminates for this control statement. Processing continues for any other control statements.

Programmer Response: Correct the control statement in error. Rerun the key generator utility program, specifying the CHGK function on the EXEC statement and providing the corrected control statement.

ICU1043 CKDS RECORD WITH VERIFICATION PATTERNS NOT FOUND

Explanation: The key generator has searched the cryptographic key data set (CKDS) and cannot locate the records that contain the the verification patterns. (These verification patterns are derived when the CKDS is created and are used in the key verification procedure.) The records are expected to have labels of X'DACBEDFCEDCCFEE1' and X'DACBEDFCEDCCFEE2'.

System Action: Key generator utility processing terminates.

Programmer Response: Notify the security administrator. The CKDS is probably not usable. If a back-up copy of the CKDS is available, use it; otherwise, the CKDS must be recreated.

Problem Determination: Table I, items 1, 13, 20, 29, 34.

ICU1044 THE ATTACH OF TASK ICUMKG04 FAILED WITH CODE xx

Explanation: An error occurred when the key generator issued the ATTACH macro instruction for ICUMKG04. The module could not be found in SYS1.LINKLIB. This module is invoked when the key generator has determined that the cryptographic unit has been tampered with. ICUMKG04 will try to locate another cryptographic unit that is available to the Cryptographic Unit Support.

System Action: Key generator utility processing terminates.

Programmer Response: Notify the security administrator. Ensure that the module ICUMKG04 is properly loaded in SYS1.LINKLIB and rerun the key generator utility.

Problem Determination: Table I, items 1, 13, 27, 29.

ICU1045 INSUFFICIENT SPACE ON ddname

Explanation: The key generator utility program could not complete a request to build or update the data set defined in the message by ddname because there is insufficient space on the target data set.

If the problem occurred while the utility program was processing a change to the host master key, the contents of the PARM field of the EXEC statement precede this message. If the problem occurred while the utility program was processing a SYSIN control statement, the control statement precedes this message.

System Action: Key generator utility processing terminates.

Programmer Response: If the SETM or CHGM function was requested and the host system master key was not set (the contents of the PARM field precede this message), define a larger target data set for the CKDS and rerun the entire job. Otherwise, the key generator utility program failed while processing a SYSIN control statement and one of the following must be done.

- Reorganize the target CKDS to force more efficient space utilization.
- Define a larger data set for use as the new target CKDS and copy the contents of the original target CKDS to the larger data set.

Then, use this listing to determine which control statements were processed successfully and rerun the key generator utility program using the CHGK option to process the remaining control statements.

For information on defining and reorganizing the CKDS, see "Defining Storage for the CKDS and MKDS" in *OS/VS1 and OS/VS2 MVS Cryptographic Unit Support: Installation Reference Manual.* The commands needed to define, reorganize, and copy the data set are described in *OS/VS2 Access Method Services* and *OS/VS Virtual Storage Access Method (VSAM) Programmer's Guide.* Notify the security administrator.

Problem Determination: Table I, items 13, 29.

ICU1046 INVALID SYNTAX FOR {OLD MASTER KEY / NEW MASTER KEY / SEED}

Explanation: An invalid value for the SETM, CHGM, or SEED parameter was found in the PARM field of the EXEC statement for the key generator utility program.

System Action: Key generator utility processing terminates.

Programmer Response: Correct the value in the PARM field of the EXEC statement. A valid value consists of 16 hexadecimal digits. (Valid hexadecimal digits are 0 through 9 and A through F.) Rerun the key generator utility program.

Problem Determination: Table I, items 1, 13.

ICU1047 UNEXPECTED VSAM ERROR ON ddname CODE rc [FDBK code]

Explanation: An error occurred when the key generator utility program attempted to read from or write to the data set identified by ddname in the message. In the message, rc is the return code that identifies the error. If rc identifies a logical error, then FDBK code indicates the specific logical error that has occurred. The explanation of the return code and feedback code for a VSAM request is provided in *OS/VS Virtual Storage Access Method (VSAM) Programmer's Guide.*

System Action: Key generator utility processing terminates.

Programmer Response: See *OS/VS Virtual Storage Access Method (VSAM) Programmer's Guide* for the appropriate response to the return code and, if applicable, the feedback code given in the message. Correct the problem and rerun the utility program as follows. If the SETM or CHGM function was requested and the host master key was not set (message ICU010I was not issued), rerun the entire job. Otherwise, use this listing to determine

which control statements were processed successfully. Then rerun the utility program using the CHGK function to process the remaining control statements. Notify the security administrator.

Problem Determination: Table I, items 1, 3, 29.

ICU1048 INCORRECT VALUE SPECIFIED ON PARM CARD FOR OLD SYSTEM MASTER KEY

Explanation: When attempting to change the host master key (CHGM), the key generator utility encountered an invalid old host master key value in the PARM field on the EXEC statement.

System Action: Key generator utility processing terminates.

Programmer Response: Correct the value of the old host master key in the EXEC statement and rerun the key generator utility program.

Problem Determination: Table I, items 1, 13.

Virtual Storage Access Method Messages (IDA)

Component Name	IDA
Program Producing Message	VSAM (Virtual Storage Access Method)
Audience and Where Produced	For programmer: SYSPRINT data set.
Message Format	ss, ***IDAnnn text ss Severity code indicating effect of error on execution of the program being assembled: 4 Warning message; successful execution is probable. 8 Error; execution may fail. 12 Serious error; successful execution is improbable. nnn Message serial number. text Message text.
Associated and Referenced Publications	*OS/VS Virtual Storage Access Method (VSAM) Programmer's Guide*, GC26-3838 *OS/VS2 MVS VSAM Logic*, SY26-3825

IDA001 INVALID POSITIONAL PARAMETER, prm - IGNORED

Explanation: A positional parameter whose name is prm was specified. The specified parameter is not valid.

System Action: The positional parameter is ignored and the macro instruction is expanded normally. Severity code = 4.

Programmer Response: Probable user error. Correct the invalid positional parameter and resubmit the job.

Problem Determination: Table I, items 15, 19, 22, 29.

IDA002 keywd KEYWORD REQUIRED - NOT SPECIFIED

Explanation: The required keyword indicated by keywd was omitted.

System Action: The macro instruction is not expanded. Severity code = 12.

Programmer Response: Probable user error. Provide the required keyword and value and resubmit the job.

Problem Determination: Table I, items 15, 19, 22, 29.

IDA003 INVALID VALUE, val, SPECIFIED FOR keywd KEYWORD

Explanation: The indicated value specified for the indicated keyword was invalid.

System Action: The macro instruction is not expanded. Severity code = 12.

Programmer Response: Probable user error. Correct the invalid value and resubmit the job.

Problem Determination: Table I, items 15, 19, 22, 29.

IDA004 keywd KEYWORD NOT VALID FOR EXECUTE FORM - IGNORED

Explanation: The keyword indicated by keywd is not valid for the execute form of the macro.

System Action: The keyword is ignored and the macro instruction is expanded normally. Severity code = 4.

Programmer Response: Probable user error. Remove the keyword from the execute form of the macro. The keyword may be specified on the list form, which is referred to by the execute form.

Problem Determination: Table I, items 15, 19, 22, 29.

IDA005 INVALID OR DUPLICATE SUBLIST ITEM FOR keywd KEYWORD, xxx

Explanation: The sublist item whose name is xxx was specified, but it is not valid or is duplicated for the keyword, keywd.

System Action: The macro instruction is not expanded. Severity code = 8.

Programmer Response: Probable user error. Correct the invalid or duplicated sublist item and resubmit the job.

Problem Determination: Table I, items 15, 19, 22, 29.

IDA006 keywd VALUE, val, NOT VALID FOR LIST FORM

Explanation: The indicated value specified for the keyword whose name is keywd is not valid for the list form of the macro.

System Action: The macro instruction is not expanded. Severity code = 8.

Programmer Response: None.

Problem Determination: Table I, items 15, 19, 22, 29.

IDA007 LOGIC ERROR IN MACRO mac

Explanation: A logic error has occurred in the macro whose name is mac.

System Action: The macro instruction is not expanded. Severity code = 12.

Programmer Response: Probable system error. None.

Problem Determination: Table I, items 15, 19, 22, 29.

IDA008 INCOMPATIBLE SUBLIST ITEMS. xxx AND yyy, FOR keywd KEYWORD

Explanation: The sublist items whose names are indicated by xxx and yyy, which were specified for the keyword, keywd, are incompatible.

System Action: The macro instruction is not expanded. Severity code = 12.

Programmer Response: Probable user error. Remove one of the incompatible sublist items and resubmit the job.

Problem Determination: Table I, items 15, 19, 22, 29.

IDA009 nnn CONTROL BLOCK KEYWORDS SPECIFIED - ONLY ONE ALLOWED

Explanation: On a TESTCB macro instruction, nnn control block keywords were specified; only one is allowed.

System Action: The macro instruction is not expanded. Severity code = 12.

Programmer Response: Probable user error. Remove all but one of the control block keywords and resubmit the job.

Problem Determination: Table I, items 15, 19, 22, 29.

IDA010 EXIT ADDRESS REQUIRED FOR keywd KEYWORD - NOT SPECIFIED

Explanation: An exit address required for the keyword, keywd, was not specified.

System Action: The macro instruction is not expanded. Severity code = 8.

Programmer Response: Probable user error. Supply the required exit address and resubmit the job.

Problem Determination: Table I, items 15, 19, 22, 29.

IDA011 keywd IS NOT A VALID xxx KEYWORD - IGNORED

Explanation: The keyword keywd was specified, but it is not a valid keyword for the xxx control block.

System Action: The invalid keyword is ignored and the macro instruction is expanded normally. Severity code = 4.

Programmer Response: Probable user error. Remove the invalid keyword and resubmit the job.

Problem Determination: Table I, items 15, 19, 22, 29.

IDA018 VTAM KEYWORD, keywd, SPECIFIED WITHOUT SPECIFYING AM=VTAM

Explanation: The VTAM keyword, keywd, was specified but is not valid unless AM=VTAM is specified.

System Action: The macro instruction is not expanded. Severity code = 12.

Programmer Response: Either remove the invalid keyword, or specify AM=VTAM and resubmit the job.

Problem Determination: Table I, items 15, 19, 22, 29.

IDA019 KEYWORDS keywd1 AND keywd2 ARE INCOMPATIBLE

Explanation: The keywords, keywd1 and keywd2, cannot be specified together.

System Action: The macro instruction is not expanded. Severity code = 8.

Programmer Response: Correct the indicated error and rerun the job.

Problem Determination: Table I, items 15, 19, 22, 29.

IDA020 VTAM SUBLIST ITEM, xxx, SPECIFIED FOR keywd KEYWORD WITHOUT SPECIFYING AM=VTAM

Explanation: The VTAM sublist item xxx was specified for the keyword, keywd, and is not valid unless AM=VTAM is specified.

System Action: The macro instruction is not expanded. Severity code = 12.

Programmer Response: Correct the indicated error and rerun the job.

Problem Determination: Table I, items 15, 19, 22, 29.

IDA021 keywd1 AND keywd2 KEYWORDS MUST BE SPECIFIED TOGETHER BUT ONE IS MISSING

Explanation: Keywords keywd1 and keywd2 form a pair. One cannot be specified without the other.

System Action: The macro instruction is not expanded. Severity code = 8.

Programmer Response: Probable user error. Supply the missing keyword or remove the one specified, and resubmit the job.

Problem Determination: Table I, items 15, 19, 22, 29.

IDA022 CONFLICTING SUBLIST ITEMS WERE SPECIFIED FOR keywd KEYWORD

Explanation: The keyword, keywd, has been specified with conflicting sublist items.

System Action: The macro instruction is not expanded. Severity code = 12.

Programmer Response: Correct the sublist item or items that are in conflict, and resubmit the job.

Problem Determination: Table I, items 15, 19, 22, 29.

IDA024 keywd, A VSAM KEYWORD SPECIFIED FOR A NON-VSAM CONTROL BLOCK

Explanation: The keyword keywd is a VSAM keyword but is being specified for a non-VSAM control block.

System Action: The macro instruction is not expanded. Severity code = 12.

Programmer Response: Probable user error. Correct the indicated error and resubmit the job.

Problem Determination: Table I, items 2, 15, 19, 22, and 29.

IDA025 www,xxx,yyy CONFLICTING SUBPARAMETERS IN keywd KEYWORD, www ASSUMED

Explanation: In the keyword keywd the subparameters www,xxx,and yyy are conflicting. Only one may be specified.

System Action: The macro instruction is expanded using www as the default. Severity code = 12.

Programmer Response: Probable user error. Specify no more than one of the conflicting subparameters and resubmit the job.

Problem Determination: Table I, items 2, 15, 19, 22, and 29.

IDA030A jjj, sss, ddn, ENTER VSAM TRACE PARMLIST OR 'END'.

Explanation: Your reply specifies the VSAM trace RPL (request parameter list) you want for the data set defined by ddn in job jjj and step sss. Or, you may reply END to terminate tracing. The four parameter list types are:

Parameter List Type	Explanation
FE-COUNT	Count mode
FA	Address display mode
FE	Record management tracing
END	Causes the trace routine to terminate

Each parameter list, its options, and associated prompts are described in *OS/VS2 MVS VSAM Logic.*

IDA031I jjj, sss, ddn, BAD INPUT. RESTART.

Explanation: You entered invalid data for the trace of the data set defined by ddn in job jjj and step sss. The system restarts the trace and prompts you with message IDA030A.

Note: An asterisk (*) is invalid input.

If you entered incorrect data when prompted, you may want to enter an asterisk to restart the trace.

System Action: The trace routines reset all previous input and issue message IDA030A.

Operator Response: Probable user error. Examine the last data item entered for invalid contents.

Problem Determination: Table I, items 2, 20, and 29.

IDA032A jjj, sss, ddn, ENTER TRACE NUMBER(S) TO BE ACTIVATED.

Explanation: Your reply specifies the trace point records for the data set defined by ddn in job jjj and step sss you want the system to write to the trace data set. You may specify up to four trace numbers.

The trace point numbers and their corresponding trace point records are:

Trace Point Numbers	Record System Writes To Trace Data Set
00	RESERVED - IDA0200T call to close trace data set
01	IDA019R1 - exit from VSAM for all request macros
02	IDA019R3 - prior to EXCPVR for writes of CIs (no reads)
03	IDA019RZ - after I/O wait for CI reads and writes
04	IDA019SE - prior to call to EOV (SVC 55)
05	IDA019SE - after return from EOV
06	IDA019RE - start of a CI split
07	IDA019RE - after completion of a CI split
08	IDA019R3 - all I/O occurring during a CI split
09	IDA019RF - start of a CA split
0A	IDA019RF - after completion of a CA split
0B	IDA019R3 - all I/O occurring during a CA split
0C	IDA019RI - before index split is done
0D	IDA019RI - after call to IDA019RJ (index split)
0E	IDA019RU - after completion of an upgrade request

0F RESERVED

10 - FF User trace points

System Action: The VSAM job waits until the operator replies.

Operator Response: Enter the trace point numbers, separated by slashes. For example:

R 24, 2/8/2A

This reply to OS/VS message 24 (R 24) activates system trace point numbers 2 and 8 and user trace point number 2A.

IDA033A jjj, sss, ddn, ENTER DDNAME OF TRACE OUTPUT DATA SET.

Explanation: Your reply specifies the ddname of the DD statement for the trace output data set for the trace of the data set defined by ddn in job jjj and step sss. The trace facility writes its records to this data set.

System Action: The VSAM job waits until the operator replies.

Operator Response: Enter the ddname of the DD statement for the trace output data set for the job.

IDA034A jjj, sss, ddn, ENTER PARM LIST FOR PATH/UPGRADE SUPPORT.

Explanation: The system issues this message because the reprompt bit (bit 5 of byte 5) is on in your reply to message IDA030A for the trace of the data set defined by ddn in job jjj and step sss.

The parameter list you enter in reply to this message controls the printing of path name (AIX) base or upgrade data sets. If you specify a path name, VSAM opens the base and any upgrade data sets associated with it. The parameter list then controls the base and upgrade data sets VSAM opened. The last subparameter (one byte) is described in the parameter list section of *OS/VS2 MVS VSAM Logic*.

System Action: The VSAM job waits until the operator replies.

Operator Response: Enter an FE type parameter list. See *OS/VS2 MVS VSAM Logic* for details about the parameter list.

IDA035A jjj, sss, ddn, ENTER ONE BYTE ERROR CODE OR 'ANY'.

Explanation: In reply to message IDA030A for the trace of the data set defined by ddn in job jjj and step sss, the operator specified that the system is to write a trace only when VSAM detects an error. Also, the prompt operator bit (bit 7 of byte 5) is on in the RPL (request parameter list).

System Action: The VSAM job waits until the operator replies.

Operator Response: If you reply to this message with a one byte error code, the system compares it to the error code entered in reply to message IDA030A. If the error codes are equal, the trace takes place. If you reply ANY, any VSAM detected error is traced.

IDA036A jjj, sss, ddn, ENTER START COUNT VALUE IN HEX.

Explanation: An option in the RPL (request parameter list) entered in reply to message IDA030A requests that the system is to write a trace only after the trace routines have been called a certain number of times for the data set defined by ddn in job jjj and step sss. Your reply to this message and IDA037A specifies the number of calls.

System Action: The VSAM job waits until the operator replies.

Operator Response: Enter a four-digit hexadecimal start value for the number of calls.

IDA037A jjj, sss, ddn, ENTER END COUNT VALUE IN HEX.

Explanation: This message follows IDA036A. Your reply determines when tracing ends for the data set defined by ddn in job jjj and step sss. When this value is reached, the trace routines reset and restart with message IDA030A.

System Action: The VSAM job waits until the operator replies.

Operator Response: Enter a four-digit hexadecimal value. If your response is X'FFFF', the trace never reaches the END value.

Note: Do not reset the count. Continue from the stop value. You may continue the trace using the stop value or a value greater than the stop value.

If you want to terminate the trace facility, enter an invalid character (an asterisk, *, for example). The system issues message IDA030A, to which you can reply END.

IDA038I jjj, sss, ddn, COUNT FIELD AT ADDRESS nnnnnn

Explanation: The system issues this message when you specified an FE-COUNT parameter list in reply to message IDA030A for the data set defined by ddn in job jjj and step sss. nnnnnn is the address of the fullword hexadecimal counter field. The system increases this counter by one each time the trace facility data set is entered for data set ddn. You can use this count and the count option of the parameter list to limit the trace output.

System Action: None.

Operator Response: None.

IDA039A jjj, sss, ddn, ERROR CODE=x. ENTER A OR S (ABEND OR STOP).

Explanation: The trace routine detected an error in the trace for the data set defined by ddn in job jjj and step sss. The error code, x, means the following:

Error Code	Explanation
1	After a BSAM write operation, the DECB (data event control block) was posted with something other than X'48' (purged I/O) or X'41' (EOV required). In the dump, register 2 points to the DECB in error.

3 Module IDA019SU issued a GETMAIN macro instruction for a 200-byte save area in the user's subpool. The GETMAIN routine returned an error code.

4 The input registers contain the address of the required control blocks. When trace was called, register 13 + X'1F0' points to the registers in the trace work area. Registers 0 through 15 are stored there. Check the address where the trace point was installed. Register 2 must point to a PLH, and register 3 must point to an AMB.

5 The system tried to open the trace BSAM data set, and the open failed. The system checked the DCB (data control block), offset X'48', for an open indicator (X'10'). This bit was not on after the attempted open.

6 The system tried to close the trace BSAM data set, and the close failed.

The reply to this message stops the trace function; if A is entered, a dump is written.

System Action: The VSAM job waits until the operator replies. If S is specified, the job continues with no tracing. If A is specified, the job terminates abnormally (system completion code 201).

Operator Response: Enter A or S.

Problem Determination: Table I, item 5. Specify A if the problem continues.

Access Method Services Messages (IDC)

Component Name	IDC
Program Producing Message	Access Method Services
Audience and Where Produced	For operator: console. For programmer: SYSPRINT data set.
Message Format	xx IDCnnns text xx IDCnnnns ** text xx IDCnnnnns ** text xx Message reply identification (absent, if operator reply not required). nnn Message serial number. nnnn or nnnnn Message serial number, the first digit of which is a condition code that indicates the severity of the problem: Onnn or Onnnn — Informational message; no effect on execution. 1nnn or 1nnnnn — Warning message; no effect on execution. 2nnn or 2nnnnn — Error; execution may fail. 3nnn or 3nnnnn — Serious error; successful execution is improbable. 4nnn or 4nnnnn — Terminal error; successful execution is impossible. 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. ** Indicates a second-level message that further explains a preceding message. text Message text.
Comments	The messages are in sequence according to the absolute value of the message serial number. The message serial number may have three, four, or five digits (nnn, nnnn, or nnnnn) , as explained above.
Associated and Referenced Publications	*OS/VS Virtual Storage Access Method (VSAM) Programmer's Guide*, GC26-3838 *OS/VS2 Access Method Services*, GC26-3841 *OS/VS2 Catalog Management Logic*, SY26-3826 *OS/VS2 System Programming Library: Data Management*, GC26-3803 *OS/VS2 MVS Data Management Macro Instructions*, GC26-3873 *OS/VS2 MVS Data Management Services Guide*, GC26-3875 *OS/VS2 Resource Access Control Facility (RACF) Command Language Reference*, SC28-0733 *IBM 3850 Mass Storage System (MSS) Principles of Operation: Reference*, GA32-0029 *OS/VS2 Mass Storage System Communicator (MSSC) Logic*, SY35-0013 *OS/VS2 Using OS Catalog Management with the Master Catalog: CVOL Processor*, GC35-0010 *OS/VS2 MVS Programmed Cryptographic Facility Installation Reference Manual*, SC28-0956 *OS/VS Message Library: Mass Storage System (MSS) Messages*, GC38-1000 *DFEF: Catalog Diagnosis Reference*, SY26-3886

IDC0001I FUNCTION COMPLETED, HIGHEST CONDITION CODE WAS cde

Explanation: This message is issued by any functional command upon its completion. If some error has occurred, the condition code is not 0. If an error has occurred, it will be indicated by error messages that precede the completion message.

System Action: LASTCC is set to cde, MAXCC is also set if cde is greater than the current MAXCC value.

Programmer Response: None.

IDC002I IDCAMS PROCESSING COMPLETE. MAXIMUM CONDITION CODE WAS cde

Explanation: This message is issued at the completion of the job step.

System Action: The highest condition code (MAXCC) set during the step is printed and returned to the caller in register 15.

Programmer Response: None.

IDC0005I NUMBER OF RECORDS PROCESSED WAS nnn

Explanation: For the catalog reload function of the REPRO command, nnn indicates the number of records that were read from the input data set. For all other REPRO command functions and all PRINT command functions, nnn indicates the number of records that were written to the output data set. If input records were selectively processed, nnn includes only those actually written to the output data set. If the the Access Method Services Cryptographic Option Program Product (5740-AM8) is installed and the ENCIPHER parameter of the REPRO command was used to encipher a data set, then nnn includes one or more header records.

System Action: Processing continues.

Programmer Response: None.

IDC0014I LASTCC = cde

Explanation: This message is issued whenever a non-zero condition code is returned by any functional command upon its completion. The error or errors causing the condition code to be greater than 0 are indicated by error messages that precede this message. Possible values of the condition code, cde, and their meanings are:

4 Warning message; successful execution is probable.

8 Serious error, but processing is completed.

12 Terminating error; processing of the command is terminated.

System Action: Processing is completed or terminated depending on the condition code.

Programmer Response: Correct the cause of the error and rerun the job.

IDC0061I CARTRIDGE csn EJECTED

Explanation: Either a scratch cartridge or an old or defective data cartridge was ejected from the Mass Storage Facility.

System Action: The command continues processing.

Programmer Response: None.

IDC0063I CARTRIDGE LABELS AND INVENTORY RECORD RESTORED

Explanation: The cartridge labels and Inventory data set are restored to original status because an error was encountered while relabeling a Mass Storage Volume.

System Action: The command continues processing.

Programmer Response: Take the following action for the command that failed:

- If a Rename Operation Failed for ADDV

  Run ADDV to backout or retry the rename operation if the volume is inactive. If the volume is active, run MODIFYV or STOREV to either backout or retry the rename operation.

  If the ADDV, MODIFYV, or STOREV commands are run to recover from a rename failure, a DD statement for the volume is required and must specify deferred mounting.

  The values specified for the VOLUME and NEWSERIAL parameters depend upon how the volume record is recorded in the Inventory data set. If the cartridge labels have been updated, the volume record will be identified by the new volume serial number. For the VOLUME parameter, specify the volume serial number as recorded in the cartridge labels and the volume record. For the NEWSERIAL parameter, specify the desired volume serial number. Note that the security check for non-VSAM status and password protected data sets is bypassed only if the NEWSERIAL parameter specifies the same volume serial number as recorded in the Inventory data set for the volume label. This allows the original volume serial number of a VSAM volume to be restored if the volume is left partially renamed.

  If ADDV, MODIFYV, or STOREV terminates without indicating the status of the rename operation, LISTMSVI can be run to determine whether the volume is flagged for recovery purposes. If the mismatch flag is set in the volume record, LISTMSVI not only lists the standard information for the volume but also highlights the volume report with a note that a rename operation failed for the preceding volume and that serial number 'nnnnnn' is recorded in the volume label of the volume.

- If a Rename Operation Failed for MODIFYV

  To recover from a MODIFYV rename failure 1) run ADDV to activate the volume if the volume is merely inactive and has no volume serial mismatch condition, or 2) run ADDV to both activate the volume and complete the rename operation if the volume is both inactive and has a volume serial mismatch condition, or 3) rerun MODIFYV to complete or retry the rename operation if the volume is active but has a mismatch condition, or 4) run STOREV to complete or retry the rename operation if the volume is active and if a duplicate volume serial number is desired as a result of the rename.

For the DD statement requirements, the proper VOLUME and NEWSERIAL parameter values, and use of LISTMSVI, refer to the description above for an ADDV rename failure.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 29, 35a and 35c.

IDC0064I { **SERIAL** / **OWNER** / **SERIAL, OWNER** } **UPDATED IN CARTRIDGE LABELS AND INVENTORY RECORD**

Explanation: Either the volume serial number or owner name or both was updated in the label of the Data Cartridges assigned to the Mass Storage Volume and in the volume record in the Inventory data set. However, the data may not yet be updated in the software volume label.

System Action: The command continues processing.

Programmer Response: None.

IDC0068I n BACKUP COPIES EXIST BEYOND MAXIMUM BACKUP

Explanation: The number indicated by "n" identifies the number of backup copies that exceed the backup number specified through the use of the CREATEV or MODIFYV command.

System Action: The command continues processing.

Programmer Response: The excess backup copies can be scratched by:

- The next COPYV command executed to create a new backup copy; the oldest backup copies will be scratched, or
- The SCRATCHV command executed for each backup copy to be scratched.

IDC0073I VOLUME ATTRIBUTES CHANGED TO AGREE WITH GROUP groupname

Explanation: The attributes (bind/nobind, readonly/readwrite, dasderase/nodasderase, exclusive/shared, pagefault/nopagefault) of a general-use volume were changed to match the attributes defined at the group level for all general-use volumes belonging to the group. If the user did not explicitly request the attribute change, the attributes are changed implicitly because:

- The volume is being assigned to a different group
- A volume that does not belong to a group is being assigned to a group, or
- The group level attributes were changed while a general-use volume was inactive and is now being activated.

System Action: The command continues processing.

Programmer Response: None.

IDC083E csn [csn] EJECTED; VOL volser - jjj sss

Explanation: One or both cartridges assigned to the Mass Storage Volume identified by 'volser' were ejected from the Mass Storage Facility. The message identifies:

- The cartridge serial numbers of the sequence one and/or sequence two cartridges ('csn').
- The volume serial number ('volser') of the Mass Storage Volume.
- The jobname ('jjj') and stepname ('sss') associated with the eject request.

Operator Response: Remove the ejected cartridge or cartridges from the cartridge access station of the Mass Storage Facility. If you cannot find a cartridge in the access station, message ICB504E indicates the cartridge status. Perform the recovery action described for message ICB504E.

Programmer Response: None.

IDC0085I CARTRIDGES csn [csn] EJECTED

Explanation: The cartridge(s) assigned to a Mass Storage Volume were ejected from the Mass Storage Facility. A single cartridge serial number (csn) identifies the sequence one or sequence two cartridge successfully ejected. If both cartridges are in the Mass Storage Facility and are ejected, the cartridge serial numbers of the sequence one and sequence two cartridges are listed respectively.

System Action: The command continues processing.

Programmer Response: None.

IDC0086I { **SERIAL** / **OWNER** / **SERIAL, OWNER** } **UPDATED IN VOLUME LABEL**

Explanation: Either the volume serial number or owner name or both was changed in the volume label as requested.

System Action: The command continues processing.

Programmer Response: None.

IDC0088I CARTRIDGES csn [csn] SCRATCHED FOR COPY yyddd

Explanation: The cartridges assigned to the copy volume created on the date indicated by 'yyddd' were successfully scratched. If only one cartridge was in the MSF, the single cartridge serial number (csn) identifies the sequence one or sequence two cartridge that was scratched. If both cartridges were in the Mass Storage Facility, both cartridges were scratched and the cartridge serial numbers of the sequence one and sequence two cartridges are listed respectively.

System Action: The command continues processing.

Programmer Response: None.

IDC0098I ** LOCATION OF VOLUME: location

Explanation: The location information recorded in the Inventory data set for the cartridges assigned to the Mass Storage Volume is listed. See the preceding message for the cartridge serial numbers of these cartridges.

System Action: The command terminates with an error message unless additional volumes have been specified for processing.

Programmer Response: Insert the missing cartridges when the Mass Storage Volume Control portion of the Mass Storage System Communicator is enabled, and rerun the command. If the cartridges assigned to the volume are lost, use the REMOVEVR command to delete the volume record from the Inventory data set before rerunning the command.

IDC0102I NO ACTIVE NON-GROUPED VOLUMES IN THE INVENTORY DATA SET

Explanation: There are no nongrouped, active mass storage volumes in the inventory data set. A reason code of X'208' or X'223' was returned from the Mass Storage Volume Control functions.

System Action: The command terminates.

Programmer Response: None.

IDC0104I NO ACTIVE VOLUMES IN THE INVENTORY DATA SET

Explanation: Either there are no base volume records in the Inventory data set, or there are no base volume records with the active flag on in the Inventory data set. A reason code of X'208' or X'223' was returned from the Mass Storage Volume Control functions.

System Action: The command terminates.

Programmer Response: None.

IDC0105I NO ACTIVE VOLUMES IN GROUP grpname

Explanation: Either there are no mass storage volumes in the group grpname, or there are no base volume records with the active flag on in the group.

System Action: If any groups remain to be processed, processing continues with the next group. Otherwise, the command terminates.

Programmer Response: None.

IDC0106I NO ACTIVE GENERAL USE VOLUMES IN GROUP grpname

Explanation: Either there are no mass storage volumes in group grpname, or there are no base volume records in the Inventory data set in the group with both the active and general-use flags on.

System Action: If any groups remain to be processed, processing continues with the next group. Otherwise, the command terminates.

Programmer Response: None.

IDC0107I NO DATA SETS ELIGIBLE FOR SELECTION ON VOLUME ser

Explanation: No data sets on volume ser met the criteria specified on the command for either listing or scratching.

System Action: If there are more volumes to be processed, the next volume is processed. Otherwise, the command terminates.

Programmer Response: None.

IDC0112I dsn SCRATCHED

Explanation: The data set dsn was successfully scratched from the VTOC.

System Action: If other data sets remain to be scratched, processing continues with the next data set. Otherwise, the command terminates.

Programmer Response: None.

IDC0117I VOL volser IN GROUP group name NOT PROCESSED BY SIS

Explanation: An entry indicating that volume volser in group group name was scheduled for processing by the system-initiated scratch function was found (1) when modifying the group status with the OFFT or OFFP parameter, (2) when scratching the group scratch record, or (3) when removing a volume from the group. The volume was not processed.

System Action: Processing continues.

Operator Response: None.

Programmer Response: Use the SCRDSET command as required to perform necessary scratch processing for volume volser. The volume is not scheduled for system-initiated scratch processing.

Problem Determination: Table I, items 4, 13, 20, 35c.

IDC0204I PRECEDING COMMAND BYPASSED DUE TO CONDITION CODES

Explanation: The modal command structure specification caused the command to be bypassed.

System Action: The command is checked for syntactic errors, but not executed.

Programmer Response: None.

Problem Determination: Table I, item 4, 29.

IDC0206I IMPROPERLY PLACED COMMA HAS BEEN FOUND AND IGNORED

Explanation: An unneeded comma has been coded; omitted positional parameters may not be denoted by consecutive commas.

System Action: The usage is accepted and the extraneous comma is ignored.

Programmer Response: Remove the extra comma.

Problem Determination: Table I, item 4, 29.

IDC0222I WARNING: COMMAND-END DELIMITER APPEARS WITHIN APOSTROPHES

Explanation: A semicolon, the optional command delimiter, has been found in an item that is enclosed within apostrophes. A closing apostrophe may have been omitted.

System Action: The usage is accepted and processing continues, treating the semicolon as a valid character.

Programmer Response: Insert the missing apostrophe, if one was omitted, and rerun the job.

Problem Determination: Table I, item 4, 29.

IDC0233I TOO MANY RIGHT PARENTHESES FOUND. EXCESS IGNORED

Explanation: Too many right parentheses have been found at the end of a subparameter list or following a first-level parameter.

System Action: The excess parentheses are ignored and scanning continues.

Programmer Response: Correct the invalid syntax.

Problem Determination: Table I, item 4, 29.

IDC0234I WARNING: TOO FEW RIGHT PARENTHESES FOUND AT END OF COMMAND

Explanation: Too few right parentheses have been found at the end of the command to properly close off the subparameter lists.

System Action: The usage is accepted and processing continues.

Programmer Response: Correct the invalid syntax.

Problem Determination: Table I, item 4, 29.

IDC0339I ENCIPHERED DATAKEY FOR key name is key value

Explanation: The *key value* field provides the key value for the data encrypting key enciphered under the secondary file key whose external label is *key name*.

System Action: Processing continues.

Programmer Response: Save the *key value* for use when the data set is deciphered.

IDC0342I PRIVATE DATA KEY IS key value

Explanation: The user did not specify a private data encrypting key. REPRO command processing provided the data encrypting key given by *key value*.

System Action: Processing continues.

Programmer Response: Save the *key value* for use when the data set is deciphered.

IDC0361I ** dsn NOT LOCATED

Explanation: The VSAM or OS locate request for data set dsn was unsuccessful. A preceding message indicates the reason for the failure.

System Action: If the SCRDSET command is being run, this data set is not scratched. If the LISTDSET command is being run, this data set is listed unless the UNCATALOGED, EXPIRATIONDATE, EXPIRATION, CREATIONDATE, or CREATION parameter is specified.

Programmer Response: Determine why the data set was not located, correct the problem if necessary, and rerun the command.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 29, and 34.

IDC0362I ** dsn NOT SCRATCHED

Explanation: An error occurred during a VSAM delete request. The error prevented the data set dsn from being scratched. A preceding message explains the type of error.

System Action: The command continues to scratch and uncatalog remaining eligible data sets.

Programmer Response: Correct the error identified in the preceding message and do one of the following:

- Rerun the SCRDSET command.
- Specify DELETE in the DISP parameter on the DD statement to scratch the data set.
- Run the DELETE command to scratch the data set.

Problem Determination: Table I, items 1, 2, 3, 4, 9, 13, 25a, 29, and 34a.

IDC0363I ** dsn NOT UNCATALOGED

Explanation: One of the following situations occurred:

- An error occurred during a VSAM delete request.

  The error prevented data set dsn from being uncataloged.

  A preceding message explains the error.

- An error occurred during an OS uncatalog request.

  The error prevented data set dsn from being uncataloged.

  A preceding message explains the error.

- An error occurred during the scratch of data set dsn.

  Because the data set cannot be scratched, no attempt was made to uncatalog the data set.

System Action: The command continues to scratch and uncatalo remaining eligible data sets.

Programmer Response: Correct the error identified in the preceding message. If the data set was already scratched from the VTOC, do one of the following:

- Specify UNCATLG in the DISP parameter on the DD statement to uncatalog the data set.
- Run the DELETE command to uncatalog the data set.
- Run the IEHPROGM utility to uncatalog the data set.

If the data set was not scratched from the VTOC, do one of the following:

- Rerun the SCRDSET command.
- Specify DELETE in the DISP parameter on the DD statement to scratch the data set.
- Run the DELETE command to scratch the data set.
- Run the IEHPROGM utility to scratch and uncatalog the data set.

Problem Determination: Table I, items 1, 2, 3, 4, 9, 13, 25a, 29, and 34a.

IDC394I jjj.sss 3850 DEMOUNT FAILED,VOL=vvvvvv,vua, RC=X'cde'

Explanation: The system was unable to demount the virtual volume requested in step sss of job jjj. See message text for virtual volume serial and virtual (vua) unit address. Refer to *Mass Storage System (MSS) Messages* for an explanation of the reason codes (RC).

System Action: Processing continues.

Operator Response: Fix the problem indicated by the reason code (RC). Then issue the 'UNLOAD' command.

IDC0396I ** dsn NOT RECATALOGED

Explanation: The data set (dsn) was not recataloged. See preceding message for the reason.

System Action: The command continues processing.

Programmer Response: Examine the preceding message for response.

IDC0397I DATA SET CATALOGED IN VSAM CATALOG THAT DOES NOT OWN VOLUME

Explanation: The data set identified in the subsequent message was located in a VSAM catalog that does not own the volume. VSAM catalog management does not support altering device type and volume serial number in VSAM catalogs other than the owning catalog.

System Action: The command continues processing.

Programmer Response: Use the Access Method Services LISTCAT, DELETE, and DEFINE commands to determine the fields defined in the entry, delete the entry, and redefine the entry with the new device type.

Problem Determination: Table I, item 1, 2, 3, 4, 13, 14, 25b, 29, and 34.

IDC0398I DATA SET RESIDES ON MORE THAN TWENTY VOLUMES

Explanation: The data set identified in the subsequent message resides on more than twenty volumes, and as far as the program can tell, it has not already been recataloged. Recataloging is not supported by this program if the data set resides on more than 20 volumes. If the data set is cataloged in the VSAM owning catalog, it has already been recataloged. If the data set is not cataloged at all, this message should be ignored.

System Action: The command continues processing.

Programmer Response: Use IEHPROGM utility or Access Method Services DELETE and DEFINE command to recatalog the data set if it is cataloged and not already recataloged.

Problem Determination: Table I, item 1, 3, 4, 13, 14, 25d, 29, and 34.

IDC497E CARTRIDGE EJECTED; jobname, stepname

Explanation: An informational message has been directed to the system operator, notifying him of the presence of a cartridge in the cartridge access station.

System Action: The processing continues.

Operator Response: Remove the cartridge from the cartridge access station.

IDC498D ACCESS REQUESTED TO { STAGING PACK / VTOCHEADER / VTOC }
VOL=SER=volser: REPLY Y OR N

Explanation: Processing of REPAIRV DISPLAY or REPAIRV COPY command requests authorization to access a staging pack, or processing of the REPAIRV MODIFY command requests authorization to update the volume table of contents (VTOC) or its header (VTOCHEADER). In the message, ***volser*** identifies the volume serial number.

System Action: Processing of the REPAIRV command waits for the operator's response. If the response is Y, processing continues; if the response is N, the command terminates with a return code of 12.

Operator Response: Enter Y to allow access or N to deny access.

Problem Determination: Table I, items 2, 3, 4, and 29.

IDC0508I DATA ALLOCATION STATUS FOR VOLUME ser IS rc

Explanation: This message indicates the allocation status for a volume containing the data component. The code indicating the status is the VSAM catalog return code; a 0 indicates success.

System Action: Processing continues.

Programmer Response: See message IDC3009I for a complete explanation of rc.

IDC0509I INDEX ALLOCATION STATUS FOR VOLUME ser IS rc

Explanation: This message indicates the allocation status for a volume containing the index component. The code indicating the status is the VSAM catalog return code; a 0 indicates success.

System Action: Processing continues.

Programmer Response: See message IDC3009I for a complete explanation of rc.

IDC0510I CATALOG ALLOCATION STATUS FOR VOLUME ser IS rc

Explanation: This message indicates the allocation status of a volume containing the VSAM catalog. The code indicating the status is the VSAM catalog return code; a 0 indicates success.

System Action: Processing continues.

Programmer Response: See message IDC3009I for a complete explanation of rc.

IDC0511I SPACE ALLOCATION STATUS FOR VOLUME ser IS rc

Explanation: This message indicates the allocation status for a volume on which VSAM space is being defined. The code indicating the status is the VSAM catalog return code; a 0 indicates success.

System Action: Processing continues.

Programmer Response: See message IDC3009I for a complete explanation of rc.

IDC0512I NAME GENERATED - (x) dsn

Explanation: This is an informational message. Data and index component names are generated by VSAM catalog management, when these names have not been specified. The parenthesized character ('D' or 'I') indicates which component dsn names.

System Action: Processing continues.

Programmer Response: None.

IDC0520I CATALOG RECOVERY VOLUME IS ser

Explanation: This is an informational message indicating the volume serial number of the volume that contains and will contain all catalog recovery data for the object just defined.

System Action: Processing continues.

Programmer Response: The named volume should be mounted for any future operation that modifies the catalog entry for the object just defined.

IDC0526I ALTERED ALLOCATION STATUS FOR VOLUME ser IS rc

Explanation: This is an informational message indicating the allocation status of volumes being added or removed from a VSAM data set. The code indicating the status is the VSAM catalog return code (see message IDC3009I).

System Action: Processing continues.

Programmer Response: None.

IDC0531I ENTRY xxx ALTERED

Explanation: This message indicates that the specified entry has been successfully altered.

System Action: Processing continues.

Programmer Response: None.

IDC0532I ** ENTRY xxx NOT ALTERED

Explanation: This message indicates that the entry was not altered.

System Action: The preceding message in the system output indicates the reason the entry was not altered. Processing continues.

Programmer Response: Correct the problem indicated by the previous message, and reenter the command.

IDC0534I ** MEMBER mem NOT RENAMED

Explanation: This is an informational message indicating the member name that was not renamed.

System Action: The preceding message in the system output indicates the reason the member name was not renamed. Processing continues.

Programmer Response: Correct the problem indicated by the previous message, and reenter the command.

IDC0535I MEMBER mem RENAMED

Explanation: The indicated member has been successfully renamed.

System Action: Processing continues.

Programmer Response: None.

IDC0548I ** MEMBER mem NOT DELETED

Explanation: This is an informational message only, issued to inform the operator or programmer the member mem was not deleted.

System Action: An associated message accompanies this message indicating why the member was not deleted. Processing continues.

Programmer Response: None.

IDC0549I MEMBER mem DELETED

Explanation: This is an informational message only, indicating the member that has been successfully deleted.

System Action: Processing continues.

Programmer Response: None.

IDC0550I ENTRY (x) dsn DELETED

Explanation: The specified dsn (data set name) entry was deleted from the VSAM catalog. x indicates the type of entry: C--cluster, D--data, G--alternate index, I--index, R--path, V--volume, U--user catalog, M--master catalog, A--non-VSAM, B--GDG base, X--alias.

System Action: A volume entry is deleted only when the volume no longer contains any data spaces. This is an informational message only. Processing continues.

Programmer Response: None.

IDC0551I ** ENTRY dsn NOT DELETED

Explanation: This message indicates the entry that was not deleted. An accompanying message will indicate why the entry was not deleted.

System Action: The named dsn is not deleted.

Programmer Response: Correct the cause of non-deletion.

Problem Determination: Table I, items 1, 3, 4, 29.

IDC0555I DELETION OF SPACE OBJECT DID NOT CAUSE ser TO BE DELETED

Explanation: When a DELETE command is executed against volume ser and the FORCE parameter is not specified, all empty data spaces are deleted; data spaces that still contain data set segments are not deleted. Only when all data spaces on a volume are deleted or when FORCE is specified, is that volume deleted from its owning catalog.

System Action: The volume is still owned by the catalog in which it was originally defined.

Programmer Response: None.

IDC0571I CATALOG RELOAD HAS BEEN INVOKED

Explanation: A REPRO command has been executed where the target data set is a catalog. This message marks the beginning of processing of a catalog reload operation.

System Action: Processing continues.

Programmer Response: None.

IDC0594I PORTABLE DATA SET CREATED SUCCESSFULLY ON date AT hh:mm:ss

Explanation: At this point, the portable data set contains all information necessary to re-create the cluster being exported.

System Action: Processing continues.

Programmer Response: None.

IDC0603I CONNECT FOR USER CATALOG dsn SUCCESSFUL

Explanation: This message identifies the name of the catalog for which CONNECT completed successfully.

System Action: Processing continues.

Programmer Response: None.

IDC0604I DATA SET BEING IMPORTED WAS EXPORTED ON date AT hh:mm:ss

Explanation: This informational message gives the date and time that the data set was exported.

System Action: Processing continues.

Programmer Response: None.

IDC0611I DATA SET TO BE IMPORTED ALREADY EXISTS - DELETE ATTEMPTED

Explanation: A catalog define was attempted for the data set to be imported; it failed because an entry with that name already existed in the catalog. This situation occurs when a temporarily exported data set is imported back into the catalog from which it was exported.

System Action: An attempt is made to delete the existing entry. The message following this message in the listing indicates whether the delete was successful.

Programmer Response: None.

IDC0622I USERCATALOG catname DISCONNECTED

Explanation: A user catalog has been disconnected by IMPORTRA in order to connect a new pointer to the user catalog.

System Action: Processing continues.

Programmer Response: None.

IDC0626I IMPORTRA SUCCEEDED FOR dsn

Explanation: The object named as "dsn" has been successfully imported.

System Action: Normal processing continues.

Programmer Response: None.

IDC0634I NUMBER OF ENTRIES CONVERTED WAS nnn

Explanation: The number of catalog entries successfully converted into entries in the VSAM or ICF catalog is indicated. All base entries and their associations are counted (data and index component entries are not counted).

System Action: Processing continues.

Programmer Response: None.

IDC0635I ** dsn NOT CONVERTED

Explanation: During CNVTCAT processing, the catalog entry dsn was not converted.

System Action: An associated message contains the information required to correct the error. Processing continues with the next entry.

Programmer Response: None.

IDC0636I NUMBER OF ENTRIES UPDATED WAS nnn

Explanation: The number of non-VSAM entries whose volume information has been updated is indicated. Volume information of a non-VSAM entry is updated when the volume information of a duplicate entry being converted from the OS source catalog is different from that of the existing non-VSAM entry.

System Action: Processing continues.

Programmer Response: None.

IDC0637I ** dsn NOT UPDATED

Explanation: This is an informational message only. The OS catalog entry specified was not converted.

System Action: An accompanying message contains the information required to correct the error. Processing continues.

Programmer Response: None.

IDC0639I SPHERE CONVERSION STARTED FOR dsn

Explanation: The conversion of the specified base sphere (dsn) and its associations has started.

System Action: Processing continues.

Programmer Response: None.

IDC0652I dsn SUCCESSFULLY BUILT

Explanation: Building of the alternate index identified by dsn has been successfully completed with no errors encountered.

System Action: Processing continues.

Programmer Response: None.

IDC0665I NUMBER OF ENTRIES THAT MISCOMPARED IN THIS CRA - nn

Explanation: The COMPARE option was requested and this informational message indicates the number, nn, of entries (volume, cluster, alternate index, non-VSAM, and/or user catalog entries) for which a miscompare between the catalog recovery area (CRA) and catalog occurred.

System Action: Processing continues.

Programmer Response: Determine whether recovery is required. For more information on catalog recovery, see *OS/VS2 Access Method Services.*

IDC0669I EXPORTING FROM CRA ON VOLUME ser

Explanation: This is an informational message indicating the current catalog recovery area (CRA) and volume being used to export the data set(s) named in the following message(s).

System Action: Processing continues.

Programmer Response: None.

IDC0670I DATA SET SUCCESSFULLY EXPORTED

Explanation: The data set named in message IDC0674I was successfully retrieved and written to the portable data set.

System Action: Processing continues.

Programmer Response: None.

IDC0672I ** LOCKED ON CATALOG catname

Explanation: This is an informational message providing the name of the owning catalog whose CRAs will be processed. It is the name of the catalog owning the first CRA processed.

System Action: Processing continues.

Programmer Response: None.

IDC0674I ** NAME IS dsn

Explanation: This second-level informational message gives the data set name of the object referred to in the preceding message(s).

System Action: See the primary message.

Programmer Response: See the primary message.

IDC0676I PORTABLE DATA SET CREATED SUCCESSFULLY ON date AT time

Explanation: This is an informational message indicating the portable data set contains the necessary information to recreate the data set(s) via IMPORTRA.

System Action: Processing continues.

Programmer Response: None.

IDC0680I VOLUME volser CREATED ON CARTRIDGES csn1 csn2

Explanation: A new volume was created. The message identifies the cartridge serial number (csn1 and csn2) of the cartridges used and volume serial (volser) assigned.

System Action: The command continues processing.

Programmer Response: None.

IDC0686I PARTIALLY CREATED VOLUME volser SCRATCHED

Explanation: The partially created volume (volser) was scratched during back out because an error occurred.

System Action: The command terminates normally.

Programmer Response: Correct the error indicated in a preceding message and rerun the command.

IDC0703I ** VOL volser COPIES TO CART csn1 csn2, DATE yyddd

Explanation: The volume (volser) was copied to the cartridges (csn1 and csn2) on the date indicated by 'yyddd'.

System Action: Processing continues.

Programmer Response: None.

IDC0704I ** CARTRIDGES OF OLDEST BACKUP COPY yyddd SELECTED FOR REUSE

Explanation: The COPYV command selected the cartridges of the oldest backup copy volume indicated by the date "yyddd" for reuse. The preceding message describes the status of the new copy volume.

System Action: Processing continues.

Programmer Response: None.

IDC0705I ** CARTRIDGES OF AN INCOMPLETE COPY VOLUME SELECTED FOR REUSE

Explanation: Due to a previous failure by the COPYV command, the cartridges of an incomplete copy volume were reused by the command. The preceding message identifies the status of the new copy volume.

System Action: Continue processing.

Programmer Response: None.

IDC0711I ** VOLUME volser RESTORED FROM COPY VOLUME volser, COPY DATE yyddd

Explanation: The designated volume (volser) was successfully restored using either the latest backup copy or a user designated copy 'volser' created on the date indicated by 'yyddd'. However, if the target volume serial number is different than the copy volume, the target volume serial number was overwritten during the copy operation and must be restored. The target volume is currently flagged as an incomplete copy in the Inventory data set. The command will restore the volume label and clear the incomplete copy flag from the Inventory data set before processing of the command terminates.

System Action: Processing continues.

Programmer Response: None.

IDC0722I VOLUME volser HAS BEEN ACTIVATED

Explanation: The inactive volume indicated by 'volser' was made active but either the volume attributes could not be updated or the volume serial could not be changed.

System Action: Processing continues.

Programmer Response: Run the MODIFYV command to change the volume attributes or the volume serial number of the active volume.

IDC0724I ** SERIAL NUMBER OF VOLUME volser NOT CHANGED

Explanation: The volume (volser) has been activated but the volume serial number could not be changed. See the preceding message for further explanation of the error.

System Action: Correct the problem as indicated in the preceding message.

Programmer Response: Run the MODIFYV command to change the volume serial number of the active volume.

IDC0725I READWRITE ATTRIBUTE SET FOR VOLUME volser

Explanation: The volume (volser) is assigned the readwrite attribute as requested.

System Action: Processing continues.

Programmer Response: None.

IDC0731I VOLUME volser HAS BEEN MADE INACTIVE

Explanation: The designated volume (volser) was successfully deactivated and made nonmountable.

System Action: Processing continues.

Programmer Response: None.

IDC0733I VOLUME LABEL RESTORED TO ORIGINAL STATUS

Explanation: The volume label is restored to its original status because the volume cannot be deactivated nor the volume serial number changed in the cartridge labels. A flag in the Inventory data set, indicating a mismatch between the volume label and cartridge labels, will remain set only if the flag was previously set from an earlier relabel failure by the MODIFYV, ADDV, or STOREV command.

System Action: The command terminates with an error message.

Programmer Response: Take one of the following actions for the command that failed:

- If a Rename Operation Failed for ADDV

  Run ADDV to backout or retry the rename operation if the volume is inactive. If the volume is active, run MODIFYV or STOREV to either backout or retry the rename operation.

  If the ADDV, MODIFYV, or STOREV commands are run to recover from a rename failure, a DD statement for the volume is required and must specify deferred mounting.

  The values specified for the VOLUME and NEWSERIAL parameters depend upon how the volume record is recorded in the Inventory data set. If the cartridge labels have been updated, the volume record will be identified by the new volume serial number. For the VOLUME parameter, specify the volume serial number as recorded in the cartridge labels and the volume record. For the NEWSERIAL parameter, specify the desired volume serial number. Note that the security check for non-VSAM status

and password protected data sets is bypassed only if the NEWSERIAL parameter specifies the same volume serial number as recorded in the Inventory data set for the volume label. This allows the original volume serial number of a VSAM volume to be restored if the volume is left partially renamed.

If ADDV, MODIFYV, or STOREV terminates without indicating the status of the rename operation, LISTMSVI can be run to determine whether the volume is flagged for recovery purposes. If the mismatch flag is set in the volume record, LISTMSVI not only lists the standard information for the volume but also highlights the volume report with a note that a rename operation failed for the preceding volume and that serial number 'nnnnnn' is recorded in the volume label of the volume.

- If a Rename Operation Failed for MODIFYV

  To recover from a MODIFYV rename failure 1) run ADDV to activate the volume if the volume is merely inactive and has no volume serial mismatch condition, or 2) run ADDV to both activate the volume and complete the rename operation if the volume is both inactive and has a volume serial mismatch condition, or 3) rerun MODIFYV to complete or retry the rename operation if the volume is active but has a mismatch condition, or 4) run STOREV to complete or retry the rename operation if the volume is active and if a duplicate volume serial number is desired as a result of the rename.

  For the DD statement requirements, the proper VOLUME and NEWSERIAL parameter values, and use of LISTMSVI, refer to the description above for an ADDV rename failure.

- If a Rename Operation Failed for STOREV

  Rerun STOREV or run MODIFYV to either backout or retry the rename operation.

  For the DD statement requirements, the proper VOLUME and NEWSERIAL parameter values, and use of LISTMSVI, refer to the description above for an ADDV rename failure.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 29, 35a, and 35c.

IDC0737I FURTHER PROCESSING TERMINATED

Explanation: An error occurred which prevents any further processing. Preceding messages indicate the extent of the processing which has been completed. Functions which may not be completed are:

- Updating the alternate track information in the VTOC of the TO volume.
- If the volume is VSAM, updating the time stamp in the VTOC of the TO volume.
- If the FROM and TO volume serial numbers are different, updating the serial number in the label of the TO volume.
- Updating the owner in the label of the TO volume.
- If a recatalog option was specified or defaulted to, recataloging the data sets.
- If the scratch option was specified or defaulted to, scratching the data sets on FROM volume.

  For conversion from a 3336 Model 1 Disk Pack to a mass storage volume, the incomplete copy flag is set in the Inventory data set for any of the following cases:

- The FROM and TO volume serial numbers are not the same, and processing terminated during the copy operation.
- The FROM and TO volume serial numbers are not the same, and processing terminated before the VTOC and volume label were updated.
- The TO volume is VSAM and processing terminated before the VSAM recataloging was completed.

System Action: The command terminates with an error message indicating the severity of the problem.

Programmer Response: If the incomplete copy flag is on in the Inventory data set, rerun the CONVERTV command, recover from a copy volume using the RECOVERV command, or scratch the Mass Storage Volume using the SCRATCHV command. Otherwise, you can decide whether to rerun the CONVERTV command or to complete the functions not performed by CONVERTV using other Access Method Services commands or utility programs. The owner in the volume label can be updated by the MODIFYV command for Mass Storage Volumes or IEHDASDR for 3336 Model 1 Disk Packs. Data sets can be recataloged using Access Method Services DELETE and DEFINE commands or IEHPROGM utility. Data sets can be scratched using the Access Method Services DELETE command or IEHPROGM utility.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 29, and 35c.

IDC0743I FROM VOLUME COPIED TO THE TO VOLUME

Explanation: The source volume was successfully copied to the target volume.

System Action: The command continues processing.

Programmer Response: None.

IDC0746I DATA SETS IN VSAM CATALOG SUCCESSFULLY RECATALOGED

Explanation: Data sets in the VSAM catalog owning the volume have been successfully recataloged.

System Action: The command continues processing.

Programmer Response: None.

IDC0747I VTOC AND LABEL OF TO VOLUME UPDATED

Explanation: The converted volume now has the appropriate alternate track information and VSAM time stamp in the VTOC. The converted volume now has the appropriate owner and volume serial number in the label.

System Action: The command continues processing.

Programmer Response: None.

IDC0748I ELIGIBLE NON-VSAM DATA SETS SUCCESSFULLY RECATALOGED

Explanation: The data sets not in the VSAM owning catalog have been recataloged if there were any that needed to be recataloged.

System Action: The command continues processing.

Programmer Response: None.

IDC0749I VTOC OF FROM VOLUME SCRATCHED

Explanation: The VTOC of the source volume was successfully scratched.

System Action: The command continues processing.

Programmer Response: None.

IDC0751I CARTS csn1 csn2 SCRATCHED FOR VOLUME volser

Explanation: The requested volume (volser) was scratched. The message identifies the cartridges scratched (csn1 and csn2). The cartridge IDs in the message are in reverse order from the order in which they were scratched, which is csn2 then csn1.

System Action: The command continues processing.

Programmer Response: None.

IDC0760I RECORD FOR COPY yyddd REMOVED

Explanation: The copy record created on the date indicated by 'yyddd' was removed from the Inventory data set.

System Action: The command continues processing.

Programmer Response: None.

IDC0763I RECORD FOR VOLUME volser REMOVED

Explanation: A base volume record for volume (volser) was removed from the Inventory data set.

System Action: The command continues processing.

Programmer Response: None.

IDC0780I SCRATCH CARTRIDGE csn EJECTED

Explanation: A scratch cartridge (csn) was ejected from the Mass Storage Facility (MSF). The message identifies the cartridge serial number of the cartridge.

System Action: Continue processing.

Programmer Response: None.

IDC0781I NUMBER OF SCRATCH CARTRIDGES EJECTED IS nnnnnnnnn

Explanation: A number of scratch cartridges (nnnnnnnnn) were ejected successfully from the library.

System Action: Continue processing.

Programmer Response: None.

IDC783E SCRATCH CARTRIDGE csn EJECTED; jjj sss

Explanation: A scratch cartridge was ejected from the Mass Storage Facility (MSF). The message identifies the cartridge serial number (csn) of the cartridge ejected plus the jobname (jjj) and the stepname (sss) associated with the ejected cartridge.

System Action: Processing continues.

Operator Response: Remove the scratched cartridge from the Cartridge Access Station and label it as a scratch cartridge.

IDC0790I CARTRIDGE csn REPLACED BY CARTRIDGE csn

Explanation: An old or defective cartridge of a Mass Storage Volume has been replaced by a scratch cartridge selected by the user or at random by the Mass Storage Controller (MSC). The first cartridge serial number (csn) identifies the replaced cartridge; the second cartridge serial number (csn) identifies the cartridge used as the replacement. The data on the old or defective cartridge has been copied to the new cartridge.

System Action: Processing continues.

Programmer Response: None.

IDC791E REPLACED CARTRIDGE { csn / UNIDENTIFIED } EJECTED; jjj sss

Explanation: The cartridge serial number (csn) identifies an ejected cartridge. An old or defective cartridge of a Mass Storage Volume is ejected from the Mass Storage Facility (MSF) after being replaced with a different cartridge. The jobname (jjj) and the stepname (sss) identify the job associated with the ejected cartridge.

If the cartridge was ejected, the replacement failed and the system failed to read the base volume record. The csn could not be identified. Messages IDC2080I and IDC2400I will follow this message indicating that the base volume could not be read.

System Action: Processing continues.

Operator Response: Remove the cartridge from the Cartridge Access Station and label it as an old or defective cartridge.

IDC0810I VOLUME ser BEING PROCESSED

Explanation: A new volume ser is being processed. Messages follow to indicate the data sets on the volume that are scratched.

System Action: Processing of data sets on the volume begins.

Programmer Response: None.

IDC0811I dsn UNCATALOGED

Explanation: The data set entry for dsn was successfully removed from the catalog.

System Action: Processing continues.

Programmer Response: None.

IDC0812I n DATA SETS WERE SCRATCHED FROM VOLUME ser

Explanation: The number of data sets scratched from volume ser was n.

System Action: Processing continues.

Programmer Response: None.

IDC0813I n CATALOGED GDG TYPE DATA SETS WERE NOT SCRATCHED

Explanation: The number of cataloged generation data group (GDG) type data sets that were not scratched is n. The SCRDSET command does not scratch cataloged data sets with names that end in 'name.GnnnnVnn'.

System Action: Processing continues with the next volume to be processed.

Programmer Response: If the data sets must be scratched, use one of the following methods to scratch them:

- Run the IEHPROGM utility.
- Run the DELETE command.
- Specify DELETE in the DISP parameter on the DD statement.

IDC0814I n CATALOGED MULTI-VOLUME DATA SETS WERE NOT SCRATCHED

Explanation: The number of cataloged multivolume data sets that were not scratched is n. The SCRDSET command does not scratch multivolume cataloged data sets.

System Action: Processing continues with the next volume to be processed.

Programmer Response: If the data sets must be scratched, use one of the following methods to scratch them:

- Run the IEHPROGM utility.
- Run the DELETE command.
- Specify DELETE in the DISP parameter of the DD statement.

IDC0815I VOLUME ser IN GROUP grpname BEING PROCESSED

Explanation: A new volume with the volume serial number ser in group grpname is being processed. Additional messages follow to indicate the data sets that have been scratched, if any.

System Action: The volume is processed.

Programmer Response: None.

IDC0816I SYSCTLG DATA SET NOT SCRATCHED

Explanation: The PURGE parameter was not specified on a SCRDSET command and an OS system or CVOL catalog data set SYSCTLG met the limiting criteria for data set scratching. Data set SYSCTLG was not scratched.

System Action: Processing continues with the next volume to be processed.

Programmer Response: If the SYSCTLG data set must be scratched, use the IEHPROGM utility, or run the SCRDSET command with the PURGE parameter.

IDC0817I ALL ACTIVE VOLUMES IN GROUP grpname WERE EXCLUDED

Explanation: No volumes were processed in group grpname. Each active volume that normally would have been processed was excluded with the EXCLUDEVOLUMES parameter.

System Action: If any groups remain to be processed, processing continues with the next group. If not, the command terminates.

Programmer Response: None.

IDC0832I NO { BASE VOLUME / DUPLICATE VOLUME / NON–GROUPED VOLUME / CARTRIDGE INDEX / PLACE HOLDER / GROUP SCRATCH / GROUP CATALOG } RECORDS EXIST IN THE INVENTORY

Explanation: No records of the type requested exist in the inventory.

System Action: Processing continues.

Programmer Response: None.

IDC0855I CHANGE OF prm SUCCESSFUL

Explanation: The specified TUNE command parameter (prm) was successfully changed.

System Action: The command continues processing.

Programmer Response: None.

IDC0861I NO TAPE DATA SETS OPEN FOR THIS CHECKPOINT

Explanation: No type 1 DSDRs were found for this checkid.

System Action: Normal processing continues, the checkpoint is not processed.

Programmer Response: None.

IDC0862I DUPLICATE SELECTED CHECKID xxxxxxxxxxxxxxxx

Explanation: The same checkid was selected by the user more than once.

System Action: Normal processing continues, the checkpoint is not processed.

Programmer Response: Check to see if another checkid was intended; and then resubmit.

IDC0863I DUPLICATE CHECKPOINT ENTRY xxxxxxxxxxxxxxxx

Explanation: A duplicate entry was found for a user-selected checkid already.

System Action: Normal processing continues.

Programmer Response: None.

IDC0874I FOLLOWING NOT ALPHABETIC - INSUFFICIENT WORK SPACE FOR SORT

Explanation: Insufficient virtual storage is available for sorting alphabetically the objects to be listed by a LISTCRA command.

System Action: The sorting is not done and the objects are listed in the order that they are encountered while reading the catalog recovery area.

Programmer Response: If a sorted listing is desired, rerun the job with a larger storage allocation.

IDC0877I NUMBER OF RECORDS THAT MISCOMPARED IN THIS CRA - nn

Explanation: The COMPARE option was requested and this message indicates the number (nn) of records for which a miscompare between the catalog recovery area and catalog occurred.

System Action: Processing continues.

Programmer Response: Determine whether recovery is required. For more information on catalog recovery, see *OS/VS2 Access Method Services*.

IDC0888I ** ENTRY CONTAINS NO DATA RECORDS

Explanation: There are no data records in the VSAM data set to be exported. See the primary message for the name of the data set.

System Action: Processing of catalog information only for this data set is attempted. See the primary message for processing result. If processing was successful, then the portable data set contains the necessary information to redefine the data set via IMPORTRA.

Programmer Response: None.

IDC0922I 'xxx' DUMP ELEMENT INVALID FOR SYMBOLIC DUMP

Explanation: The specified dump element in a symbolic dump list has an invalid type field or the length field is invalid for the specified type. The condition code remains unchanged.

System Action: The specified dump element is ignored.

Programmer Response: Correct the length and/or type of the specified dump element.

IDC0923I 'xxx' ARRAY HEADER INVALID FOR SYMBOLIC DUMP

Explanation: The specified array header in a symbolic dump list has an invalid extent field (must be greater than 0 and less than or equal to 99), has an invalid item count field (must be greater than 0), or is an array header within an existing array specification (arrays of arrays are not allowed). The condition code remains unchanged.

System Action: The specified array header is ignored. Dump elements within the array specification are treated as single (non-arrayed) items.

Programmer Response: Correct the invalid fields of the specified array header.

IDC0924I DUMP ROUTINE INVOKED AT 'mac'

Explanation: The Access Method Services dump routine has been invoked at the specified UDUMP macro (mac), a dump entry point.

System Action: A dump of the IDCAMS trace tables is provided, as well as symbolic and/or full region dumps, if requested by the IDCAMS user.

Programmer Response: None.

IDC0925I DUMP xxx PRODUCED AT DUMP POINT 'mac'

Explanation: A dump was requested and produced at the specified UDUMP macro (mac). The dump identifier (xxx) is given.

System Action: Processing continues.

Programmer Response: None.

IDC0970I ** NUMBER OF TRACKS = nn; CCHH OF NEXT TRACK =X'cchh'

Explanation: The above data could not be restored in the VTOC.

System Action: The command continues processing.

Programmer Response: If the volume is a virtual volume, ignore this error since alternate tracks do not apply for virtual volumes and the problem need not be corrected. If the volume is a real volume, use the AMASPZAP service aid to place the information from the subsequent message into the VTOC.

IDC0974I ** LAST USE DATE NOT CHANGED FOR DATA SET(S) ON VOLUME volser

Explanation: An attempt to set or clear the date-last-used field for one or more data sets failed on the indicated volume. This message is preceded by a message that specifies the error.

System Action: Processing continues.

Programmer Response: Correct the error specified in the previous message and rerun the command to set or clear the date-last-used field.

Problem Determination: Table I, items 2, 3, 4, 13, 25, 29, 35c.

IDC01002I RESETCAT CATALOG catname

VOL volser LEVEL time stamp

Explanation: This message is informational, indicating the catalog to be reset and the time stamp on the volume.

System Action: Processing continues.

Programmer Response: None.

IDC01011I CRA CHOSEN FOR RESET - VOL volser LEVEL time stamp

Explanation: This message is informational, indicating the CRA to be reset and the time stamp on the volume.

System Action: Processing continues.

Programmer Response: None.

IDC01037I catname HAS BEEN RESET

Explanation: This message is informational, indicating that RESETCAT processing has been completed for the indicated catalog.

System Action: Processing continues.

Programmer Response: None.

IDC01049I NON-VSAM/USERCATALOG ENTRIES MOVED TO NEW CATALOG'S CRA

Explanation: This message indicates that RESETCAT processing has moved non-VSAM, GDG base, alias, and/or user catalog entries from the CRA on the old catalog's volume to the CRA on the new catalog's volume.

System Action: Processing continues.

Programmer Response: None.

IDC1069I FUNCTION PERFORMED - ERROR UPDATING INVENTORY, CODE = X'nnnn'

Explanation: If a Mass Storage Control function was requested, the function was performed by the Mass Storage Control; however, an error prevented the Mass Storage Volume Control Inventory data set from being updated. If only Inventory data set updating was requested, at least one record was updated in the Inventory; however, an error prevented the rest of the records from being updated. nnnn is the reason code returned from the Mass Storage System Communicator and indicates the cause of the error. The request has been journalled in the Mass Storage Volume Control Journal data set.

System Action: The command continues processing. A subsequent function may fail because of the error in the Inventory data set.

Programmer Response: Investigate the reason code returned from the Mass Storage System Communicator. Contact the system programmer. The Inventory data set should be restored from the backup copy of the Inventory data set and the Journal data set.

Problem Determination: Table I, Items 1, 2, 3, 4, 13, 14, 29, 35a, 35b, and 35c.

IDC1116I ERROR UPDATING CARTRIDGE LABEL:

{ VOLUME = volser, SEQ = n / CSN = csn [,CSN = csn2] }

Explanation: One of the following has occurred:

- For a REPLACEC command, a Copy Cartridge order resulted in the replacement of one of two cartridges in volume volser with sequence number n. An unrecoverable error occurred while the label of the other cartridge of the pair (csn2) was being updated to point to the target cartridge.
- For a COPYV, CREATEV, or SCRATCHV command, a Define Volume or Eliminate Volume order resulted in the cartridges being listed on the scratch cartridge list table. The cartridge or cartridges in error are given an unusable cartridge serial number because the label could not be updated successfully.

System Action: Processing of the failing order completed. Environmental data that identifies the failing cartridge was logged on the primary processing unit.

Programmer Response: For a REPLACEC command, if the REPLACEC command detected the error, reissue the command to replace the other cartridge of the volume, which is indicated by the sequence number n. If either the COPYV, CREATEV, or SCRATCHV command detected the error, issue the MODIFYC command with the DIRECTEJECT parameter to move the failing cartridge or cartridges to the exit station. Then issue the NULLIFYC SCRC CSN(csn) command to eliminate the records for the ejected cartridges from the Mass Storage Facility.

IDC01120I INCONSISTENT field

Explanation: The fields identified by field do not match in table entries that are otherwise matching. Two secondary messages identify the specific field or attribute values that are inconsistent, and the respective tables and table indices in which the inconsistencies occur. See *IBM 3850 Mass Storage System (MSS) Principles of Operation: Reference* for locations and descriptions of the fields in the mass storage control and staging adapter tables. See *OS/VS2 Mass Storage System Communicator (MSSC) Logic* for locations and descriptions of fields in the inventory data set.

System Action: Processing continues.

Programmer Response: Investigate the inconsistency. You can issue the DUMPMSS, LISTMSF, or LISTMSVI commands to obtain dumps of the table with the inconsistency. If there is any

doubt whether the inconsistency is temporary or not, reissue the CHECKMSS command.

Problem Determination: Table I, items 13, 29, 30, and 41g.

IDC01121I DUPLICATE field REFERENCE FOUND

Explanation: More than one table entry references the same field or attribute (identified by field). All entries should be unique with respect to that field or attribute. Two secondary messages identify the specific field or attribute values that are identical, and the table(s) and table indices in which the duplicate occurs. See *IBM 3850 Mass Storage System (MSS) Principles of Operation: Reference* for locations and descriptions of the fields in the mass storage control and staging adapter tables. See *OS/VS2 Mass Storage System Communicator (MSSC) Logic* for locations and descriptions of fields in the inventory data set.

System Action: Processing continues.

Programmer Response: Investigate the duplicate table entries. You can issue the DUMPMSS, LISTMSF, or LISTMSVI commands to obtain dumps of the table containing the duplicate information. If there is any doubt whether the duplicate is temporary or not, reissue the CHECKMSS command.

Problem Determination: Table I, items 13, 29, 30, and 41g.

IDC01122I SUM = n OF INDIVIDUAL counts FROM table NOT EQUAL TO TOTAL VALUE

Explanation: The sum n of the individual counts or values counts obtained from table does not match the field that should contain the total of the counts or values. A secondary message identifies the total value, and the table and table indices to locate the entry containing the total. See *IBM 3850 Mass Storage System (MSS) Principles of Operation: Reference* for locations and descriptions of the fields in the mass storage control and staging adapter tables. See *OS/VS2 Mass Storage System Communicator (MSSC) Logic* for locations and descriptions of fields in the inventory data set.

System Action: Processing continues.

Programmer Response: Investigate the inconsistency. You can issue the DUMPMSS, LISTMSF, or LISTMSVI commands to obtain dumps of the table with the inconsistency. If there is any doubt whether the inconsistency is temporary or not, rerun the CHECKMSS command.

Problem Determination: Table I, items 13, 29, 30, and 41g.

IDC01123I ** VALUE = value table (index)

Explanation: This secondary message identifies the value of the field or attribute named in a primary message: the table name (table) containing the field or attribute, and the table indices (index) that identify the particular table entry containing the field or attribute. See *IBM 3850 Mass Storage System (MSS) Principles of Operation: Reference* for locations and descriptions of the fields in the mass storage control and staging adapter tables. See *OS/VS2 Mass Storage System Communicator (MSSC) Logic* for locations and descriptions of fields in the inventory data set.

System Action: Processing continues.

Programmer Response: Follow the Programmer Response for the primary message.

Problem Determination: Table I, items 13, 29, 30, and 41g.

IDC01124I MATCHING field = value NOT FOUND IN table1 TO MATCH table2 (index)

Explanation: An entry in table2 should have a matching entry in table1. No such match was found, or the table1 entry was invalid. field = value identifies the field or attribute and its value for which a matching entry was not found or not valid. The table indices (index) to locate the unmatched table2 entry are also listed. See *IBM 3850 Mass Storage System (MSS) Principles of Operation: Reference* for locations and descriptions of the fields in the mass storage control and staging adapter tables. See *OS/VS2 Mass Storage System Communicator (MSSC) Logic* for locations and descriptions of fields in the inventory data set.

System Action: Processing continues.

Programmer Response: Investigate the inconsistency. You can issue the DUMPMSS, LISTMSF, or LISTMSVI commands to obtain dumps of the tables with the inconsistency. If there is any doubt whether the inconsistency is temporary or not, rerun the CHECKMSS command.

Problem Determination: Table I, items 13, 29, 30, and 41g.

IDC01146I NO DISCREPANCIES FOUND, REPORT NOT PRINTED

Explanation: No report was printed by the AUDITMSS command with the CHECK or READLABEL parameter. No discrepancies were found.

System Action: The command terminates normally.

Programmer Response: None.

IDC1178I DEFINE SPACE SUBCOMMAND IGNORED - CATALOG IS ICF FORMAT

Explanation: A DEFINE SPACE subcommand was found to be oriented to an ICF catalog. This function is invalid in the ICF Catalog environment and thus this command is ignored.

System Action: This is a warning message. A return code of 4 and this message are issued to call attention to the condition.

Programmer Response: None.

Problem Determination: Table I, items 1, 3, 4, and 29.

IDC01190I CARTRIDGE csn IS NOW A SCRATCH CARTRIDGE

Explanation: The cartridge with the cartridge serial number csn is now a scratch cartridge.

System Action: Processing continues.

Programmer Response: None.

IDC01215I LAST RECORD NOT FOUND IN dsname

Explanation: While displaying or copying the requested records, the last record specified in the DATASETRANGE or the REPAIRRANGE parameter was not found in the data set indicated by (dsname).

System Action: REPAIRV DISPLAY/COPY terminates. Control returns to Access Method Services. The return code is 0.

Programmer Response: None.

Problem Determination: Table I, items 2, 3, 4, 29, 34b, 37a.

IDC01236I TRACK cchh WAS DEBLOCKED INTO n RECORDS

Explanation: The DEBLOCK function has deblocked the R'0/R'1 pair, indicated by cchh, into n records (including R0).

System Action: REPAIRV DEBLOCK has written deblocked records to repair work file.

Programmer Response: None.

Problem Determination: Table I, items 2, 3, 4, 29, 37b.

IDC1252I COMMAND ALLOWS NO PARAMETERS - PARAMETERS IGNORED

Explanation: This message indicates that for a command defined to have no parameters, some parameters were coded.

System Action: The parameters are ignored but the command is processed.

Programmer Response: None.

Problem Determination: Table I, items 13, 20, 29.

IDC01360I THE FOLLOWING ENTRIES HAD NO ERRORS

Explanation: The entries which follow passed the DIAGNOSE checks with no errors.

System Action: None.

Programmer Response: None needed; this is an informational message.

Problem Determination: None.

IDC01371I RECORD DISPLAY SUPPRESSED, ALREADY DUMPED

Explanation: The record described by message IDC21365I will not be dumped here because the record has already been dumped. If DIAGNOSE is unable to obtain enough storage to show which records have been dumped, suppression of duplicates are suspended.

System Action: DIAGNOSE considers this an informational message; processing continues.

Programmer Response: None.

Problem Determination: None.

IDC01402I SPHERE CONVERSION COMPLETED FOR dsn

Explanation: The conversion of the specified base sphere and its associations has completed successfully.

System Action: Processing continues.

Programmer Response: None.

Problem Determination: None.

IDC01407I SPHERE BACKED OUT OF TARGET CATALOG FOR dsn

Explanation: The specified sphere base (dsn) and any of its associations defined in the target catalog have been deleted from the target catalog. The reason for this action is because one of the associations could not be defined in the target catalog and the sphere base and any other associations already defined must be deleted from the target catalog.

System Action: Processing is continued with the next base object.

Programmer Response: Another message will give the name of the object and the reason it could not be defined. Correct this problem and rerun the job.

IDC

IDC01408I DATA SPACES TO BE DELETED FOR VOLUME volser

Explanation: During processing of a CNVTCAT command, suballocated entries in a VSAM catalog have been found. The specified volume's VSAM data spaces will be deleted to allow conversion. Unless an error message follows this message indicating the delete failed, the data spaces will have been deleted.

System Action: Processing continues if the delete of the volume's VSAM data space is successful.

Programmer Response: None.

IDC1412I TRACE ALREADY IN REQUESTED STATE

Explanation: The hardware trace is already in the requested state. The Mass Storage System Communicator reason code is X'7F'. See *Mass Storage System (MSS) Messages* for more information about the reason code.

System Action: The command completes normally.

Programmer Response: None.

IDC01460I THE NUMBER OF ENTRIES MERGED WAS nn

Explanation: The number of entries merged from the source catalog to the target catalog was nn. This count does not include data or index components.

System Action: Normal processing continues.

Programmer Response: None.

IDC01500I BIND/UNBIND SUCCESSFUL FOR (SUBSYSTEM CONTAINING) volser

Explanation: The data is successfully bound or unbound, as the BIND command parameters specify.

System Action: The system performs the I/O (input/output) operation without error.

Programmer Response: None.

Problem Determination: None.

IDC1502I PASSWORD SUPPRESSION IN MODEL OBJECT

Explanation: The password information in the model object was inaccessible because there was insufficient password protection authorization or RACF authorization. This is an informational or warning message that occurs if the password or RACF authorization provided is not high enough to locate the passwords themselves; therefore, the passwords were not used for the object being defined.

System Action: Processing of the command continues. The passwords are not modeled.

Programmer Response: None, if you did not want to model the password information. If you did, delete the data set. The, before redefining, either supply the MASTERPW password of the model object or have your user profile modified so you have RAC-alter access to the model object.

Problem Determination: Table I, items 3, 4, 29.

IDC1543I NEW KEYS AND/OR RECORDSIZE VALUES EQUAL TO PRIOR DEFAULT VALUES.

Explanation: The ALTER command specified the KEYS or maximum RECORDSIZE parameter with values equal to the default values chosen by the DEFINE command. The DEFINE defaults are KEYS (64 0) and RECORDSIZE (4089 4089) for non-spanned record data sets or RECORDSIZE (4086 32600) for spanned record data sets.

System Action: The ALTER command continues processing with a condition code of 4, altering any parameters other than KEYS and RECORDSIZE if possible. Invalid key values also prevent alteration of record size values in the same command and vice versa.

Programmer Response: None, if the default values are the correct ones. Otherwise, execute an ALTER command to correct the values.

Problem Determination: Table I, items 1, 2, 3, 4, 29.

IDC1544I KEYS AND/OR RECORDSIZE VALUES EQUAL TO PRIOR NON-DEFAULT VALUES

Explanation: The ALTER command specified the KEYS or maximum RECORDSIZE parameter with values equal to those already defined.

System Action: The ALTER command continues processing with a condition code of 4, altering any parameters other than KEYS and RECORDSIZE if possible . Invalid key values also prevent alteration of record size values in the same command and vice versa.

Programmer Response: None, if the specified values are correct. Otherwise, execute an ALTER command to correct the values.

Problem Determination: Table I, items 1, 2, 3, 4, 29.

IDC1561I WKSPC LACKING FOR dsn

Explanation: A larger region size is required for this particular invocation of Access Method Services and LISTCAT.

System Action: The LISTCAT command bypasses the indicated entry and continues processing with a condition code of 4.

Programmer Response: Rerun the job in a larger region for those entries that were bypassed.

Problem Determination: Table I, items 1, 3, 4, 29.

IDC1562I ser VOLUME SERIAL NUMBER TOO LONG

Explanation: A volume serial number exceeds six characters for the LISTCAT SPACE request.

System Action: The LISTCAT command bypasses the indicated entry and continues processing with a condition code of 4.

Programmer Response: Rerun the job with the corrected volume serial numbers.

Problem Determination: Table I, items 3, 4, 29.

IDC1564I chartyp IS AN UNKNOWN TYPE

Explanation: An entry returned from the catalog is a type not supported by LISTCAT.

System Action: The LISTCAT command bypasses the entry and continues processing with a condition code of 4.

Problem Determination: Table I, items 3, 4, 29.

IDC1565I xxx NOT A REQUESTED TYPE

Explanation: A desired entry (xxx) was not among the types requested.

System Action: The LISTCAT command bypasses the specified entry and continues processing with a condition code of 4.

Programmer Response: Rerun the job with the correct type or types specified.

Problem Determination: Table I, items 3, 4, 29.

IDC1566I ** xxx NOT LISTED

Explanation: One of the following conditions is present:

- An entry name (dsn) specified in the LISTCAT ENTRIES parameter does not exist in the catalog(s) to be listed.
- An associated object for a CLUSTER, AIX or GDG group does not exist if LISTCAT was requested with no entry types specified.

- Password verification failed.
- An entry name specified in the ENTRIES parameter was a volume serial number and the catalog(s) to be listed is an ICF catalog(s).
- A catalog error has occurred.

If the name should be in the VVDS, run a PRINT of the VVDS to verify the presence of the catalog name.

System Action: The designated entry is bypassed and processing continues with a return code of 4.

Programmer Response: Correct the entry name (dsn) and return the job to list only this entry or refer to the documentation for message IDC3009I and respond as indicated for the specified return code and reason code.

Problem Determination: Table I, items 1, 3, 4, 29.

IDC1567I ** INVALID CONTROL INTERVAL NUMBER nnn

Explanation: An entry identified by the control interval number nnn in the VSAM catalog does not exist.

System Action: The designated entry is bypassed and processing continues.

Problem Determination: Table I, items 1, 3, 4, 29.

IDC1569I EXPIRATION PARAMETER DOES NOT APPLY TO ENTRY TYPE(S)

Explanation: The EXPIRATION option of LISTCAT was specified with entry type(s) that contain either no expiration-date field (for example, UCAT, SPACE) or an expiration-date field that is never initialized (for example, DATA, INDEX).

System Action: LISTCAT continues normally after the warning message, processing the specified entry types. (Condition code of 4.)

Programmer Response: None, but the programmer should be aware that the listing has not been restricted by the EXPIRATION option. All specified entry types will be listed.

IDC1574I CATALOG ENTRY COMPARISON NO LONGER FUNCTIONING

Explanation: This message follows the 100th IDC1575I message. Comparison of the backup and target catalog continues but only volume serial number mismatches are listed.

System Action: Reload processing continues.

Programmer Response: The large number of discrepancies detected between the target and backup catalogs indicate that you should use the reloaded catalog with care until the LISTCAT output obtained before and after the reload has been carefully checked.

Problem Determination: Table I, item 34a.

IDC1575I ONLY { BACKUP / TARGET } DEFINES { dsn / ser }

Explanation: This message indicates that either the backup or target catalog does not contain the data set or volume entry.

System Action: Reload processing continues.

Programmer Response: If only the backup defines a data set, the physical data for the data set probably does not exist on the volumes indicated. Consequently, the catalog entry should be deleted. Use the DELETE NOERASE option, since the ERASE option may affect other users' data.

If only the backup defines a volume, the volume is probably no longer owned by this catalog. Delete any data sets indicated as residing on this volume, then delete this volume.

If only the target defines a VSAM data set, access to the data set has been lost. A backup copy of the data set (output from EXPORT) should be obtained and imported (IMPORT command).

If only the target defines a non-VSAM data set or an alias or generation data group, their catalog entries can be reestablished with the DEFINE command.

If only the target defines a volume, access has been lost to the volume. It cannot be reused by VSAM until the VSAM ownership and data space protection attributes have been removed. (This can be done by executing an off-line IEHDASDR DASDI, or executing Access Method Services ALTER REMOVE VOLUME.)

IDC

IDC1595I PASSWORDS SUPPRESSED FOR THE EXPORTED DATA SET

Explanation: The password and other protection information was inaccessible due to insufficient password or RACF authorization. (The portable version of the data set has been created, but without the protection attributes.)

Note: When protection information is exported, it does not include the RACF profile, the passwords, and other protection information for the data set. However, the RACF indicator is exported.

System Action: Processing of the command continues.

Programmer Response: If the protection attributes are desired, specify the master level password or have your user profile modified so it indicates RAC-alter access to the data set.

IDC1597I THE { INHIBITSOURCE / INHIBITTARGET / PERMANENT } PARAMETER IS INVALID FOR AN ICF CATALOG

Explanation: An ICF catalog is to be exported and INHIBITSOURCE or INHIBITTARGET was specified or PERMANENT was specified or defaulted. These parameters are invalid when exporting an ICF catalog.

System Action: The invalid parameter is ignored and the object is exported.

Programmer Response: If an ICF catalog is being exported, do not specify INHIBITSOURCE or INHIBITTARGET and specify TEMPORARY.

Problem Determination: Table I, items 3, 4, 29.

IDC1631I DUPLICATE 'SYS1. DATA SET NAME' IN TARGET CATALOG

Explanation: This is an informational message only. A duplicate SYS1. data set entry was found in the VSAM or ICF catalog while attempting to convert an OS catalog entry.

System Action: An accompanying message identifies the entry not converted. The entry is not converted.

Programmer Response: If duplicates exist and the one on the CVOL is the copy wanted in the target catalog, then the copy in the target catalog must be deleted prior to issuing the CNVTCAT command.

Problem Determination: Table I, items 2, 3, 4, 29.

IDC1632I CVOL POINTER 'xxx' TO VOLUME 'ser' NOT CONVERTED

Explanation: The CVOL name was not converted to an alias entry in the VSAM or ICF master catalog because the CVOLEQUATES parameter was not specified, or was specified but the CVOL volume serial number in the CVOL pointer entry was not the one specified in the parameter.

System Action: The entry is not converted.

Programmer Response: Use the DEFINE ALIAS command to create an alias entry in the master catalog.

Problem Determination: Table I, items 1, 3, 4, 29.

IDC1638I ALIASES OF GENERATION INDEX POINTER ENTRIES ARE NOT CONVERTED

Explanation: An alias name of an OS catalog generation index pointer entry (GIPE) was encountered. Because aliases of VSAM or ICF catalog GDG base entries are not allowed, the GIPE alias name is not converted.

System Action: The entry is not converted.

Programmer Response: None.

Problem Determination: Table I, items 1, 3, 4, 25, 29.

IDC1644I ALTERNATE INDEX KEY NOT IN BASE RECORD xxx

Explanation: xxx identifies a base cluster record that is not long enough to contain the entire alternate key. If the base cluster is a key-sequenced data set, xxx is the key of the short base cluster record (up to a maximum of the first ten bytes) expressed in hexadecimal. If the base cluster is an entry-sequenced data set, xxx is the RBA of the short base cluster record, given in decimal.

System Action: The base cluster record is bypassed. Therefore, it will not be reflected in the alternate index being built (see subsequent message for the name of the alternate index.)

Programmer Response: After the alternate index is built, the short record must be deleted and a long enough record rewritten via a user program with the alternate index as part of the upgrade set. This will cause the alternate index to be upgraded to reflect this particular base record.

Problem Determination: Table I, items 2, 3, 4, 29.

IDC1645I NONUNIQUE AIX KEY key PRIME { KEY / RBA } IS xxx

Explanation: The alternate index being built (see subsequent message for name) was defined with the UNIQUEKEY attribute; that is, the alternate key exists on one and only one base cluster record. However, multiple occurrences of the same alternate key have been encountered. The message is issued once for each multiple occurrence. The message gives the alternate key first (up to a maximum of the first ten bytes) expressed in hexadecimal. If the base cluster is a key-sequenced data set, xxx is the prime key (up to a maximum of the first ten bytes) expressed in hexadecimal. If the base cluster is an entry-sequenced data set, xxx is the prime RBA in decimal.

System Action: An alternate index record is created containing the alternate key and only the first prime key or RBA listed. All subsequent prime keys/RBAs will not be reflected in the alternate index record.

Programmer Response: If the UNIQUEKEY attribute was correctly specified, then the base cluster is in error and must be corrected via a user program. If the UNIQUEKEY attribute was incorrectly specified:

- and the alternate index was defined with the REUSE parameter, change it to NONUNIQUEKEY using the Access Method Services ALTER command.
- and the alternate index was defined with the REUSE parameter, change it to NONUNIQUEKEY using the Access Method Services ALTER command.
- and the alternate index was not defined with the REUSE attribute, delete the alternate index and redefine it with the NONUNIQUEKEY attribute.

Then rebuild the alternate index using the BLDINDEX Command.

Problem Determination: Table I, items 2, 3, 4, 29.

IDC1646I nnnnn EXCESS PRIME { KEY / RBA } VALUES FOR AIX KEY key

Explanation: key is the key (expressed in hexadecimal, up to a maximum of the first ten bytes) of an alternate index record that was too short to contain all the prime key or RBA pointer values that occurred for that alternate index key. nnnnn gives the number of pointers that could not fit into the record. The name of the alternate index being built is given in a subsequent message.

System Action: The alternate index record is created with only those pointers that could fit.

Programmer Response: Delete the alternate index and redefine it (using the Access Method Services commands) with a maximum record size long enough to contain the maximum number of pointers for any one alternate key. Then rebuild the alternate index using the BLDINDEX command.

Problem Determination: Table I, items 2, 3, 4, 29.

IDC1653I dsn BUILT WITH ERRORS

Explanation: Building of the alternate index identified by dsn has been completed but some non-terminating errors were encountered. Non-terminating errors consist of:

- alternate index key not contained in one or more base cluster records.
- multiple occurrences of one or more alternate keys for an alternate index defined with the UNIQUEKEY attribute.
- one or more alternate index records too short to contain all the prime key or RBA pointers.

All non-terminating errors for this alternate index have been identified in messages that precede this message.

System Action: The building of the alternate index is complete.

Programmer Response: Depends on the error encountered. Refer to the action outlined for the individual errors.

Problem Determination: Table I, items 2, 3, 4, 29.

IDC1661I OUT-OF-SYNC DATA SET SUCCESSFULLY EXPORTED (BY FORCE)

Explanation: The portable data set contains the necessary information to recreate the data set via IMPORTRA. At the time of export the data set was out of synchronization, caused by a mismatch between time stamps or space information. See the secondary message for the data set name.

System Action: Processing continues.

Programmer Response: None.

IDC1662I OUT-OF-SYNC DATA SET NOT EXPORTED

Explanation: The VSAM data set named in the message that follows is out of synchronization and the FORCE parameter was not specified. The out-of-synchronization is caused by a mismatch of the space information.

System Action: Processing of the VSAM data set is bypassed.

Programmer Response: If the data set, with its possible problems, is desired, then the FORCE parameter should be specified on the EXPORTRA command and the job rerun.

IDC1663I BYPASSED RELATION dsn

Explanation: An error occurred or a catalog entry could not be located for a path or an alternate index to a VSAM cluster, an OS/VS alias for a non-VSAM object, or a non-VSAM object associated with an OS/VS2 generation data group. In the message, dsn is the name of the cluster, non-VSAM object, or generation data group.

System Action: The related object is bypassed and processing of the named object is continued.

Programmer Response: List the named object after performing an IMPORTRA operation to determine missing related object(s) and to redefine the related object(s).

IDC1664I ASSOCIATION ERROR, dsn

Explanation: The named catalog entry described a generation data set having no relationship to any OS/VS2 generation data group, or the entry describes a non-VSAM data set containing other than an OS/VS alias related to it.

System Action: The association cannot be processed and processing of the named object is continued.

Programmer Response: List the named object after performing an IMPORTRA operation to determine missing related object(s) and to redefine the related object(s).

IDC1667I VOLUME ser IS OUT-OF-SYNC AND LATER THAN VOLUME ser

Explanation: The data-set-directory-entry time stamp mismatches the time stamp for the VSAM data set named in the following message. The volumes are out of synchronization, although some of the data sets may still be recoverable.

System Action: The VSAM data set entry and associations are bypassed.

Programmer Response: Get the two volumes in synchronization using the IEHDASDR utility program. Then rerun the job.

IDC1678I ** DATA SET EXPORTED WITH MINOR ERRORS

Explanation: An error occurred while processing an associated object for an object being exported.

System Action: Processing of the associated object is bypassed.

Programmer Response: See the preceding message to determine the type of error and the recovery procedure.

IDC1679I ** OUT-OF-SYNC DATA SET EXPORTED WITH MINOR ERRORS

Explanation: An error occurred while processing an associated object for an out-of-synchronization data set. The out-of-synchronization is caused by a mismatch between the time stamps or space information on the various volumes of a multi-volume data set.

System Action: Processing of the associated object is bypassed.

Programmer Response: See the preceding message to determine the type of error and the recovery procedure.

IDC1707I ** OWNER ownerid NOT UPDATED IN INVENTORY FOR NEW COPY yyddd

Explanation: The owner data 'ownerid' in the volume label of the new copy volume, created on the specified date 'yyddd' could not be updated in the copy volume record or in the cartridge labels. This condition occurred because the cartridges of an existing copy volume were reused. See the preceding message for further explanation of the problem.

System Action: Processing continues.

Programmer Response: This discrepancy cannot be corrected. The LISTMSVI reports will reflect different owners for the source volume and the designated copy volume, even though the owner data is correct in the volume labels of both volumes.

IDC1742I RECATALOG OPTION INVALID FOR VOLUME

Explanation: The source volume is not owned by a VSAM catalog. Therefore, the VSAMCATALOG option does not apply.

System Action: No recataloging is performed. The command continues processing.

Programmer Response: If you want any data sets recataloged, use the IEHPROGM utility or the Access Method Services DELETE and DEFINE commands.

Problem Determination: Table I, items 3, 4, 13, 25B, and 29.

IDC1784I NO SCRATCH CARTRIDGES FOUND IN MSF

Explanation: No scratch cartridges can be ejected from the Mass Storage Facility (MSF) because there are no scratch cartridges in the MSF.

System Action: The command terminates with a message.

Programmer Response: None.

IDC1840I TRACE AREA EMPTY - NO DATA DUMPED

Explanation: An attempt was made to dump trace data but the trace areas requested were null.

System Action: The command terminates normally.

Programmer Response: Turn the trace on before requesting a dump.

Problem Determination: Table I, items 2, 3, 4, 13, 29, and 30.

IDC1841I END OF CURRENT DATA COULD NOT BE DETERMINED - ALL DATA DUMPED

Explanation: An attempt was made to dump only current trace data, but the end of the current data was not found. Therefore, all of the trace data was dumped. There may be data from a previous trace period in the output data set.

System Action: The command dumped all the data in the requested trace area.

Programmer Response: When you run the trace report program you can select to process only the data from the current trace period.

Problem Determination: Table I, items 2, 3, 4, 13, 29, and 30.

IDC1860I SELECTED CHECKID, xxxxxxxxxxxxxxxx NOT FOUND

Explanation: The checkid listed was selected by the user, but not found in the checkpoint data set.

System Action: Normal processing continues, the CHECKID is not processed.

Programmer Response: Verify the checkid spelling, and that the correct checkpoint data set was used.

Problem Determination: Table I, items 1, 2, 4, and 29.

IDC1864I NO CHECKPOINTS FOUND ON DATA SET

Explanation: No CHR records were found on the checkpoint data set.

System Action: CHKLIST terminates.

Programmer Response: Verify that the correct checkpoint data set was used, then resubmit job.

Problem Determination: Table I, items 1, 2, 4, 26b, and 29.

IDC1865I xxxxxxxx ADDITIONAL VOLUME SERIAL NOT FOUND IN CHKPT DATA SET

Explanation: Probable checkpoint logic error. A type 1 or type 2 DSDR indicated the presence of a type 2 DSDR which did not exist.

System Action: Incomplete CHKLIST information is listed, and processing continues with the next checkpoint entry.

Programmer Response: Keep all related data sets and listing for reference.

Problem Determination: Table I, items 1, 2, 4, 26b, and 29.

IDC1866I UNEXPECTED EOF ON CHECKPOINT DATA SET

Explanation: End-of-file occurred while processing DSDRs.

System Action: CHKLIST utility terminates.

Programmer Response: Keep all related data sets and listings for reference.

Problem Determination: Table I, items 1, 2, 4, 26b, and 29.

IDC1867I CURRENT VOLUME NOT FOUND 'xxxxxxxx'

Explanation: The volume sequence number exceeded the number of volumes (JFCBNVOLS) for the indicated ddname.

System Action: Normal processing continues.

Programmer Response: Keep all related data sets and listings for reference.

Problem Determination: Table I, items 1, 2, 3, 26b, and 29.

IDC1870I ** IGNORED VSAM ERROR READING CRA - CI 'nn'X

Explanation: A LISTCRA function encountered an I/O error reading a catalog recovery area (CRA) record at the specified control interval. 'nn' is the control interval number in hexadecimal.

System Action: The record is ignored and processing is continued as long as no more than 50 errors have been encountered while processing the LISTCRA command. When the number of errors reaches 50, processing is terminated.

Programmer Response: See the preceding message to determine the cause of the I/O error. Correct the problem if possible, and resubmit the job.

IDC1871I ** IGNORED VSAM ERROR READING CATALOG - CI 'nn'X

Explanation: A LISTCRA function encountered an I/O error reading a catalog record at the specified control interval. 'nn' is the control interval number in hexadecimal.

System Action: The record is ignored and processing is continued as long as no more than 50 errors have been encountered while processing the LISTCRA command. When the number of errors reaches 50, processing is terminated.

Programmer Response: See the preceding message to determine the cause of the I/O error. Correct the problem if possible, and resubmit the job.

IDC1875I ERROR TRANSLATING CRA CI FROM CATALOG CI - 'nn'X

Explanation: An error occurred when translating an entry's catalog control interval number, which points at a related entry, to a CRA control interval before reading the entry. 'nn' is the catalog control interval number in hexadecimal. This will normally result from an incomplete entry definition or an I/O error identified in a preceding message.

System Action: The error is bypassed and processing is continued; however, there may be minor errors in the list.

Programmer Response: Restore the volume on which the error occurred to a previous valid condition. For more information on catalog recovery, see *OS/VS2 Access Method Services*.

Problem Determination: Table I, items 2, 3, 4, 29.

IDC1878I xxxxxxxx IGNORED ERROR FROM FIELD MANAGEMENT

Explanation: An error occurred in module IDCRC04 (EXPORTRA Field Management) when it was called by LISTCRA; IDCRC04 was unable to return information about a field specified by LISTCRA. xxxxxxxx is the LIST CRA procedure in control when the error was detected. The following list identifies each LISTCRA procedure and the field for which IDCRC04 was searching when it encountered the error:

CATOPEN — the catalog name in the cluster record of the catalog.

CKEYRNG — the high key value in a given CRA record.

CRAOPEN — either the owning catalog name or the volume serial number in the CRA.

CTTBLD — the entry type of the catalog CI in the CRA record.

GETPRT — the entry type or the entry name in the CRA record.

INTASOC — the associated entry type or entry name fields in the CRA records.

INTSORT — the name in a given CRA record.

INTVEXT — the extension pointer in a given CRA record.

PRTCMP — the used length field in a given CRA record.

PRTDMP — the used length field in a given CRA record.

PRTOJVL — the volume information of high key value in a given CRA record.

PRTVOL — the volume time stamp information in a given catalog or CRA record.

System Action: The error is bypassed and processing is continued; however, there may be minor errors in the list.

Programmer Response: Restore the volume on which the error occurred to a previous valid condition. For more information on catalog recovery, see *OS/VS2 Access Method Services*.

Problem Determination: Table I, items 2, 3, 4, 29.

IDC1880I IGNORED I/O ERROR READING VOLUME LABEL

Explanation: A LISTCRA command encountered an I/O error reading the format-4 DSCB in the VTOC to obtain the time stamp information.

System Action: The error is ignored and the time stamps are not printed.

Programmer Response: List the format-4 DSCB using the IEHLIST or AMASPZAP utility program or determine the cause of the I/O error by referring to the reason code in the preceding error message, correct the problem if possible, and rerun the job.

Problem Determination: Table I, items 2, 3, 4, 29.

IDC1881I IGNORED OPEN FAILURE FOR ALTERNATE OUTPUT DATA SET

Explanation: LISTCRA encountered an error attempting to open the alternate output data set.

System Action: The error was ignored and the system output data set used.

Programmer Response: If the output is desired in the alternate data set, determine the cause of the error, fix it, and rerun the job.

IDC1885I CRA RECORD COULD NOT BE READ BY FIELD MANAGEMENT

Explanation: Module IDCRC04 (EXPORTRA Field Management) called by LISTCRA to read CRA fields for the miscompare list was unable to return the requested field. This message normally results from an I/O error identified in the preceding message.

System Action: The error is bypassed and processing is continued; however, there may be minor errors in the list.

Programmer Response: Restore the volume on which the error occurred to a previous valid condition. For information on catalog recovery, see *OS/VS2 Access Method Services*. Contact IBM for programming support and make sure the job stream and system output associated with this job is available for problem determination. LRPM is the last Access Method Services diagnostic dump point before the error was detected.

Problem Determination: Table I, items 2, 3, 4, 29.

IDC1887I ERROR REFERENCING CRA ON VOLUME ser - REASON CODE cde

Explanation: In opening the catalog recovery area (CRA) there was a problem indicated by the reason code cde. Possible reason codes and their meanings are:

Reason Code	Meaning
3	Time stamp for volume was not obtained.
6	I/O error reading the CRA record.

System Action: Processing continues.

Programmer Response: This message requires no action, but the problem causing it may cause other messages that you should act on.

IDC1890I RACF PROFILE COULD NOT BE DELETED — NOT ELIGIBLE

Explanation: As the result of a DELETE or EXPORT command, a RACF indicated member was successfully deleted. However, the RACF profile for this data set is not eligible for deletion for one of these reasons:

- RACDEF was failed by the installation exit.
- The resource name in the profile was not previously defined to RACF.

System Action: Processing of the command continues.

Programmer Response: None.

Problem Determination: Table I, items 3, 4, 29.

IDC1891I RACF PROFILE COULD NOT BE DELETED — NOT FOUND

Explanation: As the result of a DELETE or EXPORT command, a RACF indicated member was successfully deleted. However, the RACF profile for this data set could not be found.

System Action: Processing of the command continues.

Programmer Response: None.

Problem Determination: Table I, items 3, 4, 29.

IDC1927I INVALID 'MARGINS' VALUES SPECIFIED, DEFAULT MARGINS ASSUMED.

Explanation: The left margin value specified in a MARGINS parameter is not strictly less than the right margin value; at least two character positions must be provided.

System Action: The default margin values (2,72) are assumed. The condition code is set to 4.

Programmer Response: Correct the invalid MARGINS specifications.

Problem Determination: Table I, items 1, 3, 4, 29.

IDC1968I VSAM TIME STAMP NOT UPDATED IN VTOC OF {FROM / TO} VOLUME volser

Explanation: An error was encountered reading or updating the VTOC so the VSAM time stamp was not updated for the volume (volser). "From" or "to" indicates which value encountered the error for commands that process more than one value.

System Action: The command terminates normally if no functions have been performed yet. If some functions have been performed, the command continues processing.

Programmer Response: Rerun the job if the job was not completed. If the function completed, use the AMASPZAP service aid to correct the VSAM time stamp or ignore the error.

Problem Determination: Table I, items 1, 3, 4, 13, 25b, and 29.

IDC1969I ALTERNATE TRACK DATA NOT RESTORED IN VTOC OF TO VOLUME volser

Explanation: An error was encountered reading or updating the VTOC so the alternate track information was not restored in the VTOC of the target volume (volser) after the copy of data. A previous message explains the error.

System Action: The command continues processing.

Programmer Response: If the volume is a Mass Storage Volume, ignore this error since alternate tracks do not apply for Mass Storage Volumes and the problem need not be corrected. If the volume is a real volume, use the AMASPZAP service aid to place the information from the subsequent message into the VTOC.

Problem Determination: Table I, items 1, 3, 4, 13, 14, 25b, and 29.

IDC2011I FUNCTION CANNOT BE EXECUTED. INSUFFICIENT MAIN STORAGE

Explanation: The system issues this message if there is insufficient storage for one of the following:

- An access-method-services (AMS) function that requires scratching data sets from volumes. There was not enough virtual storage available to hold the parameter list for the SCRATCH macro.

- The mass storage control function; there was not enough storage to execute the mass storage system communicator macro.

- An AMS Cache-DASD command (BINDATA, LISTDATA, SETCACHE); the system cannot obtain enough storage to hold the work areas.

System Action: The data sets are not scratched, or the mass storage system communicator macro is not issued. In the case of a AMS Cache-DASD command, the system terminates processing. Other actions are indicated by subsequent messages.

Programmer Response: Rerun the job in a larger address space.

Problem Determination: Table I, items 1, 3, 29.

IDC2035I INVALID ERROR CONVERSION TABLE

Explanation: An error was detected in the information transmitted in the Error Conversion Table, when attempting to convert a numeric error code to a prose message. This should not occur in a valid program.

System Action: The conversion request is terminated.

Programmer Response: Do the problem determination action.

Problem Determination: Table I, items 3, 4, 29.

IDC2065I ** UNABLE TO CLEAR SERIAL-MISMATCH FLAG FROM INVENTORY RECORD

Explanation: A flag indicating a volume serial mismatch exists between the cartridge labels and the volume label for a Mass Storage Volume could not be cleared from the Inventory data set. See the previous message for further explanation of the problem.

System Action: The command terminates with an error message.

Programmer Response: Correct the problem as identified in the previous message and take the following actions for the command that failed:

- If a Rename Operation Failed for ADDV

  Run ADDV to backout or retry the rename operation if the volume is inactive. If the volume is active, run MODIFYV or STOREV to either backout or retry the rename operation.

  If the ADDV, MODIFYV, or STOREV commands are run to recover from a rename failure, a DD statement for the volume is required and must specify deferred mounting.

  The values specified for the VOLUME and NEWSERIAL parameters depend upon how the volume record is recorded in the Inventory data set. If the cartridge labels have been updated, the volume record will be identified by the new volume serial number. For the VOLUME parameter, specify the volume serial number as recorded in the cartridge labels and the volume record. For the NEWSERIAL parameter, specify the desired volume serial number. Note that the security check for non-VSAM status and password protected data sets is bypassed only if the NEWSERIAL parameter specifies the same volume serial number as recorded in the Inventory data set for the volume label. This allows the original volume serial number of a VSAM volume to be restored if the volume is left partially renamed.

  If ADDV, MODIFYV, or STOREV terminates without indicating the status of the rename operation, LISTMSVI can be run to determine whether the volume is flagged for recovery purposes. If the mismatch flag is set in the volume record, LISTMSVI not only lists the standard information for the volume but also highlights the volume report with a note that a rename operation failed for the the preceding volume and that serial number 'nnnnnn' is recorded in the volume label of the volume.

- If a Rename Operation Failed for MODIFYV

  To recover from a MODIFYV rename failure 1) run ADDV to activate the volume if the volume is merely inactive and has no volume serial mismatch condition, or 2) run ADDV to both activate the volume and complete the rename operation if the volume is both inactive and has a volume serial mismatch condition, or 3) rerun MODIFYV to complete or retry the rename operation if the volume is active but has a mismatch condition, or 4) run STOREV to complete or retry the rename operation if the volume is active and if a duplicate volume serial number is desired as a result of the rename.

  For the DD statement requirements, the proper VOLUME and NEWSERIAL parameter values, and use of LISTMSVI, refer to the description above for an ADDV rename failure.

- If a Rename Operation Failed for STOREV

  Rerun STOREV or run MODIFYV to either backout or retry the rename operation.

  For the DD statement requirements, the proper VOLUME and NEWSERIAL parameter values, and use of LISTMSVI, refer to the description above for an ADDV rename failure.

Problem Determination: Table I, item 1, 2, 3, 4, 13, 29, 35a, and 35c.

IDC2074I VOLUME ser NOT ACTIVE

Explanation: Volume ser is not active, and is recorded in the Inventory data set as inactive. The command issuing the message requires an active volume.

System Action: Processing of the command terminates with a message indicating the final condition code.

Programmer Response: Run the ADDV command to activate the volume, and then rerun the command. If the volume is already active but only the record indicates that the volume is inactive, contact the space manager. The Inventory data set may need to be restored from the backup copy and the Journal data set.

Problem Determination: Table I, items 1, 2, 3, 4, 13, and 29.

IDC2075I ** VOLUME volser CANNOT BE ACTIVATED

Explanation: An attempt to make volume (volser) active and mountable failed. See preceding message for further explanation of the failure.

System Action: The command terminates with an error message.

Programmer Response: Rerun the command after:

- Reentering one or both cartridges if the cartridges are outside the Mass Storage Facility (MSF),
- Correcting the problem as indicated in the preceding message, or
- Running the EJECTV command to eject the volume and then reentering the cartridges if the cartridges were originally entered while the Mass Storage Volume Control (MSVC) was disabled.

Problem Determination: Table I, 2, 3, 4, 13, 29, 35a, and 35c.

IDC2076I ** CART csn [csn] NOT IN MSF FOR COPY yyddd

Explanation: The cartridges assigned to the copy created on the date indicated by "yyddd" cannot be found in the Mass Storage Facility (MSF). The cartridge serial numbers (csn [csn]) identify the sequence one and/or sequence two cartridge not in the MSF. See preceding message for additional information.

System Action: The command terminates with a message unless additional copies are specified for processing.

Programmer Response: Correct the condition as indicated in the preceding message. Rerun the command after:

- Reentering the missing cartridges,
- Selecting another copy volume,
- If one of the cartridges is lost, running the SCRATCHV command to make the remaining cartridge assigned to the volume scratch cartridge and to delete the record from the Inventory data set, or
- Running the REMOVEVR command to delete the record for the copy volume if both cartridges are lost.

Problem Determination: Table I, items 2, 3, 4, 13, 29, 35a, and 35c.

IDC2078I ** COPY RECORDS FOR VOL volser CANNOT BE RETRIEVED

Explanation: An attempt to access a record in the Inventory data set for an existing copy volume failed. The base volume record indicates additional copy volumes exist; however, the record for the next copy volume in time stamp sequence cannot be read. See the preceding message for further explanation of the failure.

System Action: The command terminates with a message.

Programmer Response: Correct the error as indicated in the preceding message.

Problem Determination: Table I, items 2, 3, 4, 13, 29, 30, 35a, and 35c.

IDC2079I ** RECORD FOR GROUP group name CANNOT BE RETRIEVED FROM INVENTORY

Explanation: An attempt to access the record in the Inventory data set for group (group name) failed. See the preceding message for further explanation of the failure.

System Action: The command terminates with a message unless additional groups are specified for processing.

Programmer Response: Correct the error as indicated in the preceding message. Verify that the group name is specified correctly, then rerun the command.

Problem Determination: Table I, items 2, 3, 4, 13, 29, and 35c.

IDC2080I ** RECORD FOR VOL volser CANNOT BE RETRIEVED FROM INVENTORY

Explanation: An attempt to access the record in the Inventory data set for the volume (volser) failed. See the preceding message for further explanation of the failure.

Programmer Response: Correct the error as indicated in the preceding message. Before rerunning the command check that the volume serial number is specified correctly.

Problem Determination: Table I, items 2, 3, 4, 13, 29, 30, 35a, and 35c.

IDC2084I ** CARTRIDGES NOT EJECTED

Explanation: The cartridges assigned to a Mass Storage Volume could not be ejected from the MSF. If only one cartridge was in the Mass Storage Facility, an attempt to eject that one cartridge failed. See the preceding message for further explanation of the failure.

System Action: The command continues processing.

Programmer Response: Correct the error as identified in the preceding message and rerun the command.

Problem Determination: Table I, items 2, 3, 4, 13, 29, 35a, and 35c.

IDC2087I ** CART csn [csn] NOT SCRATCHED FOR COPY yyddd

Explanation: The cartridges assigned to the copy volume created on the date indicated by "yyddd" could not be scratched. If only one cartridge was in the MSF an attempt was made to scratch that one cartridge. The cartridge serial numbers (csn) identify the sequence one and/or sequence two cartridge not scratched. See the preceding message for further explanation of the failure.

System Action: The command continues processing.

Programmer Response: Correct the problem as indicated in the preceding message. If the cartridge(s) are out of the Mass Storage Facility, re-enter the cartridges into the Mass Storage Facility and rerun the command. If the cartridges are lost, run the REMOVEVR command to delete the record for the copy from the Inventory data set and rerun the command if necessary.

Problem Determination: Table I, items 2, 3, 4, 13, 29, 35a, and 35c.

IDC2091I ** { READONLY / READWRITE } ATTRIBUTE NOT SET FOR VOLUME volser

Explanation: Volume (volser) could not be assigned the READONLY or READWRITE attribute. READONLY may be required because the volume belongs to a group which has the READONLY attribute specified for all general-use volumes. See the preceding message for further explanation of the problem.

System Action: The command continues processing.

Programmer Response: Run the MODIFYV command to change the volume attribute to readonly or readwrite.

Problem Determination: Table I, items 2, 3, 4, 13, and 29.

IDC2093I ** VOLUME ATTRIBUTES NOT CHANGED TO AGREE WITH GROUP group name

Explanation: An attempt to change the attributes (bind/nobind, exclusive/shared, readonly/readwrite, dasderase/nodasderase, pagefault/nopagefault) of a general-use volume failed. The attributes of the volume do not agree with the attributes specified for all general-use volumes belonging to the group (group name). See the preceding message for additional information on the problem.

System Action: The command continues processing.

Programmer Response: Run the LISTMSVI command to list the information recorded in the Inventory data set about the group. After determining the volume attributes specified at the group level, run the MODIFYV command to update the volume attributes to agree with the group specifications. If there are many volumes in the group whose attributes do not agree with the group, you can run the MODIFYG command to request a change of the group attributes. If you specify the same attributes on the MODIFYG command as are recorded already in the group record, MODIFYG will still change the attributes of all the active general-use volumes for the group.

Problem Determination: Table I, items 2, 3, 4, 13, and 29.

IDC2095I { FROM / TO } VOLUME volser INCOMPLETELY RENAMED IN A PRIOR OPERATION

Explanation: Volume (volser) cannot be used. A previous MODIFYV, ADDV, or STOREV command terminated before completely changing the volume serial number of the volume. The volume serial number on the cartridge labels and in the Inventory record does not agree with the volume serial number in the volume label. "FROM" and "TO" designate which volume is unusable for those commands processing both a source and target volume having the same volume serial numbers.

System Action: The command terminates with a message reflecting the severity of the error.

Programmer Response: Correct the problem as identified in the preceding message and take the following actions for the command that failed:

- If a Rename Operation Failed for ADDV

  Run ADDV to backout or retry the rename operation if the volume is inactive. If the volume is active, run MODIFYV or STOREV to either backout or retry the rename operation. If the ADDV, MODIFYV, or STOREV commands are run to recover from a rename failure, a DD statement for the volume is required and must specify deferred mounting. The values specified for the VOLUME and NEWSERIAL parameters depend upon how the volume record is recorded in the Inventory data set. If the cartridge labels have been updated, the volume record will be identified by the new volume serial number. For the VOLUME parameter, specify the volume serial number as recorded in the cartridge labels and the volume record. For the NEWSERIAL parameter, specify the desired volume serial number. Note that the security check for non-VSAM status and password protected data sets is bypassed only if the NEWSERIAL parameter specifies the same volume serial number as recorded in the Inventory data set for the volume label. This allows the original volume serial number of a VSAM volume to be restored if the volume is left partially renamed.

  If ADDV, MODIFY, or STOREV terminates without indicating the status of the rename operation, LISTMSVI can be run to determine whether the volume is flagged for recovery purposes. If the mismatch flag is set in the volume record, LISTMSVI not only lists the standard information for the volume but also highlights the preceding volume and that serial number 'nnnnnn' is recorded in the volume label of the volume.

- If a Rename Operation Failed for MODIFYV

  To recover from a MODIFYV rename failure 1) run ADDV to activate the volume if the volume is merely inactive and has no volume serial mismatch condition, or 2) run ADDV to both activate the volume and complete the rename operation if the volume is both inactive and has a volume serial mismatch condition, or 3) rerun MODIFYV to complete or retry the rename operation if the volume is active but has a mismatch condition, or 4) run STOREV to complete or retry the rename operation if the volume is active and if a duplicate volume serial number is desired as a result of the rename.

  For the DD statement requirements, the proper VOLUME and NEWSERIAL parameter values, and use of LISTMSVI, refer to the description above for an ADDV rename failure.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 29, 35a, or 35c.

IDC2096I { FROM / TO } VOLUME volser INCOMPLETELY COPIED IN A PRIOR OPERATION

Explanation: Volume (volser) was incompletely copied by the COPYV, RECOVERV, or CONVERTV commands and cannot be used. "FROM" and "TO" designate which volume is unusable for those commands processing both a source and target volume having the same volume serial number.

System Action: The command terminates with a message containing the severity code.

Programmer Response: Correct the problem as indicated in the preceding message. Then, take one of the following actions for the command that failed:

- If a Copy Operation Failed in COPYV

  Rerun COPYV to complete the copy operation to the incomplete copy volume (COPYV will reuse the cartridges of the incomplete copy volume for the new copy) or run SCRATCHV to scratch the incomplete copy volume before rerunning the COPYV command.

  IF COPYV terminates without indicating the status of the copy operation, LISTMSVI can be run to determine whether the volume is flagged for recovery purposes. If the incomplete copy flag is set in the copy volume record, LISTMSVI not only lists the standard information for the volume but also highlights the volume report with a note that a copy operation failed for the preceding copy volume.

- If a Copy Operation Failed for RECOVERV

  Rerun RECOVERV to complete the recover operation to the target volume that is flagged as an incomplete copy volume. Otherwise, run SCRATCHV to scratch the target volume. The incomplete copy volume may even be used as the target volume in the CONVERTV command. In all cases, the empty VTOC check or security check for password protected data sets is bypassed.

  If the SCRATCHV command is run, the DD statement is not required for the volume and if provided, must specify deferred mounting. If the RECOVERV command is rerun, the DD statement is not required for the target volume, which is flagged as an incomplete copy, unless the volume serial number of the target volume is different from the source volume. If a DD statement is provided for the target volume, deferred mounting must be specified. If a VSAM catalog is on the volume, a DD statement for the catalog is not required; if provided, deferred mounting must be specified.

  If RECOVERV terminates without indicating the status of the recover operation, LISTMSVI can be run to determine whether the volume is flagged for recovery purposes. If the incomplete copy flag is set in the target volume record, LISTMSVI not only lists the standard information for the volume but also highlights the volume report with a note that a copy operation failed for the preceding volume.

- If a Copy Operation Failed for CONVERTV

  Rerun CONVERTV to complete the conversion operation to the target volume that is flagged as an incomplete copy volume. Otherwise, run SCRATCHV to scratch the target volume. The incomplete copy volume may even by used as the target volume in the RECOVERV command. In all cases, the empty VTOC check or the security check for password protected data sets is bypassed.

  If the SCRATCHV command is run, the DD statement is not required for the incompletely copied volume and if provided, must specify deferred mounting. If a VSAM catalog is on the volume and a DD statement for the target volume must be provided and must specify deferred mounting. If a VSAM catalog is on the volume and a DD statement is provided for the catalog, the DD statement must also specify deferred mounting.

  If CONVERTV terminates without indicating the status of the conversion operation, LISTMSVI can be run to determine whether the volume is flagged for recovery purposes. If the incomplete copy flag is set in the target volume record, LISTMSVI not only lists the standard information for the volume but also highlights the volume report with a note that a copy operation failed for the preceding volume.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 29, or 35c.

IDC2097I { FROM / TO } VOLUME volser INCOMPLETELY CREATED IN A PRIOR OPERATION

Explanation: Volume (volser) was incompletely created by the CREATEV command and could not be used. "FROM" and "TO" designate which volume is unusable for those commands processing both a source and target volume having the same volume serial number.

System Action: The command terminates with a message reflecting the severity of the error.

Programmer Response: Before creating the volume using the CREATEV command run the SCRATCHV command to scratch the partially created volume. In the SCRATCHV run, there must be no DD statement for the partially created volume; the empty VTOC check is bypassed.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 29, 35a, and 35c.

IDC2100I CATALOG RETURN CODE FOR LOCATE REQUEST WAS nn

Explanation: The return code from an OS/VS locate request was nn. See *OS/VS2 System Programming Library: Data Management* for a description of the return codes. The error was detected either in the VSAM or OS Catalog Management.The subsequent message identifies the data set not recataloged. During a CONVERTV operation, if the data set was cataloged in a VSAM user catalog on the converted volume, the data set may have been recataloged, and this message can be ignored.

System Action: The command continues processing.

Programmer Response: Correct the error and recatalog the data set using IEHPROGM utility or the Access Method Services DELETE and DEFINE commands.

Problem Determination: Table I, item 1, 3, 4, 13, 14, 25d, 29, and 34.

IDC2101I CATALOG RETURN CODE FOR RECAT REQUEST WAS nn - REASON CODE nn

Explanation: The return code from an OS/VS recatalog request was nn. The reason code in register 0 was nn. See *Mass Storage System (MSS) Messages* for a description of the reason codes; and *VS2 System Codes* for return code. A subsequent message identifies the data set not cataloged.

System Action: The command continues processing.

Programmer Response: Correct the error and recatalog the data set using the IEHPROGM utility or the Access Method Services DELETE and DEFINE commands.

Problem Determination: Table I, item 1, 3, 4, 13, 14, 25d, 29, and 31.

IDC2103I VOLUME IN RECORD CHAIN CANNOT BE RETRIEVED

Explanation: An Inventory data set error caused a break in the group or nongrouped volume chain. The next record in the chain either was not found, or the record indicates that it does not belong in the chain being processed. A reason code of X'208' or X'224 was returned from the Mass Storage Volume Control functions. The error may be caused by another command updating the Inventory data set while this command is running.

System Action: Processing continues with the next group, or processing terminates if the request is for nongrouped volumes.

Programmer Response: Rerun the command. If there is a permanent Inventory data set error, contact the system programmer.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 29, and 35c.

IDC2108I ** UNABLE TO PROCESS VOLUME ser

Explanation: Volume ser cannot be processed. A preceding message indicates the reason why the volume cannot be processed.

System Action: The command continues with the next volume to be processed. If there is none, the command terminates.

Programmer Response: Determine from the preceding message whether a problem exists, and correct it if necessary. Rerun the command to process the volume.

Problem Determination: Follow the problem determination actions for the preceding message.

IDC2109I ** REMAINING VOLUMES CANNOT BE PROCESSED

Explanation: An error occurred in the Inventory data set that prevents any more volume records from being read. Remaining volumes cannot be processed by the command. A preceding message indicates the type of error encountered with the Inventory data set.

System Action: The command terminates.

Programmer Response: Contact the system programmer to correct the problem with the Inventory data set.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 29, and 35c.

IDC2110I ** REMAINING VOLUMES IN GROUP grpname CANNOT BE PROCESSED

Explanation: An Inventory data set error occurred to prevent processing down the volume chain for group grpname. The problem may be temporary, or the Inventory data set may have permanent errors. A preceding message indicates the type of error encountered with the Inventory data set.

System Action: Processing continues with the next group to be processed. If there is none, the command terminates.

Programmer Response: Refer to the preceding message to determine why processing for this group was terminated.Contact the system programmer to correct the Inventory data set if necessary, and rerun the command.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 29, and 35c.

IDC2111I ** REMAINING GROUPS CANNOT BE PROCESSED

Explanation: An error occurred in the Inventory data set that prevented any more group records from being read. A preceding message indicates the type of Inventory data set error.

System Action: The command terminates.

Programmer Response: Refer to the preceding message for the type of Inventory data set error.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 29, and 35c.

IDC2118I ** SCRATCH RECORD FOR GROUP group name CANNOT BE RETRIEVED

Explanation: The scratch record for group group name cannot be retrieved because either (1) the attempt to access a scratch record in the inventory data set for the group failed, or (2) the scratch record did not contain volumes scheduled for processing by the system-initiated scratch function. See the preceding message for further explanation of the failure.

System Action: The command terminates with this message unless additional groups are specified for processing.

Programmer Response: Correct the error specified in the preceding message. Before rerunning the command, check that the group name is specified correctly.

Problem Determination: Table I, items 2, 3, 4, 13, 25, 29, 30, 35a, and 35c.

IDC2119I ** CATALOG RECORD FOR GROUP group name CANNOT BE RETRIEVED

Explanation: An attempt to access the catalog record in the inventory data set for group (group name) failed. See the preceding message for further explanation of the failure.

System Action: The command terminates with this message unless additional groups are specified for processing.

Programmer Response: Correct the error specified in the preceding message. Verify that the group name is specified correctly, then rerun the command.

Problem Determination: Table I, items 2, 3, 4, 13, 29, and 35c.

IDC2160I INVALID REFERENCE TO VOLUME xxxxxx, OBJECT BYPASSED

Explanation: EXPORTRA has encountered a VSAM object that references a volume entry that contains no reference to the object. (This situation is probably the result of a system failure during a prior delete operation.)

System Action: EXPORTRA bypasses the VSAM data set and its associations.

Programmer Response: The data on valid volumes can be copied using the REPRO command, and then the data set can be deleted using the DELETE command. The data set cannot be opened for output.

Problem Determination: Table I, items 3, 4, 13, 29.

IDC2360I CATALOG ENTRY FOR DATA SET INDICATES DIFFERENT DEVICE TYPE

Explanation: The ULOCATE function, after locating a data set name in the catalog, determined that the data set resides on a device type other than the catalog indicates, or else a duplicate data set name exists.

System Action: Processing continues with the next data set on the volume.

Programmer Response: If the device type is incorrect, uncatalog the data set and then recatalog it with the correct device type.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 29, and 34.

IDC2364I CATALOG ENTRY TYPE FOR DATA SET IS OTHER THAN NON-VSAM

Explanation: The ULOCATE function, after locating a data set name in the catalog, determined that the catalog entry type was not for a VSAM data set, or else a duplicate data set name exists.

System Action: Processing continues with the next data set on the volume.

Programmer Response: If the data set entry is cataloged, rerun the SCRDSET command after restructuring the STEPCAT concatenation.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 29, and 34.

IDC2370I UNABLE TO READ JFCB FOR DD ENTRY ddname RDJFCB CODE x

Explanation: The system was not able to read the JFCB (job file control block) for the specified DD statement (ddname). The RDJFCB macro return code was x. This condition generally occurs when the DD statement was not supplied.

System Action: The command terminates normally.

Programmer Response: Ensure the DD name in the FILE parameter is correct and there is a corresponding DD card in the JCL statements.

Problem Determination: Table I, items 1, 2, 3, 4, 13, and 29.

IDC2371I UNABLE TO OBTAIN STORAGE FOR I/O PROCESSING

Explanation: There was insufficient storage to perform the necessary I/O processing.

System Action: The command terminates normally.

Programmer Response: Increase the region size for the job and rerun the command.

Problem Determination: Table I, items 1, 2, 3, 4, 13, and 29.

IDC2372I OPEN ABEND EXIT { dsn / VTOC }

Explanation: The OPEN macro encountered an error that resulted in the OPEN DCB ABEND exit being entered. This error prevented the opening of the DCB and stopped further I/O processing. The specified data set (dsn) or the VTOC was being opened.

System Action: The command terminates normally.

Programmer Response: Examine the write-to-programmer message issued by the OPEN macro for the specific error code. Correct the problem and rerun the command.

Problem Determination: Table I, items 1, 2, 3, 4, 13, and 29.

IDC2373I INVALID PASSWORD dsn

Explanation: One of the following errors occurred:

- The operator did not supply the correct password for the specified non-VSAM data set (dsn), for the specified VSAM unique data or index component (dsn), or for a data or index component within the specified VSAM data space (dsn).
- There is no JOBCAT or STEPCAT DD statement for the VSAM catalog that owns the volume.

System Action: The command terminates normally. The requested function cannot be performed.

Programmer Response: If the operator supplied the incorrect password, do the following:

- Tell the system operator the correct password. The operator is prompted for the password that corresponds to (1) the data or index component name or code word (VSAM data sets) or (2) the name of the DD statement for the data set (non-VSAM data sets). Rerun the command.

If there is no JOBCAT or STEPCAT DD statement for the VSAM catalog, do the following:

- Supply a JOBCAT or STEPCAT DD statement for the catalog or supply the master password of the VSAM catalog on the command or via operator prompting. Rerun the command.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 25b, and 29.

IDC2374I CLOSE ABEND EXIT { dsn / VTOC }

Explanation: The CLOSE macro encountered an error that resulted in the CLOSE DCB ABEND exit being entered. This error prevented the closing of the DCB and stopped further I/O processing. The specified data set (dsn) or VTOC was being closed.

System Action: The command continues processing.

Programmer Response: Examine the write-to-programmer message issued by the CLOSE macro for the specific error. Correct the problem and rerun the command if the function was not performed.

Problem Determination: Table I, items 1, 2, 3, 4, 13, and 29.

IDC2375I ** I/O ERROR { dsn / VOLUME LABEL / VTOC / volser IOS RC=rc }

Explanation: A SYNAD error occurred during EXCP I/O processing for a data set (dsn), the volume label, or the VTOC. This message also appears if a AMS Cache-DASD command (BINDDATA, LISTDATA, SETCACHE) encounters an IOS return code that indicates unsuccessful completion of I/O to the volume on the device you specified in **volser**. **rc** is the IOS return code.

System Action: Processing of the command terminates.

Programmer Response: Refer to the preceding message, correct any problems, and re-issue the command. If you issued the Cache-DASD command, check the IOS return code, follow the action indicated by the return code, and then re-issue the command.

Problem Determination: Table I, items 1, 2, 3, 4, 13, and 29.

IDC2376I SECURITY VIOLATION dsn

Explanation: One of the following errors occurred:

- The system operator did not supply the correct password for the non-VSAM data set specified by dsn, for the VSAM unique data or index component specified by dsn, or for a data or index component within the specified VSAM data space that is specified by dsn.
- There is no JOBCAT or STEPCAT DD statement for the VSAM catalog that owns the volume.
- The user does not have the proper RACF authorization to the VSAM unique data or index component specified by dsn or for a data or index component within the specified VSAM data space that is specified by dsn.

System Action: The command terminates normally. The requested function is not performed.

Programmer Response: If the operator supplied the incorrect password, tell the system operator the correct password. The operator is prompted for the password that corresponds to the data or index component name or code word (VSAM data sets) or the name of the DD statement for the data set (non-VSAM data sets). Reissue the command.

If there is no JOBCAT or STEPCAT DD statement for the VSAM catalog, supply a JOBCAT or STEPCAT DD statement for the catalog or supply the master password of the VSAM catalog on the command or through the use of operator prompting. Reissue the command.

If the protection violation occurred for a RACF-protected VSAM component, acquire the proper RACF user authorization to all RACF-protected VSAM components on the volume or the VSAM catalog that owns the volume. Reissue the command.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 25b, and 29.

IDC2381I VOLUME WITH SERIAL volser ALREADY MOUNTED IN SYSTEM

Explanation: After mounting mass storage volume (volser) the UCB cannot be posted because it causes a duplication of volume label within the system.

System Action: Demounts the mass storage volume. The command terminates normally.

Programmer Response: Rerun the command after the volume with the same serial number is demounted.

Problem Determination: Table I, items 1, 2, 3, 4, 13, and 29.

IDC2386I UNIT ASSIGNED TO ddname COULD NOT BE READING FOR MOUNTING

Explanation: The unit assigned by the DD statement (ddname) cannot be used to mount needed volumes, because a previous volume cannot be demounted.

System Action: The command terminates normally.

Programmer Response: Rerun the command. Specify the correct volume serial on the DD statement. If the same unit is assigned to the DD statement and the same error occurs, rerun the command after the operator varies the unusable unit offline.

Problem Determination: Table I, items 1, 2, 3, 4, 13, and 29.

IDC2387I ** VOLUME volser COULD NOT BE MOUNTED

Explanation: The mount of the specified volume (volser) is unsuccessful. A preceding message gives the explanation for this error.

System Action: The command terminates normally.

Programmer Response: Examine preceding message, correct the problem, and rerun the command.

Problem Determination: Table I, items 1, 2, 3, 4, 13, and 29.

IDC2388I ** VOLUME volser COULD NOT BE DEMOUNTED

Explanation: The demount of the specified volume (volser) is unsuccessful. A preceding message gives the explanation for this error.

System Action: The command terminates normally.

Programmer Response: Examine preceding message, correct the problem, and rerun the command.

Problem Determination: Table I, items 1, 2, 3, 4, 13, and 29.

IDC2389I ** DESTAGE OF DATA ON VOLUME volser NOT SUCCESSFUL

Explanation: The destaging of the specified volume (volser) is unsuccessful after a successful demount. A preceding message explains the reason for the error.

System Action: The command cannot perform the next function because all destaging is not complete.

Programmer Response: Examine preceding message, correct the problem, and rerun the command. The cartridge of the volume may need to be replaced via the REPLACEC command.

Problem Determination: Table I, items 1, 2, 3, 4, 13, and 29.

IDC2390I VOLUME volser COULD NOT BE ENQUEUED FOR EXCLUSIVE USE

Explanation: The enqueue of the specified volume (volser) for exclusive use cannot be done because the volume serial is enqueued for shared use.

System Action: The command terminates normally.

Programmer Response: Rerun the command after the volume is not being used by any other job. Be sure to specify the volume serial on the DD statement.

Problem Determination: Table I, items 1, 2, 3, 4, 13, and 29.

IDC2391I UNABLE TO ESTABLISH E/STAE ENVIRONMENT - RETURN CODE x'nn'

Explanation: The STAE or ESTAE macro returned a non-zero return code that prevented recovery protection in case of an abnormal termination of the command. STAE was issued in VS1; ESTAE in VS2. The primary reason is insufficient storage to build control blocks.

System Action: Function did not continue.

Programmer Response: Examine the return code, correct the problem, and rerun the job.

Problem Determination: Table I, items 1, 2, 3, 4, 13, and 29.

IDC2399I CATALOG ENTRY FOR DATA SET INDICATES DIFFERENT VOLUME

Explanation: The ULOCATE function, after locating the data set name in the catalog, determined that the data set resides on a different volume than the catalog indicates, or else a duplicate data set name exists.

System Action: Processing continues with the next data set on the volume.

Programmer Response: Uncatalog the data set if necessary, and recatalog it with the correct volume serial number.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 29, and 34.

IDC2400I MSS REASON CODE IS x'nnnn'

Explanation: The Mass Storage System Communicator reason code returned as a result of a Mass Storage System Communicator request. The reason code is "nnnn." See *Mass Storage System (MSS) Messages* for an explanation of the reason code.

System Action: The function was not performed. The command terminates normally or attempts to continue.

Programmer Response: See *Mass Storage System (MSS) Messages* for the response to the reason code.

IDC2401I MSS POST CODE IS X'cde'

Explanation: The MSSC (Mass Storage System Communicator) completion coded posted in the ECB (event control block) was cde.

The possible values for cde are:

7F Successful completion.

7B A permanent tape error occurred on the target volume during destage, while a COPYV operation was in progress. Destaging was not done.

System Action: If the post code is 7F the function completed successfully. If the post code is 7B, the function terminated.

Programmer Response: If the post code is 7B, the location of the failing cartridge will be indicated in message ICB501F or ICB509E. Use the SCRATCHV command to scratch the partial copy, and use the EJECTC command to remove the failing cartridge from the mass storage facility.

Problem Determination: Table I, items 1, 3, 4, 13, 29, and 30.

IDC2402I VOLUME REQUESTED IS NOT AN ACTIVE VOLUME

Explanation: The requested mass storage volume is not in the Mass Storage Control's Volume Inventory Table. The user is requesting the wrong volume or the volume is inactive. The Mass Storage System Communicator reason code is X'07'. See *Mass Storage System (MSS) Messages* for more information about the reason code.

System Action: The command terminates normally.

Programmer Response: Make the mass storage volume available by either:

- Defining the Mass Storage Volume with the CREATEV command.
- Activating the Mass Storage Volume with the ADDV command,
- Inserting and activating the Mass Storage Volume. If the volume serial number was erroneously specified, change the serial number. Resubmit the command.

Problem Determination: Table I, items 3, 4, 13, 14, 29, 30, 35a, and 35c.

IDC2403I WORK FILE MUST SPECIFY UNIT IN SDG 0

Explanation: The Mass Storage Volume specified for the work data set, on which the Mass Storage Control tables are copied, is not mounted on a unit in staging drive group 0. The volume must be mounted on the same group as the Mass Storage Control tables volume.

System Action: The command terminates normally.

Programmer Response: Specify a unit in staging drive group 0 on the DD statement, even though the work data set may be cataloged. You can use the esoteric name SDG00 created by the Mass Storage Control Table Create program in the UNIT parameter of the DD statement, and then rerun the command.

Problem Determination: Table I, items 3, 4, 13, 29, and 30.

IDC2404I VOLUME REQUESTED IS MOUNTED

Explanation: The requested Mass Storage Volume is mounted and cannot be accessed for the requested function. The volume may have been mounted on another operating system when the command was run. The Mass Storage System Communicator reason code is X'22'. See *Mass Storage System (MSS) Messages* for more information about the reason code.

System Action: The command terminates normally.

Programmer Response: Ensure that you do not have any DD statements for the volume in the job step if the DD statement is not required by the command. If you do have a DD statement for the volume, specify the name of the DD statement in the FILE parameter of the command so the command can demount the volume. Be sure to rerun the command when no other operating system which has shared access has the volume mounted.

Problem Determination: Table I, items 3, 4, 13, 30, and 35a.

IDC2405I SPECIFIED CARTRIDGE SERIAL NOT FOUND IN APPROPRIATE MSC TABLE

Explanation: The cartridge serial number was not found in a Mass Storage Control table. If the cartridge is supposed to be a scratch cartridge, the cartridge serial number was not found in the Mass Storage Control's Scratch Cartridge List for the Mass Storage Facility specified in the MSF parameter of the command. If the cartridge was for an inactive volume, the cartridge serial number was not found in the Mass Storage Control's Transient Volume Table. The Mass Storage System Communicator reason code is X'23'. See *Mass Storage System (MSS) Messages* for more information about the reason code.

System Action: The command terminates normally.

Programmer Response: Correct the cartridge serial number parameter and rerun the command. If running the CREATEV or COPYV command, make sure the cartridge is a scratch cartridge in the Mass Storage Facility specified in the MSF parameter. You can get a listing of the scratch cartridges available with the LISTMSF command. If you are running the EJECTV command, make sure the cartridge serial number specified is for the volume you want to eject. You can get a listing of the volume and its cartridge serial numbers using the LISTMSVI command. If you are ejecting a volume for which there is no record in the Inventory data set, be sure you have specified the cartridge serial number of the first cartridge of the volume. You can get a listing of the cartridge serial numbers using the LISTMSF command. If you are running the REPLACEC command, make sure the scratch cartridge specified in the CARTRIDGE parameter is a scratch cartridge in the same Mass Storage Facility as the volume.

Problem Determination: Table I, items 3, 4, 13, 29, 30, 35a, 35b, and 35c.

IDC2406I NO SCRATCH CARTRIDGES AVAILABLE IN THE MSF

Explanation: No scratch cartridges remain in the Mass Storage Facility specified in the MSF parameter. In the case of the REPLACEC command, no scratch cartridges remain in the Mass Storage Facility that contains the volume. The Mass Storage System Communicator reason code is X'24'. See *Mass Storage System (MSS) Messages* for more information about the reason code.

System Action: The command terminates normally.

Programmer Response: Provide more scratch cartridges either by scratching Mass Storage Volumes, or by entering new cartridges through the cartridge access station. Ensure that the correct Mass Storage Facility is specified in the MSF parameter. Rerun the command.

Problem Determination: Table I, items 3, 4, 13, 14, 29, 30, 35a, and 35b.

IDC2407I SEQUENCE ONE CARTRIDGE NOT IN MSF

Explanation: The first cartridge of the requested mass storage volume is not in the Mass Storage Facility. The Mass Storage System Communicator reason code is X'26'. See *Mass Storage System (MSS) Messages* for more information about the reason code.

System Action: The command terminates normally.

Programmer Response: Insert the missing Mass Storage Volume cartridge and rerun the command.

Problem Determination: Table I, items 3, 4, 13, 14, 29, 30, 35a, and 35c.

IDC2408I SEQUENCE TWO CARTRIDGE NOT IN MSF

Explanation: The second cartridge of the requested mass storage volume is not in the Mass Storage Facility. The Mass Storage System Communicator reason code is X'2A'. See *Mass Storage System (MSS) Messages* for more information about the reason code.

System Action: The command terminates normally.

Programmer Response: Insert the missing Mass Storage Volume cartridge and rerun the command.

Problem Determination: Table I, items 3, 4, 13, 14, 29, 30, 35a, and 35c.

IDC2409I VOLUME SPECIFIED IS CURRENTLY BEING DESTAGED

Explanation: Destaging as a result of a demount for the specified Mass Storage Volume is in progress. This situation occurs if the volume was mounted by another operating system at the time the job was run. The Mass Storage System Communicator reason code is X'2B'. See *Mass Storage System Messages* for more information about the reason code.

System Action: The command terminates normally.

Programmer Response: Rerun the job when the mass storage volume becomes available.

Problem Determination: Table I, items 3, 4, 13, 29, 30, and 35a.

IDC2410I NOT ENOUGH SPACE IN WORK DATA SET TO COPY TABLES

Explanation: There was insufficient space to perform the copy of the Mass Storage Control tables. The Mass Storage System Communicator reason code is X'49'. See *Mass Storage System (MSS) Messages* for more information about the reason code.

System Action: The command terminates normally.

Programmer Response: If you are running the LISTMSF command, ensure that the work data set contains 40 contiguous cylinders in the first extent. If you are running the TRACE command, ensure that the work data set contains 16 contiguous cylinders in the first extent whether you are dumping one or both trace areas.

Problem Determination: Table I, items 3, 4, 13, 14, 25a, 29, and 30.

IDC2411I ERROR EJECTING SEQUENCE TWO CARTRIDGE

Explanation: Only the first cartridge of the volume has been ejected. The second cartridge was not ejected due to an equipment error. In most cases, sense data for the equipment error has already been reported in previous sense data. The Mass Storage System Communicator reason code is X'4C'. See *Mass Storage System (MSS) Messages* for more information about the reason code.

System Action: The job completes normally.

Programmer Response: Rerun the job once because the problem may be temporary and also to ensure that sense data is recorded.

Problem Determination: Table I, items 3, 4, 13, 30, and 35a.

IDC2414I STAGING DRIVE GROUP OR ATTRIBUTE BYTE SPECIFIED IS INVALID

Explanation: An invalid staging drive group or attribute byte was specified on the command. The Mass Storage System Communicator reason code is X'B5'. See *Mass Storage System (MSS) Messages* for more information about the reason code.

System Action: The command terminates normally.

Programmer Response: Specify a valid staging drive group number or attribute byte on the command. The staging drive group number must have been defined by the Mass Storage Control Table Create program. Rerun the command.

Problem Determination: Table I, items 3, 4, 13, 29, and 30.

IDC2415I VOLUME REQUESTED IS NOT AN ACTIVE VOLUME

Explanation: The requested volume was not found on the Mass Storage Control's Volume Inventory Table. The incorrect volume has been specified or the volume is not an active volume. The Mass Storage System Communicator reason code is X'8A'. See *Mass Storage System (MSS) Messages* for more information about the reason code.

System Action: The command terminates normally.

Programmer Response: Make sure the volume serial number is specified correctly. Activate the volume if it is inactive via the ADDV command, inserting the cartridges of the volume into the Mass Storage Facility first if necessary.

Problem Determination: Table I, items 3, 4, 13, 14, 29, 30, 35a, and 35c.

IDC2416I NEW SERIAL ALREADY ASSIGNED TO ANOTHER VOLUME

Explanation: The new volume serial specified on the command already assigned to another volume recorded in the Inventory data set. The Mass Storage System Communicator reason code is X'204'. See *Mass Storage System (MSS) Messages* for more information about the reason code.

System Action: The command terminates normally. If the volume serial has already been changed in the volume label, the command attempts to restore the original volume serial.

Programmer Response: If you are executing the STOREV command, you can use the desired new serial if you specify the EJECT and NORECORD parameters. Otherwise, you must select a new volume serial or in some way remove the volume that currently has that volume serial from the Inventory data set, either by scratching the volume, by ejecting it and removing its record, or by renaming it.

Problem Determination: Table I, items 1, 3, 4, 13, 29, 35a, and 35c.

IDC2417I RECORD NOT FOUND IN INVENTORY

Explanation: A required record could not be found in the Inventory data set. The Mass Storage System Communicator reason code is X'208'. See *Mass Storage System (MSS) Messages* for more information about the reason code.

System Action: The command either terminates normally or attempts to continue.

Programmer Response: Ensure that the volume serial number and the cartridge serial number (if specified) are correct. Ensure that the group name is correct. Ensure that the copy date is correct. Rerun the command. If the volume was entered while the Mass Storage Volume Control portion of the Mass Storage System Communicator was disabled, there is no eject for the volume. You must use the EJECTV command to eject the volume, then reenter the volume while the Mass Storage Volume Control portion of the Mass Storage System Communicator is enabled. If

everything has been correctly specified and the volume was not entered while the Mass Storage Volume Control portion of the Mass Storage System Communicator was disabled, contact your programming support group because the Inventory may need to be restored from the backup copy and the Journal data set.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 29, 35a, and 35c.

IDC2418I GROUP NAME OR NEW SERIAL ALREADY EXISTS IN INVENTORY

Explanation: A new record was requested to be written in the Inventory data set; however, a record with that key already exists. This situation occurs if the group name or new volume serial specified on the command already exists in the Inventory data set. The Mass Storage System Communicator reason code is X'20A'. See *Mass Storage System (MSS) Messages* for more information about the reason code.

System Action: The command continues processing.

Programmer Response: Make sure the group name or volume serial to be assigned is not already recorded in the Inventory. Specify a unique group name or volume serial and rerun the command. Verify that the key length of the MSVI inventory data set has been defined as having the proper length.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 29, 35a, and 35c.

IDC2419I RECORD PARAMETER CANNOT BE SPECIFIED FOR DUPLICATE VOLUME

Explanation: The volume being ejected is a duplicate volume. Retaining a record for a duplicate volume in the Inventory data set is not allowed; therefore, the RECORD parameter cannot be specified. The Mass Storage System Communicator reason code is X'20E'. See *Mass Storage System (MSS) Messages* for more information about the reason code.

System Action: The volume is not ejected.

Programmer Response: Do not specify the RECORD parameter. Rerun the command.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 29, 35a, and 35c.

IDC2420I RECORD PARAMETER MUST BE SPECIFIED FOR BASE VOLUME WITH COPIES

Explanation: The volume being ejected is a base volume which has copies recorded in the Inventory data set. The base record must be retained in the Inventory data set if copy records exist; therefore, the NORECORD parameter is not allowed.

System Action: The volume is not ejected.

Programmer Response: The programmer should do one of the following:

- Scratch the copies (with the SCRATCHV command).
- Eject the copies and remove their records (with the EJECTV command).
- Remove the copy records if the copies are ejected already (with the REMOVEVR command); then rerun the command to eject the base volume and then its record can be removed. If you want to retain the copy records, rerun the command to eject the base volume but do not specify the NORECORD parameter.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 14, 29, 35a, and 35c.

IDC2421I VOLUME HAS COPIES RECORDED IN INVENTORY

Explanation: The Inventory record for the volume whose record is to be removed indicates that copy records still exits for the volume; therefore the volume record cannot be removed. The Mass Storage System Communicator reason code is X'218'. See *Mass Storage System (MSS) Messages* for more information about the reason code.

System Action: The volume record is not removed.

Programmer Response: If the copies are still in the Mass Storage Facility, scratch them or eject them. Then rerun the REMOVEVR command with the ALL parameter to remove the records for all the copies as well as the record for the base volume.

Problem Determination: Table I, items 1, 3, 4, 13, 14, 29, 35a, and 35c.

IDC2422I CARTRIDGES STILL IN MSF

Explanation: The record in the Inventory data set for the base volume or copy being ejected indicates that one or more cartridges of the volume are still in the Mass Storage Facility; therefore, the record cannot be removed. The Mass Storage System Communicator reason code is X'21A'. See *Mass Storage System (MSS) Messages* for more information about the reason code.

System Action: The record is not removed from the Inventory; the command continues processing.

Programmer Response: Run the EJECTV command to eject the volume specifying the NORECORD parameter.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 14, 29, 35a, and 35c.

IDC2423I GROUP RECORD NOT FOUND IN INVENTORY

Explanation: The Mass Storage System Communicator reason code is X'205'. See *Mass Storage System (MSS) Messages* for more information about the reason code. The group specified on the command does not exist in the Mass Storage Volume Control Inventory data set.

System Action: The command terminates normally.

Programmer Response: Correct the group name on the command or use the CREATEG command to create the group. Rerun the command.

Problem Determination: Table I, items 1, 3, 4, 13, 29, and 35c.

IDC2424I GROUP RECORD NOT SCRATCHED BECAUSE VOLUMES ASSIGNED TO IT

Explanation: The group record in the Inventory data set indicates volumes are still assigned to the group; therefore, the group cannot be scratched. The Mass Storage System Communicator reason code is X'21C'. See *Mass Storage System (MSS) Messages* for more information about the reason code.

System Action: The command terminates normally.

Programmer Response: Remove the volumes from the group and then rerun the command. Either scratch the volumes, eject them with the NORECORD parameter, remove their records if they are already ejected, or modify the volumes so they no longer belong to the group.

Problem Determination: Table I, items 1, 3, 4, 13, 14, 29, 35a, and 35c.

IDC2425I CARTRIDGE IS ASSIGNED TO A DIFFERENT VOLUME

Explanation: The cartridge serial number specified on the command was found in the Inventory data set, but the cartridge serial number is assigned to a volume that has a different volume serial number than that specified on the command. The Mass Storage System Communicator reason code is X'21D'. See *Mass Storage System (MSS) Messages* for more information about the reason code.

System Action: The command terminates normally.

Programmer Response: Specify the correct volume serial and cartridge serial numbers and rerun the command. If the correct volume and cartridge serial numbers have been specified, contact the programming support group because the Inventory data set may need to be restored from a backup copy and the Journal data set.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 29, 35a, and 35c.

IDC2426I GROUP NAME CONTAINS SPECIAL CHARACTERS

Explanation: The group name specified on command contains invalid characters; only alphameric and national characters are allowed in a group name. The Mass Storage System Communicator reason code is X'225'. See *Mass Storage System (MSS) Messages* for more information about the reason code.

System Action: The group is not created.

Programmer Response: Correct the group name and rerun the command.

Problem Determination: Table I, items 1, 3, 4, 13, 29, and 35c.

IDC2427I SYSGROUP MUST NOT BE SCRATCHED

Explanation: A request was made to scratch SYSGROUP. You are not allowed to scratch SYSGROUP. The Mass Storage System Communicator reason code is X'226'. See *Mass Storage System (MSS) Messages* for more information about the reason code.

System Action: SYSGROUP is not scratched.

Programmer Response: None.

Problem Determination: Table I, items 1, 3, 4, 13, 29, and 35c.

IDC2428I GROUP LACKS RETPD OR VOLUME IS NOT GENERAL - TO/FOR INVALID

Explanation: The TO or FOR parameter was specified on the command but the volume was either:

- Not a general-use volume.
- The group the volume is assigned to or is being assigned to does not have a retention period.

The Mass Storage System Communicator reason code is X'227'. See *Mass Storage System (MSS) Messages* for more information about the reason code.

System Action: The command terminates normally. No modification is performed.

Programmer Response: Make sure you have specified the correct volume serial number and group name. Do not specify an expiration data for the volume unless it is an active, general-use volume assigned to a group that has a retention period.

Problem Determination: Table I, items 1, 3, 4, 13, 29, 35a, and 35c.

IDC2429I ATTRIBUTES DO NOT AGREE WITH GROUP ATTRIBUTES

Explanation: The attributes (bind/nobind, exclusive/shared, dasderase/nodasderase, readonly/readwrite, pagefault/nopagefault) specified for the volume do not agree with those specified in the group record. Since the volume is a general-use volume in the group or is being made a general-use volume in the group, the attributes of the volume must be the same as those for the group. The Mass Storage System Communicator reason code is X'228'. See *Mass Storage System (MSS) Messages* for more information about the reason code.

System Action: The command terminates normally.

Programmer Response: Make sure that the attributes you specify on the command for the volume are the same as the attributes specified in the group record, or do not specify any attributes at all on the command and the command will assign the appropriate attributes. If you have not specified any conflicting attributes on the command, ensure that you were not modifying the group attributes at the same time you were running the command.

Problem Determination: Table I, items 1, 3, 4, 13, 19, 35a, and 35c.

IDC2431I RECORD PARAMETER CANNOT BE SPECIFIED - NO INVENTORY RECORD

Explanation: There is no record in the Inventory data set for the volume being ejected; therefore the RECORD parameter cannot be specified. The Mass Storage System Communicator reason code is X'235'. See *Mass Storage System (MSS) Messages* for more information about the reason code.

System Action: The command terminates normally. The volume was not ejected.

Programmer Response: Make sure that the correct volume serial and cartridge serial numbers are specified. If the volume was manually entered in the Mass Storage Facility while the Mass Storage Volume Control portion of the Mass Storage System Communicator was disabled, there is no record in the Inventory data set. Rerun the command and do not specify the RECORD parameter. If there should be a record in the Inventory data set, contact the programming support group. The Inventory may need to be restored from the backup copy and the Journal data set.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 29, 35a, and 35c.

IDC2432I VOLUME ENTERED WHILE MSVC DISABLED - RECORD NOT COMPLETE

Explanation: MSVC (mass storage volume control) of the mass storage system communicator (MSSC) cannot activate a virtual volume that has bee requested, because both MSF (mass storage facility) identification fields in the volume record are zero. These fields are zero because one of the following occurred:

- The user tried to reenter the volume into the MSF when the MSVC was disabled.
- The user did not reenter the volume into the MSF.

The user previously ejected the volume from the MSF with the RECORD option.

The MSSC reason code is X'236', which is documented in *OS/VS Message Library: Mass Storage System (MSS) Messages.*

System Action: The request fails.

Programmer Response: If the volume is in the MSF, eject it with the RECORD option. If the volume is not in the MSF, manually enter it into the MSF when the MSVC is enabled. Restart the request.

Problem Determination: Table I, items 1, 3, 4, 13, 14, 29, 35a, 35c.

IDC2433I CARTRIDGES NO LONGER ASSIGNED TO SPECIFIED VOLUME

Explanation: The volume record for the requested volume indicates the cartridges have been reassigned to a different volume. This situation occurs when a volume is ejected with the RECORD parameter, used in a different Mass Storage System, and then reinstated into the original Mass Storage System with at least one cartridge serial number that is the same but with a different volume serial number. The Mass Storage System Communicator reason code is X'237'. See *Mass Storage System (MSS) Messages* for more information about the reason code.

System Action: The command terminates normally.

Programmer Response: Remove any copy volume records for the requested volume from the Inventory data set by scratching the copies or by ejecting the copies. Remove the base volume record and all copy records for the requested volume. Make sure you have specified the correct volume serial number and rerun the command.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 14, 29, 35a, and 35c.

IDC2434I COPIES RECORDED IN INVENTORY - NEW SERIAL NOT ALLOWED

Explanation: The volume being renamed has copies recorded in the Inventory data set. Because the serial number of a copy cannot be changed, you are not allowed to change the serial number of the base volume. The Mass Storage System Communicator reason code is X'238'. See *Mass Storage System (MSS) Messages* for more information about the reason code.

System Action: The command terminates normally. If the volume serial has already been changed in the volume label, the command attempts to restore the original volume serial.

Programmer Response: Before renaming the volume, scratch the existing copies or else eject them with the NORECORD parameter. However, note that when the copies are reinstated, they will no longer be considered copies.

Problem Determination: Table I, items 1, 3, 4, 13, 29, 35a, and 35c.

IDC2439I CARTRIDGE NOT UPDATED BUT MOVE WAS INITIATED

Explanation: A request was made to update a cartridge label.The cartridge update portion of the request failed, but the move was initiated after the update failure.

System Action: The cartridge move to the new requested location or to its home cell location was initiated.

Programmer Response: Ignore the message if you know that the cartridge label is bad and the request was made only to move the cartridge to its correct location. In this case, the AUDITMSS command should be issued to confirm that the cartridge move completed successfully.

If you do not know whether the cartridge label is bad, issue the AUDITMSS command with the READLABEL and LIST parameters to determine what is wrong with the label. If the response to the AUDITMSS command indicates that the cartridge label cannot be read, then check the cartridge for physical damage. If it is damaged, see the *IBM 3850 Data Cartridge Care and Handling Instructions* publication for repair instructions. Otherwise, the cartridge is bad.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 30, and 38c.

IDC2533I MEMBER CANNOT BE SPECIFIED WITH A GENERIC NAME

Explanation: A generic entry name was given followed by a member name in parentheses, which is not an allowable combination.

System Action: Processing continues.

Programmer Response: Remove the * indicating a generic entry name or remove the member name to achieve the desired alteration.

IDC2552I ENTRY TYPE IS INVALID FOR DELETE

Explanation: The types of entries that can be deleted are cluster, user catalog, master catalog, non-VSAM, space; alias, GDG base, path and alternate index.

System Action: The entry is not deleted. The rest of the entries are deleted if possible.

Programmer Response: If the user thinks the entry is one of these types, he should list that entry with LISTCAT to check the type field.

Problem Determination: Table I, items 3, 4, 29.

IDC2553I ERASE OPTION IS INVALID FOR ENTRY TYPE

Explanation: Only VSAM clusters and alternate indexes can be erased.

System Action: The entry is not deleted. The remaining VSAM entries, if any, are deleted.

Programmer Response: Resubmit the request without the ERASE parameter.

Problem Determination: Table I, items 1, 2, 3, 4, 29.

IDC2554I DYNAMIC ALLOCATION FAILED OR FILE WAS NOT CODED WITH SCRATCH

Explanation: Dynamic allocation failed. Preceding messages (prefixed by IKJ) indicate the reason for the failure.

System Action: Processing is terminated for this entry.

Programmer Response: Refer to the dynamic allocation error messages or supply a FILE parameter.

Problem Determination: Table I, items 1, 3, 4, 5, 29.

IDC2557I SCRATCH NOT AVAILABLE FOR TYPE OF OBJECT TO BE DELETED

Explanation: The SCRATCH option is invalid for the entry type being deleted. SCRATCH is invalid for a VSAM master catalog, user catalog, path, alias, and GDG base.

System Action: Processing for the entry is terminated.

Programmer Response: Ensure that SCRATCH is valid for all entries specified, or do not use the SCRATCH option.

IDC2559I MEMBER CANNOT BE SPECIFIED WITH A GENERIC NAME

Explanation: The generic name used is followed by a member name enclosed in parentheses. This combination is invalid.

System Action: Processing for this entry is terminated.

Programmer Response: Remove the * which indicates a generic entry name or remove the member name.

Problem Determination: Table I, items 1, 3, 4, 29.

IDC2563I ALLOCATION/VOLUME PARAMETER IS INVALID FOR ENTRY TYPE(S)

Explanation: A LISTCAT command request for allocation or volume information conflicts with the desired entries or types of entries.

System Action: The LISTCAT command attempts recovery to list that part of the request that does not conflict.

Programmer Response: Rerun the job with LISTCAT parameters that are compatible with the fields specification.

Problem Determination: Table I, items 3, 4, 29.

IDC2616I PATH dsn WAS NOT SUCCESSFULLY IMPORTED

Explanation: IMPORT was not able to successfully define path dsn over the object being imported. The most likely cause is a duplicate object name already in the catalog.

System Action: Processing continues, attempting to define any remaining paths whose catalog information is stored on the portable data set.

Programmer Response: Determine if the paths whose defines failed already exist in the catalog. If so, delete and redefine them.

Problem Determination: Table I, items 3, 4, 26b, 34a.

IDC2618I INVALID OBJECTS SUBPARAMETER FOR PATH dsn

Explanation: An OBJECTS subparameter other than NEWNAME or FILE was specified for path object dsn.

System Action: IMPORT processing continues, attempting to define any remaining paths from the portable data set.

Programmer Response: Probable user error. Correct the OBJECTS parameter and resubmit the job.

Problem Determination: Table I, items 3, 4, 26b.

IDC2620I OBJECT TYPE NOT SUPPORTED FOR OBJECT dsn

Explanation: A duplicate data set name was found in the VSAM catalog while attempting to convert an OS catalog entry.

System Action: An associated message identifies the entry not converted.

Programmer Response: The duplicate name must be resolved.

Problem Determination: Table I, items 1, 3, 4, 29.

IDC2621I IMPORTRA FAILED FOR dsn

Explanation: The object named could not be imported. The preceding messages will give the reason for the failure.

System Action: Processing continues with the next object on the portable data set unless one of the following conditions exists:

1. A failure occurred while attempting to alter the name of the cluster to or from the dummy name provided in the

OUTFILE DD statement. (Message IDC3619I precedes this message.)

2. An error occurred while trying to read the portable data set.

In both cases, the command terminates.

Programmer Response: Determine the cause of the failure by examining previous messages on the SYSPRINT output, correct the problem, and rerun the job.

IDC2630I DUPLICATE DATA SET NAME IN TARGET CATALOG

Explanation: A duplicate data set name was found in the target catalog while attempting to convert an OS or VSAM catalog entry.

System Action: An associated message identifies the entry not converted.

Programmer Response: The duplicate name must be resolved.

Problem Determination: Table I, items 1, 3, 4, 29.

IDC2640I dsn NOT AN AIX

Explanation: The data set identified by dsn is not an alternate index or a path over an alternate index. The data set name was specified in (1) job control identified via the OUTFILE dname subparameter or (2) the OUTDATASET dsname subparameter. The OUTFILE data set must be a defined alternate index or a path over the alternate index.

System Action: Processing is terminated for this OUTFILE or OUTDATASET subparameter. However, processing continues with any other subparameters specified in the OUTFILE or OUTDATASET parameter.

Programmer Response: The data set name in the job control identified via the OUTFILE dname subparameter or the data set name specified in the OUTDATASET subparameter must be corrected to be that of a defined alternate index or a path over an alternate index. Then resubmit the job.

Problem Determination: Table I, items 2, 3, 4, 29, 34b.

IDC2642I dsn NOT RELATED TO BASE

Explanation: The data set identified by dsn is an alternate index or a path over an alternate index, but the alternate index is not related to the base cluster identified via the INFILE or INDATASET parameter. All alternate indexes identified via the OUTFILE or OUTDATASET parameter of the BLDINDEX command must have been defined as being related to the base cluster identified via the INFILE or INDATASET parameter. This relationship is established via the RELATE parameter in the DEFINE ALTERNATEINDEX command.

System Action: Processing is terminated for this alternate index. However, processing continues for any other alternate indexes identified via the OUTFILE or OUTDATASET parameter.

Programmer Response: Either the alternate index identified via the OUTFILE or OUTDATASET parameter or the base cluster identified via the INFILE or INDATASET parameter must be corrected so that the proper relationship exists. If the alternate index was defined improperly, it must be deleted and redefined with the proper relationship specified in the RELATE parameter. Then resubmit the job.

Problem Determination: Table I, items 2, 3, 4, 29, 34b.

IDC2647I INSUFFICIENT STORAGE TO OBTAIN BUFFERS AND WORK AREAS

Explanation: BLDINDEX encountered a failure when attempting to obtain storage for buffers, work areas and a minimum sort area. (see *OS/VS2 Access Method Services* for a discussion of virtual storage considerations in BLDINDEX.) This is the amount of storage required to build one alternate index. The name of the alternate index is given in a subsequent message.

System Action: Processing is terminated for this alternate index. However, BLDINDEX attempts to process any other alternate indexes identified via the OUTFILE or OUTDATASET parameter.

Programmer Response: Increase the virtual storage region size and resubmit the job.

Problem Determination: Table I, items 2, 3, 4, 29.

IDC2648I JOB CONTROL CARDS FOR EXTERNAL SORT MISSING OR IN ERROR

Explanation: If this message occurs by itself, the user specified the EXTERNALSORT parameter, but did not provide the proper job control for the sort work files. (See *OS/VS2 Access Method Services* for a discussion of the requirements for sort work file job control.) If this message is preceded by IDC2649I or IDC2650I, BLDINDEX was not able to complete an internal sort and proper job control for the external sort work files was not supplied. The alternate index being built is named in a subsequent message.

System Action: Processing is terminated for this alternate index. However, BLDINDEX attempts to process any other alternate indexes specified via the OUTFILE or OUTDATASET parameter.

Programmer Response: Correct the external sort work file job control and resubmit the job. Alternatively, provide enough virtual storage so that an internal sort can be performed.

Problem Determination: Table I, items 2, 3, 4, 29.

IDC2649I INSUFFICIENT STORAGE TO PERFORM INTERNAL SORT

Explanation: Although BLDINDEX was able to obtain a minimum amount of virtual storage to start the sort, it was less than the amount calculated to be required for the entire sort (based on the number of records in the base cluster statistic stored in the VSAM Catalog entry for the base cluster). Under these circumstances, BLDINDEX attempts to prepare for an external sort. This message is issued only when proper job control for the external sort work files was not supplied.

System Action: Processing is terminated for this alternate index. However, BLDINDEX attempts to process any other alternate indexes specified via the OUTFILE or OUTDATASET parameter.

Programmer Response: Correct the external sort work file job control and resubmit the job. Alternatively, provide enough virtual storage so that an internal sort can be performed.

Problem Determination: Table I, items 2, 3, 4, 29.

IDC2650I INSUFFICIENT STORAGE TO FINISH INTERNAL SORT

Explanation: During initialization, BLDINDEX calculates the amount of storage required for an internal sort. This calculation is based on the number of records in the base cluster statistic stored in the VSAM Catalog entry for the base cluster. In the case of this message, BLDINDEX was able to obtain enough virtual storage to meet the calculated requirement. However, the statistic was erroneously low (probably due to a failure during a close of the base cluster) and the initial amount of storage obtained was exhausted. Under these circumstances, BLDINDEX must perform an external sort. This message is issued only when proper job control for the external sort work files was not supplied.

System Action: Processing is terminated for this alternate index. However, BLDINDEX attempts to process any other alternate indexes specified via the OUTFILE or OUTDATASET parameter.

Programmer Response: Correct the sort work file job control. Alternatively, delete the alternate index, use the EXPORT command to create a portable copy of the base cluster, followed by an IMPORT command to rebuild the base cluster. This action will correct the erroneous statistic. Then redefine the alternate index. Resubmit the job.

Problem Determination: Table I, items 2, 3, 4, 29.

IDC2651I DEFINE OF SORT WORK FILES FAILED

Explanation: In preparing for an external sort BLDINDEX attempts to dynamically define two sort work files. However, the define was rejected by VSAM catalog management. This message is preceded by either message IDC3007I or IDC3009I giving the VSAM catalog return code. Refer to the appropriate message for an explanation of the code.

System Action: Processing is terminated for this alternate index. However, BLDINDEX attempts to process any other alternate indexes specified via the OUTFILE or OUTDATASET parameter.

Programmer Response: Correct the error as explained for the return code and resubmit the job.

Problem Determination: Table I, items 2, 3, 4, 29.

IDC2654I dsn WAS NOT BUILT

Explanation: A terminating error was encountered for the alternate index identified by dsn. The message containing the terminating error precedes this message.

System Action: Processing is terminated for this alternate index. However, BLDINDEX attempts to process any other alternate indexes identified via the OUTFILE or OUTDATASET parameter.

Programmer Response: Depends on the error encountered. Refer to the action described for the individual error.

Problem Determination: Table I, items 2, 3, 4, 29, 34b.

IDC2655I UNABLE TO LOCATE ATTRIBUTES OF dsn

Explanation: The VSAM Catalog locate function issued (by BLDINDEX) has been unable to obtain all the necessary information regarding the entry identified by dsn. This indicates a serious catalog error since the information requested should be present for all catalog entries, namely: entry type, associated objects and AMDSB control block (for data objects).

System Action: If the dsn is the base cluster, BLDINDEX processing is terminated. If it is an alternate index or a path over an alternate index, processing is terminated for the alternate index; however, BLDINDEX attempts to process any other alternate indexes identified via the OUTFILE or OUTDATASET parameter.

Programmer Response: Do the problem determination actions.

Problem Determination: Table I, items 2, 3, 4, 29, 34b.

IDC2656I LOCATE FAILED FOR dsn

Explanation: The VSAM Catalog locate function issued against the base cluster or alternate index (identified by dsn) failed. Message IDC3009I precedes this message and gives the catalog return code. Refer to that message for an explanation of the code. The dsname given in this message is that specified via the INFILE/INDATASET or OUTFILE/OUTDATASET parameter. The locate failure may have been against the named object or an object associated with the named object (for example, the alternate index itself, if the named object is a path over the alternate index).

System Action: If the failure is associated with the base cluster, processing is terminated for the entire BLDINDEX command. If the failure is associated with an alternate index, processing is terminated for the alternate index; however, BLDINDEX attempts to process any other alternate indexes identified via the OUTFILE or OUTDATASET parameter.

Programmer Response: Correct the error as explained for the return code and resubmit the job.

Problem Determination: Table I, items 2, 3, 4, 29.

IDC2660I INVALID ENTRY TYPE IN CATALOG, OBJECT BYPASSED

Explanation: The entry type field indicates the object being exported is not a VSAM cluster, alternate index, user catalog, non-VSAM object, or OS/VS2 generation data group.

System Action: Processing for the object is terminated.

Programmer Response: Redefine the object in error. For the object name, see the following second-level message.

Problem Determination: Table I, items 2, 3, 4, 29.

IDC2666I ENTRY NAME SPECIFIED CANNOT BE FOUND IN SPECIFIED CRA

Explanation: The data set named in the ENTRIES parameter of the EXPORTRA command cannot be found in the catalog recovery area (CRA) specified. See message IDC0674I for the name of that unlocated data set.

System Action: Processing of this object is terminated and processing of the next object begins.

Programmer Response: Verify the name and CRA of the data set to be exported using the LISTCRA command.

IDC2668I DATA SET NOT EXPORTED, VOLUME ser REQUIRED BUT NOT SUPPLIED

Explanation: Synchronization checking was attempted on a volume not included in the list of volumes in the CRA keyword.

System Action: The VSAM entry is not processed.

Programmer Response: Add the volume serial number to the CRA keyword and rerun the job.

IDC2671I WILL NOT PROCESS CRA ON VOLUME ser, DIFFERENT CATALOG NAME

Explanation: This volume does not belong to the catalog named in the following message.

System Action: Processing of this volume is discontinued.

Programmer Response: Rerun the job with the correct catalog name.

IDC2673I CONFLICTING JCL SPECIFICATIONS FOR DNAME dname

Explanation: Incorrect volume information was specified in the JCL or EXPORTRA command. Either the CRA dname is missing from the job control or is not specified correctly in EXPORTRA, or more than a single volume is specified in the job control for a CRA.

System Action: Processing for this request is terminated.

Programmer Response: Correct the volume information in error and rerun the job.

IDC2675I DUPLICATE NAME ENCOUNTERED, NAME ON VOLUME ser BYPASSED

Explanation: Duplicate names were found in the catalog recovery areas (CRAs) on two different volumes.

System Action: The name specified in the following second-level message is skipped.

Programmer Response: If the copy of the data set skipped was on a volume you did not want skipped, rerun the job specifying only the desired volume and data set.

IDC2677I ** DATA SET NOT EXPORTED

Explanation: An error occurred or a catalog field could not be located for the object being exported.

System Action: Processing of the EXPORTRA command for the object is terminated.

Programmer Response: Determine the type of error from the preceding message, and redefine the object if necessary.

IDC2681I ** VOLUME volser NOT CREATED

Explanation: The volume was not created for the volume serial number specified by (volser). A preceding message explains the error.

System Action: The command does not attempt to create any subsequent volumes and terminates normally.

Programmer Response: Correct the error as indicated in the preceding message and rerun the command.

IDC2684I ** VOLUME volser NOT INITIALIZED

Explanation: The newly created volume (volser) was not initialized with a volume label and an empty VTOC. A preceding message explains the error.

System Action: The command scratches the partially created volume and then terminates processing normally.

Programmer Response: Correct the error as indicated in the preceding message and rerun the command requesting creation of the volumes not created.

IDC2685I ** NO ATTEMPT MADE TO CREATE ADDITIONAL VOLUMES

Explanation: An error occurred preventing the creation of all volumes requested. A preceding message explains the error.

System Action: The command terminates normally.

Programmer Response: Correct the error indicated in preceding message and rerun the command requesting creation of the volumes not created.

IDC2687I ** PARTIALLY CREATED VOLUME volser NOT SCRATCHED

Explanation: The partially created volume (volser) was not scratched during back out because an error occurred. A preceding message explains the error.

System Action: The command terminates normally. The volume record in the Inventory data set for the volume indicates the volume was incompletely created.

Programmer Response: Correct the error indicated in the preceding message.

Run SCRATCHV to scratch the partially created volume before rerunning CREATEV to recreate the same volume. A DD statement is not required even if the partially created volume is active. If a DD statement is provided, deferred mounting must be specified. SCRATCHV will bypass the empty VTOC check of the partially created volume.

If CREATEV terminates without indicating the status of the volume create operation, LISTMSVI can be run to determine whether the volume is flagged for recovery purposes. If the incomplete create flag is set in the volume record, LISTMSVI not only lists the standard information for the volume but also

highlights the volume report with a note that a create operation failed for the preceding volume.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 29, 35a, and 35c.

IDC2688I ** INCOMPLETE VOLUME CREATION FLAG NOT RESET FOR VOLUME volser

Explanation: The recovery flag for incomplete volume creation was not turned off in the Inventory record after new volume creation was completed for volume (volser). A preceding message explains the error.

System Action: The command scratches the partially created volume.

Programmer Response: Correct the error indicated in the preceding message and rerun the command.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 29, 35a, and 35c.

IDC2689I INSUFFICIENT NUMBER OF CARTRIDGES SPECIFIED ON COMMAND

Explanation: The number of cartridges specified in the CARTRIDGE parameter is insufficient to create the number of new volumes requested.

System Action: The command creates as many volumes as possible; then terminates normally.

Programmer Response: Specify sufficient cartridges in the CARTRIDGE parameter for all volumes to be created or do not specify any cartridges in the CARTRIDGE parameter and rerun the command.

IDC2752I ** CARTS csn1 cns2 NOT SCRATCHED FOR volser

Explanation: The requested volume (volser) was not scratched csn1 and csn2 identify the cartridges not scratched.

System Action: The command terminates normally.

Programmer Response: Correct the error indicated in the preceding message and rerun the command.

IDC2753I VOLUME volser NOT SCRATCHED, COPIES EXIST

Explanation: The base volume (volser) was not scratched because copies still exist.

System Action: The command terminated normally.

Programmer Response: Correct the error that prevented the copies from being scratched and rerun the command specifying the ALL parameter.

IDC2761I ** RECORD FOR COPY yyddd NOT REMOVED

Explanation: The volume copy record created on the date indicated by "yyddd" was not removed from the Inventory data set. A preceding message explains the reason for the failure.

System Action: The command continues processing or terminates depending on the severity of the error encountered.

Programmer Response: Correct the error indicated in the preceding message and rerun the command to remove records not removed.

IDC2762I ** RECORD FOR VOLUME volser NOT REMOVED

Explanation: The volume record for volume (volser) was not removed from the Inventory data set. A preceding error message explains the reason for the failure.

System Action: The command terminates normally.

Programmer Response: Correct the error indicated in the preceding message and rerun the command to remove the volume record.

IDC2764I CARTRIDGES STILL IN MASS STORAGE FACILITY

Explanation: The REPLACEVOLUME keyword is specified, but the base volume cartridges have been reentered into the Mass Storage Facility while the Mass Storage Volume Control was disabled.

System Action: The request is bypassed; the remaining requests will be attempted.

Programmer Response: When the Mass Storage Volume Control is enabled, eject the base volume from the Mass Storage Control and reenter it.

Problem Determination: Table I, items 2, 13, and 35.

IDC2765I RECORD FOR VOLUME volser NOT REMOVED. RECORD FOR COPY EXISTS

Explanation: A copy volume record still exists. Therefore, the base volume record for volume (volser) cannot be removed. See a preceding message for the error that prevented removal of all copy records.

System Action: The command terminates normally.

Programmer Response: Correct the error indicated in the preceding message and rerun the REMOVEVR command with the ALL parameter.

Problem Determination: Table I, items 2, 3, 4, 13, 29, 35a, and 35c.

IDC2782I ** SCRATCH CARTRIDGE csn NOT EJECTED

Explanation: The requested scratch cartridge (csn) could not be ejected. See the preceding message for further explanation of the problem.

System Action: Processing continues.

Programmer Response: Correct the problem as identified in the preceding message and rerun the command to eject the cartridge.

Problem Determination: Table I, items 2, 3, 4, 13, 29, and 35b.

IDC2800I ATTRIBUTES COULD NOT BE CHANGED FOR REMAINING VOLUMES IN GROUP

Explanation: Although the group level attributes have been successfully changed in the group record in the Inventory data set, the attributes (bind/nobind, readonly/readwrite, dasderase/nodasderase, exclusive/shared, pagefault/nopagefault) cannot be changed for the general-use volumes remaining in the group because storage for an ECB and message area cannot be obtained or a base volume record cannot be retrieved from the Inventory data set.

System Action: The command terminates with a message.

Programmer Response: Correct the problem as identified in a preceding message. To determine the number of additional volumes in the group that must be updated, run the LISTMSVI command. Rerun the command if a large number of volumes remain to be updated. Otherwise, run the MODIFYV command to change the volume attributes of each volume if the number of remaining volumes is small.

Problem Determination: Table I, items 2, 3, 4, 13, 29, 35a, and 35c.

IDC2801I ** ATTRIBUTES NOT CHANGED FOR VOLUME volser

Explanation: Although the attributes have been changed in the group record, the attributes (bind/nobind, readonly/readwrite, dasderase/nodasderase, exclusive/shared, pagefault/nopagefault) of volume (volser) cannot be changed. The volume may be currently mounted, marked in the Inventory data set for recovery purposes, or unavailable for another reason. See the preceding message for further explanation of the problem.

System Action: Processing continues.

Programmer Response: Correct the problem as identified in the preceding message. Run the MODIFYV command to change the volume attributes of each volume that could not be updated.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 29, 35a, and 35c.

IDC2821I ** { SCRATCH CARTRIDGE / MOUNTABLE VOLUME / NON-MOUNTABLE VOLUME } REPORT NOT PRODUCED

Explanation: The indicated report was not produced due to a previously identified error.

System Action: The command continues with the next report.

Programmer Response: Check the previous error message for the cause of the failure. Correct the error and rerun the command.

Problem Determination: Table I, items 3, 4, 13, and 29.

IDC2823I

**** { SCRATCH CARTRIDGE / MOUNTABLE VOLUME / NON-MOUNTABLE VOLUME / EMPTY CELL } TOTAL COULD NOT BE CALCULATED**

Explanation: Because of an error, the summary count information could not be calculated. A previous message explains the error.

System Action: The command continues processing, but the indicated count is not listed.

Programmer Response: Correct the error identified in the previous message and rerun the command.

Problem Determination: Table I, items 3, 4, 13, 29, and 30.

IDC2831I ** RECORD CHAIN BROKEN, REST OF CHAIN NOT LISTED

Explanation: The record could not be found for a volume recorded in the Inventory data set as part of a chain of nongrouped volumes or a chain of volumes belonging to a specific group. See the preceding message for further explanation of the error.

System Action: Processing continues.

Programmer Response: Correct the error as indicated in the preceding message and rerun the command to list volumes that could not be listed.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 29, 35a, and 35c.

IDC2833I ** CARTRIDGE RECORD csn NOT FOUND IN INVENTORY

Explanation: The cartridge record for the cartridge with cartridge serial number csn cannot be found in the Inventory data set.

System Action: Processing continues.

Programmer Response: Correctly specify the cartridge serial number and rerun the job. If the problem is not the result of a user error, contact the space manager.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 29, and 35c.

IDC2834I VOLUME ser NOT IN THE INVENTORY FOR CARTRIDGE csn

Explanation: The base, copy, or duplicate record associated with the mass storage volume ser cannot be found in the Inventory data set. The cartridge serial number of the cartridge is csn. The Mass Storage System Communicator MSSC reason code that caused the message to be printed is X'23C'.

System Action: Processing continues.

Programmer Response: Contact the space manager.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 29, and 35c.

IDC2843I FUNCTION SUSPENDED DUE TO I/O ERROR - RECORDS DUMPED nnnnnn

Explanation: While dumping trace data records, an I/O error was encountered and no further processing was possible. The number of records written to the output file is inserted into the message. A preceding message explains the I/O error.

System Action: No more data was dumped. The command terminates normally.

Programmer Response: Rerun the command to get the remaining trace data. If problem continues, reallocate and recatalog the data set which is getting I/O errors.

Problem Determination: Table I, items 2, 3, 4, 13, 29, and 30.

IDC2853I ** DISPLAY OF prm NOT SUCCESSFUL

Explanation: An attempt to retrieve the information for the indicated tuning parameter (prm) failed. See preceding message for an explanation of the error.

System Action: The command terminated normally. No more parameters displayed.

Programmer Response: Correct the error and rerun the command.

IDC2854I ** CHANGE OF prm NOT SUCCESSFUL

Explanation: An attempt to change the specified TUNE command parameter (prm) failed. See preceding message for an explanation of the error.

System Action: The command terminates normally. No more tuning parameters are changed.

Programmer Response: Correct the error and rerun the command.

IDC2872I CRA IS OWNED BY catname

Explanation: The catalog recovery area (CRA) on this volume belongs to a catalog other than the one for which COMPARE was specified.

System Action: The COMPARE option is ignored and processing is continued.

Programmer Response: Specify the correct catalog in the CATALOG parameter and rerun the job.

IDC2873I ** COMPARE OPTION IGNORED

Explanation: The catalog recovery area on this volume cannot be opened or belongs to a catalog other than the one for which COMPARE was specified. If an error occurred in open, a preceding message gives the cause.

System Action: The COMPARE option of the LISTCRA command is ignored and processing is continued.

Programmer Response: Specify the correct catalog name in the CATALOG parameter or correct the cause of the Open error, and rerun the job.

IDC2876I IGNORED VERIFY FAILURE FOR CRA

Explanation: When a catalog recovery area is opened, a VERIFY is issued by LISTCRA to set up the proper end-of-file condition. The VERIFY was unsuccessful.

System Action: The error is ignored and processing is continued. An incomplete listing of the contents of the catalog recovery area may result.

Programmer Response: Restore the volume on which the error occurred to a previous valid condition. For more information on catalog recovery, see *OS/VS2 Access Method Services*.

Problem Determination: Table I, items 2, 3, 4, 29.

IDC2879I CATALOG NOT LOCKED UP FOR THIS EXECUTION

Explanation: LISTCRA was unable to gain exclusive control of the catalog. One or more other programs may be updating the catalog during LISTCRA execution.

System Action: LISTCRA processing continues. Some listing errors or miscompares may result if a catalog or recovery area entry is updated during LISTCRA processing.

Programmer Response: If you doubt the accuracy of this CRA listing, rerun the job when no other programs are accessing the catalog.

IDC2882I VSAM ERROR READING CRA CONTROL RECORD

Explanation: A LISTCRA command encountered an error reading the control record in the catalog recovery area (CRA) to determine the size of the table necessary for its processing.

System Action: Processing is terminated for this CRA.

Programmer Response: Restore the volume on which the error occurred to a previous valid condition. For more information on catalog recovery, see *OS/VS2 Access Method Services*.

Problem Determination: Table I, items 2, 3, 4, 29.

IDC2884I IGNORED VERIFY FAILURE FOR CATALOG

Explanation: When a catalog is opened, a VERIFY is issued by LISTCRA to set up the proper end-of-file condition. The VERIFY was unsuccessful.

System Action: The error is ignored and processing continues. Erroneous miscompares and/or I/O errors may result.

Programmer Response: Restore the volume on which the error occurred to a previous valid condition. For more information on catalog recovery, see *OS/VS2 Access Method Services*.

Problem Determination: Table I, items 2, 3, 4, 29.

IDC2886I UNABLE TO REFERENCE CRA ON VOLUME ser - REASON CODE cde

Explanation: When opening the catalog recovery area (CRA) there was a problem indicated by the reason code cde. Possible reason codes and their meanings are:

Reason Codes	Meaning
1	Cannot verify the CRA.
2	Cannot open the CRA.
4	I/O error on control interval No.0
5	I/O error on control interval No.3
7	Error on number of directories.
8	Error on directory entries.

System Action: The CRA is marked bad and no entries are placed on the portable data set.

Programmer Response: If the reason code cde is 1, 2, 4, or 5, restore the volume on which the error occurred to a previous valid condition. For more information on catalog recovery, see *OS/VS2 Access Method Services.*

If the reason code is 7 or 8, provide the FORCE keyword in the EXPORTRA command to override the synchronization problem.

IDC2889I UNUSABLE DATA SET NOT EXPORTED

Explanation: A multi-volume data set (identified in the following message) that is marked unusable was encountered by EXPORTRA. The data set is not on one or more of its secondary volumes. (This situation is probably the result of a prior RESETCAT operation.)

System Action: EXPORTRA bypasses the VSAM data set and its associations.

Programmer Response: The data on valid volumes can be removed using the REPRO command prior to deletion. The data set cannot be opened for output.

Problem Determination: Table I, items 3, 4, 13, 29.

IDC2892I INVALID ENTRY TYPE FOR A VSAM VOLUME DATA SET

Explanation: A VSAM volume data set name was specified on a DELETE command and either an entry type other than CLUSTER was specified or the entry type in the catalog is not a cluster.

System Action: The entry is not deleted. The remaining entries, if any, are deleted.

Programmer Response: Specify the CLUSTER parameter or run a LISTCAT against the catalog and verify the entry type. Correct and rerun the job.

Problem Determination: Table I, items 3, 4, and 29.

IDC2893I INVALID PARAMETER SPECIFIED FOR THE RECOVERY OPTION

Explanation: The RECOVERY parameter has been specified for a DELETE command and a VVDS is not to be deleted or the USERCATALOG parameter has not been specified. The RECOVERY parameter is only valid for ICF catalogs and VSAM volume data sets.

System Action: The entry is not deleted. The remaining entries, if any, are deleted.

Programmer Response: Correct the parameters specified and rerun the job.

Problem Determination: Table I, items 3, 4, and 29.

IDC2894I GENERIC NAME NOT ALLOWED FOR VVR OR TRUENAME DELETE

Explanation: A name in the generic form, a name with a qualifier of *, has been specified along with the VVR or TRUENAME parameter on a DELETE command. Generic names are not allowed when deleting VVR or TRUENAME entries. One DELETE command is required for each VVR or TRUENAME entry to be deleted.

System Action: The command is terminated.

Programmer Response: Correct the name specification and rerun the job.

Problem Determination: Table I, items 1, 3, 4, and 29.

IDC2908I ddn NOT FOUND IN SYSTEM

Explanation: An attempt was made to use the volume identified by ddn. However, a DD statement corresponding to the ddname could not be found.

System Action: The volume cannot be accessed.

Programmer Response: Correct the erroneous ddname or provide a DD statement and resubmit the job.

Problem Determination: Table I, items 1, 2, 3, 4, 29.

IDC2909I UNABLE TO SCRATCH dsn

Explanation: An error occurred while attempting to scratch dsn. A subsequent second-level message explains the error.

System Action: The data set is not scratched.

Programmer Response: See the associated message.

Problem Determination: Table I, items 1, 2, 3, 4, 29.

IDC2910I ** NO VOLUME MOUNTED

Explanation: None of the volumes specified for the data set is mounted.

System Action: The data set is not scratched.

Programmer Response: Mount the proper volume(s) and resubmit the job.

Problem Determination: Table I, items 1, 2, 3, 4, 25a, 29.

IDC2912I ** PASSWORD VERIFICATION FAILED

Explanation: The data set to be scratched is password-protected, and the console operator did not supply the proper password.

System Action: The data set is not scratched.

Programmer Response: Resubmit the job, supplying the correct password when prompted.

Problem Determination: Table I, items 1, 2, 3, 4, 25a, 29.

IDC2913I ** DATA SET HAS NOT EXPIRED ON VOLUME ser

Explanation: The PURGE option was not specified, and the data set's retention period has not expired.

System Action: The data set is not scratched.

Programmer Response: Resubmit the job, specifying PURGE if you wish to delete the data set.

Problem Determination: Table I, items 1, 2, 3, 4, 25a, 29.

IDC2914I ** PERMANENT I/O ERROR ON VOLUME ser

Explanation: The VTOC cannot be read because of an I/O error.

System Action: The data set is not scratched.

Programmer Response: Have the volume restored.

Problem Determination: Table I, items 1, 2, 3, 4, 29.

IDC2915I ** UNABLE TO MOUNT VOLUME ser

Explanation: An appropriate unit was not available for mounting, or JES3 will not permit the volume to be mounted.

System Action: The data set is not scratched.

Programmer Response: Ensure that a unit is available for mounting.

Problem Determination: Table I, items 1, 2, 3, 4, 29.

IDC2916I ** DATA SET WAS IN USE

Explanation: The data set to be scratched was in use.

System Action: The data set is not scratched.

Programmer Response: If you wish to delete the data set, you must ensure that no one else is using the data set when you rerun the job.

Problem Determination: Table I, items 1, 2, 3, 4, 25a, 25c, 29.

IDC2917I NO RACF PROFILE ON dsn

Explanation: The data set as specified by dsn, is recorded in the VTOC as RACF protected. However, no RACF profile could be found for the data set. RACF could not perform the user authorization check for the data set.

System Action: The command is terminated.

Programmer Response: Before rerunning the job, run the RACF ADDSD command to redefine the profile for the data set. See *OS/VS2 Resource Access Control Facility (RACF) Command Language Reference* for a description of the RACF ADDSD command. This command can be run in the foreground or with the Terminal Monitor Program in the background.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 25a, 29, and 34b.

IDC2918I RACHECK FAILED FOR dsn

Explanation: An unauthorized user requested access to a RACF protected resource. The user does not have the proper authorization for the data set specified by dsn.

System Action: The command is terminated.

Programmer Response: Rerun the job after acquiring the proper authorization. Contact the RACF security administrator to acquire the proper authorization.

Problem Determination: Table I, items 1, 2, 3, 4, 25a, 29, and 34b.

IDC2919I INVALID URACHECK PARAMETER LIST

Explanation: The parameter list passed to the URACHECK macro is invalid. The Access Method Services module which invoked the URACHECK macro either set up the parameter list incorrectly or passed an invalid pointer to the parameter list.This error should not occur and is a system error if it does.

System Action: The command is terminated.

Programmer Response: Follow the Problem Determination action.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 25a, 29, and 34b.

IDC2930I ** INVALID RACF AUTHORIZATION

Explanation: The data set to be scratched is RACF-protected and the user does not have the proper RACF authorization to scratch the data set.

System Action: The data set is not scratched.

Programmer Response: Re-run the job after acquiring the proper user RACF authorization. Contact the RACF security administrator to acquire the proper authorization.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 25a, and 29.

IDC2950I INVALID FORMAT STRUCTURE

Explanation: An element of one of the text format structures is invalid. This message should never appear in a valid program. If it does, it is a system error.

System Action: The request to print a line is ignored.

Programmer Response: Do the problem determination action.

Problem Determination: Table I, items 3, 4, 29.

IDC2951I OUTPUT COLUMN SPECIFIED OUT OF RANGE

Explanation: An output column specified is outside the print line width, for example, not between columns 1 and 121. This should not occur on a checked-out Access Method Services command.

System Action: This field and subsequent fields are ignored.

Programmer Response: Do the problem determination action.

Problem Determination: Table I, items 3, 4, 29.

IDC2952I EXCESSIVE FIELD LENGTH FOR BD OR PU CONV

Explanation: A binary to decimal or packed to unpacked conversion length was specified as greater than 15 characters. This should not occur in a valid program.

System Action: The default (15) is used.

Programmer Response: Do the problem determination action.

Problem Determination: Table I, items 3, 4, 29.

IDC2953I A REDO SUB-STRUCTURE IS NESTED

Explanation: A redo structure cannot be defined within the set of structures to be redone. This should not occur in a valid program.

System Action: The current redo operation is terminated. All structures will be treated only once.

Programmer Response: Do the problem determination action.

Problem Determination: Table I, items 3, 4, 29.

IDC2954I STATIC TEXT ENTRY REQUESTED NOT IN MODULE

Explanation: A static text request indicated an entry that was not in the module specified. This should not occur in a valid program.

System Action: The request is not honored.

Programmer Response: Do the problem determination action.

Problem Determination: Table I, items 3, 4, 26c, 29.

IDC2955I INVALID PACKED DECIMAL FIELD

Explanation: A conversion request for packed to unpacked found a digit that was not in the range 0 to 9. The input data may be wrong. This should not occur unless an incorrect field is being printed.

System Action: Conversion stops. Previously converted data will be printed.

Programmer Response: Check the input data.

Problem Determination: Table I, items 1, 3, 4, 29.

IDC2960I NO PSWDFILE FOR dsn

Explanation: A password protected data set (dsn) was found on the VTOC but no DD card was found with that data set name.

System Action: The command terminates normally.

Programmer Response: Provide a DD card with the name of the data set. Specify the name of the DD card on the PASSWORDFILE parameter, and rerun the command.

Problem Determination: Table I, items 1, 3, 4, 13, 25b, and 29.

IDC2961I { FROM / TO } VOLUME volser CONTAINS NON-VSAM DATA SETS

Explanation: The command requires that no non-VSAM data sets can reside on the volume (volser). However, a format 1 DSCB was found for a non-VSAM data set. "From" and "to" indicate which volume contains the data set for those commands that process more than one command.

System Action: The command terminates normally.

Problem Determination: Table I, items 1, 3, 4, 13, 25b, and 29.

IDC2962I ENTRY NOT FOUND FOR VOLUME volser IN VSAM CATALOG

Explanation: The volume entry could not be located for the volume in the VSAM catalog specified by the user on the command or (if not specified on the command) in the VSAM catalog in the STEPCAT, JOBCAT, master catalog hierarchy. The VSAM catalog return code was 8.

System Action: The command terminates normally.

IDC2963I FORMAT 4 DSCB NOT FOUND ON VTOC OF { FROM / TO } VOLUME

Explanation: The program positioned to the first record in the VTOC of the volume but it was not a Format 4 DSCB. "FROM" or "TO" specifies which volume encountered the error for the commands that process more than one volume.

System Action: The command terminates normally.

Programmer Response: This probably indicates an Access Method Services error. Possibly the VTOC has been destroyed. Attempt to list the VTOC using the IEHLIST utility, and reconstruct the VTOC. Rerun the command.

Problem Determination: Table I, items 1, 3, 4, 13, 25b, and 29.

IDC2964I ** SCRATCH OF DATA SETS NOT PERFORMED

Explanation: An error occurred which prevented any data set from being scratched. The volume is still marked as VSAM volume. A preceding message indicates the specific error.

System Action: The command continues processing.

Programmer Response: Run AMASPZAP service aid program to alter the VTOC if any VSAM data sets are on the volume and the VSAM data sets have been recataloged. If the volume is not a VSAM volume, use the IEHPROGM utility's SCRATCH VTOC statement.

Problem Determination: Table I, items 1, 3, 4, 13, 14, 25b, and 29.

IDC2965I ATTEMPT TO SCRATCH DATA SETS TERMINATED

Explanation: An error occurred reading or updating the VTOC so that no more data sets could be scratched. The VSAM ownership flag has been set off in the VTOC.

System Action: No further attempts to scratch data sets are made. The command continues processing.

Programmer Response: Run the AMASPZAP service aid program to alter the VTOC if the VTOC contains VSAM data sets and the data sets have been recataloged. If the volume is not a VSAM volume, use the IEHPROGM utility's SCRATCH VTOC statement.

Problem Determination: Table I, items 1, 3, 4, 13, 14, 25b, and 29.

IDC2966I RECATALOGING OF NON-VSAM DATA SETS NOT PERFORMED

Explanation: An error occurred which prevented any non-VSAM data sets from being recataloged. A preceding message will indicate the specific reason for the error.

System Action: The command terminates normally. No further function is performed.

Programmer Response: Use the IEHPROGM utility or the Access Method Services DELETE and DEFINE commands to recatalog the data sets.

Problem Determination: Table I, items 1, 3, 4, 13, and 29.

IDC2967I ATTEMPT TO RECATALOG NON-VSAM DATA SETS TERMINATED

Explanation: An error occurred after some data sets were recataloged. A preceding message indicates the specific reason for the error.

System Action: No further non-VSAM data sets are recataloged. The command terminates normally. No further function is performed.

Programmer Response: List the catalog to determine which data sets were recataloged or, if the LIST parameter was specified, examine the SYSPRINT listing to see which data sets were recataloged. Recatalog the data sets not previously recataloged using the IEHPROGM utility or the Access Method Services DELETE and DEFINE commands.

Problem Determination: Table I, items 1, 3, 4, 13, and 29.

IDC2971I RESERVE FOR VOLUME volser NOT SUCCESSFUL

Explanation: The reserve with the HAVE option returned an unsuccessful condition code.

System Action: The command terminates processing.

Programmer Response: Rerun the command.

Problem Determination: Table I, items 1, 3, 4, 13, and 29.

IDC2972I LSPACE ERROR. LSPACE RETURN CODE WAS nn.

Explanation: The LSPACE macro failed to return volume free space information for a LISTDSET space usage report. The return code from the LSPACE macro is nn. The following are possible values for nn:

- 4, indicating an I/O error while reading the DSCBs.
- 8, indicating the last allocation of the volume was made under DOS.
- 12, indicating the UCB address is invalid, the UCB is not for a direct-access device, or the UCB-not-ready bit is on, indicating the device is not ready.
- 16, indicating an invalid message area address or SMF indicator.

System Action: The volume is not processed. If other volumes were specified, they are processed.

Programmer Response: Determine why the LSPACE macro failed. Message IDC2108I follows this messages and identifies the failing volume.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 29.

IDC2973I VTOC ON volser, VOLUME TO BE COPIED, IS IN ERROR

Explanation: Either an error occurred when the volume services routine attempted to redefine a format-5 DSCB or the DIRF bit is on in the format-4 DSCB (the DIRF bit is used to detect a system failure or permanent I/O error while the VTOC is being updated).

System Action: Instead of attempting to copy only allocated cylinders, a copy of all cylinders of the volume will be performed. The return code is 4.

Programmer Response: Check to insure that the VTOC is not in error. Try to list the VTOC using the IEHLIST utility program. There is no need to rerun the job because all of the cylinders of the volume have been copied even with the VTOC errors.

Problem Determination: Table I, items 1, 3, 4, 13, 25b.

IDC3003I FUNCTION TERMINATED. CONDITION CODE IS cde.

Explanation: This message is issued when a terminating error condition has occurred in the execution of a functional command. Messages printed just before this message in the program listing indicate the error that occurred.

System Action: Processing continues with the next command, and LASTCC is set to cde. MAXCC is also set if cde is greater than the current MAXCC value.

Programmer Response: The appropriate programmer response is indicated by the preceding messages.

IDC3004I FUNCTION TERMINATED. INSUFFICIENT MAIN STORAGE.

Explanation: The region size was not large enough to execute a functional command.

System Action: Processing continues with the next command.

Programmer Response: Increase the size of the storage allocated.

Problem Determination: Table I, items 1, 3, 29.

IDC3006I FUNCTION TERMINATED DUE TO BEGINNING POSITIONING ERROR

Explanation: An error occurred when positioning to a record in a data set (such as occurs via the FROMKEY facility of the PRINT command) was attempted. The position indicator may be beyond the limits of the data set or an I/O error may have occurred in positioning. An I/O error message may have been printed.

System Action: The operation is terminated.

Programmer Response: Correct the positioning parameter value. See the I/O error message description for the I/O error indicated ahead of this message.

Problem Determination: Table I, items 1, 3, 4, 13, 29.

IDC3007I VSAM CATALOG RETURN-CODE IS rc

Explanation: This condition code was returned as the result of a catalog error or exceptional condition. This message is used only when a more specifically worded message does not exist; in most instances, a subsequent message will indicate the action taken for the command that encountered the condition. The return code, rc, may be either a VSAM return code or a CVOL processor return code. To determine which, you must determine whether the entry name specified in the command was directed to a VSAM catalog or a CVOL catalog. For a return code to be a CVOL return code, the entry name specified in the command must be qualified; and the first qualifier must be identical to an alias entry in the master catalog. The alias entry must be related to a non-VSAM entry of the form SYSCTLG.anyname. For example, if A.B.C is the entry name in the command and A is found to be an alias relating to SYSCTLG.anyname in the master catalog, then processing will take place for the data set A.B.C. The CVOL processor return codes follow. The VSAM catalog return codes are listed with message IDC3009I, where they appear together with reason codes; for message IDC3007I, ignore these reason codes.

CVOL Return Codes	Explanation
4	Cannot allocate catalog, catalog does not exist, or is not open.
8	The data set does not exist, or a CVOL contains a CVOL pointer or GDG alias, or the entry name duplicates an existing name.
20	There is insufficient space in the CVOL data set.
24	LOCATE operation - Permanent I/O error, unrecoverable error, or nonzero return code from ESTAE (ESTAE is issued by the CVOL processor).
28	Non-LOCATE operation - Permanent I/O error, unrecoverable error, or nonzero return code from ESTAE (ESTAE is issued by the CVOL processor).
44	All eligible entries could not be listed by the LISTCAT function. LISTCAT can handle a maximum of 1,456 entries.
48	Function inconsistent with CVOL processor.
56	An attempt to delete an entry failed because the DELETE command specified SCRATCH but password verification failed for the password protected data set.
84	An attempt to delete an entry failed because the DELETE command specified SCRATCH without PURGE but the expiration date of the data set has not been reached.
102	An attempt to delete an entry failed because the DELETE command specified SCRATCH but the data set is defined to RACF and the accessor is not authorized to it.
164	There is insufficient virtual storage available for a CVOL catalog management work area.
168	An attempt to delete an entry failed because the DELETE command specified SCRATCH but the device type of the cataloged volume did not match the UCB device type.
184	An attempt to delete an entry failed because the DELETE command specified SCRATCH but the data set is currently open and cannot be scratched.

See *OS/VS2 Using OS Catalog Management with the Master Catalog: CVOL Processor* for further information.

System Action: The command is terminated.

Programmer Response: The response depends on the return code received:

CVOL Return Codes	Response
4	Ensure that the CVOL is mounted; verify the use of the STEPCAT and JOBCAT JCL or of the ddname DD cards statement.
8	Check that the entry name is spelled correctly; verify the use of JOBCAT and STEPCAT catalogs, if employed.
20	See your system programmer for assistance in reorganizing the CVOL.
24	Have the volume restored or try mounting the volume on a different device.
28	Have the volume restored, or try mounting the volume on a different device.
44	Change the LEVEL or ENTRIES parameter of the LISTCAT command to limit the number of eligible entries to 1,456.
48	Verify the use of JOBCAT and STEPCAT catalogs, if employed, to ensure that the catalog being acted upon is appropriate to the action you are attempting.
56	Message IEC301A has been printed until the maximum number of attempts is exceeded. Provide the operator with the correct password and rerun the job.
84	Specify the PURGE option, if desired, and rerun the job.
102	Get authorization for the data set and rerun the job.
164	Increase the region size for the step.
168	If the data set was cataloged using an esoteric device type, such as, SYSDA, a non-standard device type is cataloged, such as, "000B2000" To delete the entry, use the Access Method Services DELETE command with NOSCRATCH specified. Then, to scratch the data set, specify DISP=(OLD, DELETE), or IEHPROGM to scratch the data set.
184	Rerun the job. To ensure proper completion, specify a disposition of OLD, not SHR.

Problem Determination: Table I, items 1, 2, 3, 4, 16, 25a, 29, or 30. (For item 16, the dump identification ZZCA may be used to obtain a dump just before the CATLG macro is executed.)

IDC3008I FUNCTION IS NOT SUPPORTED IN THIS ENVIRONMENT

Explanation: A request for prompting or data set name qualifying has been received while not in a TSO environment.

System Action: The request is terminated.

Programmer Response: None. The message will not result from a user error.

Problem Determination: Table I, items 1, 3, 4, 29.

IDC3009I VSAM CATALOG RETURN CODE IS rc - REASON CODE IS IGGOCLaa - crs

Explanation: This return code, rc, and reason code, crs, were returned by Catalog Management module IGGOCLaa as a result of a catalog error or exceptional condition.

System Action: Processing associated with the error return code is terminated.

Programmer Response: See the specific return code and reason code.

Problem Determination: Table I, items 1, 2, 3, 4, 16, 25a, and 29 or 30. (For item 16, the dump identification ZZCA may be used to obtain a dump just before the CATLG macro is executed.) A complete list of return codes and reason codes follows:

Return Codes	Reason Codes Description
4	An error was encountered while performing open/close processing for a VSAM catalog or a catalog recovery area. If the catalog is being accessed dynamically due to a lack of a JOBCAT or STEPCAT DD statement for the catalog, dynamic allocation may have failed because the volume is allocated exclusively. The volume may be allocated exclusively due to one of the following: ● specification of deferred mount on a DD statement ● volume count greater than unit count on a DD statement ● previous Access Method Services command in the job step needed to demount the volume and changed the allocation of the volume to exclusive.
2	Error opening the catalog.
4	Error closing the catalog.
6	A request has referenced a catalog while catalog management is processing, or after catalog management has processed an Access Method Services DELETE command for the specific catalog.
8	An invalid Access Method Control Block (ACB) was supplied to catalog management for a catalog to be used during a catalog request.
10	A specific catalog was not found to be open.
12	Error opening a catalog recovery area.
14	Error closing a catalog recovery area.
16	No master catalog was found on a non-superlocate request.

18 A catalog recovery area did not exist on a volume, but was expected.

20 Requester tried to OPEN an SDS (VVIC) data set, but requester is not key 0 or in supervisor state.

21 Workarea was passed in ACBUAPTR but requester is not key 0 or in supervisor state.

22 No TIOT address was passed in OPEN workarea. OPEN processing was unable to find TIOT entry corresponding to DDNAME specified in the ACB.

24 JFCB pointer was passed in ACBUJFCB but the user is not APF authorized.

25 Unable to get CSA for SDS (VVIC) data set (236 bytes in subpool 241.)

26 Unable to get storage for scheduler workarea (588 bytes in subpool 252).

27 Unable to get CSA for catalog (140 bytes in subpool 241).

28 Error from queue manager when reading the JFCB.

30 Unable to get storage for DRWA (716 bytes in subpool 252).

32 Non-zero return code from IDA0192V on volume MOUNT and VERIFY.

34 I/O error reading the format-4 DSCB.

36 Format-4 DSCB does not contain the TTR of a CRA as expected.

38 I/O error reading the format-1 DSCB.

40 Format-1 DSCB for catalog not found in the VTOC. Search is for format-1 with high level name of Z9999994 or Z9999996.

42 I/O error reading the catalog cluster record.

44 Record read from the catalog is not a data record ("D" type) as expected.

46 Record read from the catalog is not a cluster record ("C" type) as expected.

48 Catalog name found in the cluster record is not the name the user provided as the name of the catalog being opened.

50 The requester of CLOSE or EOV for SDS (VVIC) is not key 0 or in supervisor state.

52 Common CLOSE (IFG019RA) was unable to find the correct TIOT entry.

54 Error during CLOSE of the CRA.

56 Invalid CAXWA on SDS (VVIC) EOV (end of volume).

58 Common EOV (IFG019RA) was unable to find the correct TIOT entry.

60 Unable to get storage for queue manager workarea-- 588 bytes in subpool 252 (for EOV) or in subpool 253 (for CLOSE).

62 Error from queue manager reading the JFCB.

64 No DSAB chain exists off either the current or active JSCB.

66 Both the current DSAB chain and the active DSAB chains have been searched, but no TIOT entry was found for which the DDNAME matches the PCCB DDNAME.

68 Both the current DSAB chain and the active DSAB chains have been searched, but no TIOT entry was found for which the DDNAME matches the PCCB DDNAME. (Reason code 68 comes from a different location in the logic than reason code 66.)

70 Unable to find the PCCB containing the input ACB address on the active JSCB's PCCB chain.

72 Both the current DSAB chain and the active DSAB chains have been searched, but no TIOT entry was found for which the DDNAME matches the PCCB DDNAME. (Reason code 72 comes from a different location in the logic than reason codes 66 and 68.)

74 Both the current DSAB chain and the active DSAB chains have been searched, but no TIOT entry was found for which the DDNAME matches the PCCB DDNAME. (Reason code 74 comes from a different location in the logic than reason codes 66, 68, and 72.)

80 Scan of DSAB queue failed to find a TIOT entry with the same DDNAME as input.

81 Error from queue manager reading the JFCB.

82 CVT + X '100' does not contain an AMCBS pointer.

83 Catalog has been deleted, and CAXWA is still on the chain until all jobs allocated to it terminate or logoff.

84 CAXWA count of active users has reached the maximum allowed. The maximum is 255 or, in Data Facility Product (DFP) release 1.1 and later releases, 32,767.

85 Unable to get CSA for the catalog ACB or for the PCTT (76 bytes in subpool 241 for the ACB or 48 bytes in subpool 241 for the PCTT).

86 Error opening the catalog.

87 PCTT is incorrect. The number of active slots is greater than the number of possible entries.

90 Input ACB pointer is invalid.

92 Input ACB address was not found in a PCTT slot.

94 Scan of DSAB queue failed to find a TIOT entry with the same DDNAME as input.

96 Error from queue manager reading the JFCB.

98 CAXWA was not found on the CAXWA chain containing the input ACB address.

Programmer Response: For reason codes:

2,4,12,14
Check for open/close problem determination messages in the job stream output.

6 If you want to use DEFINE processing for the catalog, submit a separate job. If you are using TSO, you must logoff and then logon before using the DEFINE command. Termination processing for the DELETE command can then be completed.

8,16 Contact IBM for programming support.

10 Ensure proper usage of JOBCAT or STEPCAT JCL statements.

18 Determine if the IEHDASDR dump/restore or IBCDASDI activity has impacted any VSAM containing volumes and restore to the proper version. If restore versions are not available, invoke proper catalog and volume recovery procedures.

20 The requester issuing the OPEN for SDS (VVIC) must be in key 0 or supervisor state.

21 To pass an address in ACBUAPTR, the requester issuing the OPEN must be in key 0 or supervisor state.

22 If a user program issued the OPEN, check for correct DDNAME in ACB and for missing DD statement. If operating system code issued the OPEN, contact IBM for programming support.

24 User must be APF authorized to pass pointer in ACBUJFCB.

25 Increase size of CSA or run job when more CSA is available.

26 Increase the REGION size.

27 Increase size of CSA or run job when more CSA is available.

28 Contact IBM for programming support.

30 Increase the REGION size.

32 Make sure that unit is available for mounting and that correct volume is mounted.

34, 36, and 38:
Contact IBM for programming support.

40 Check the user catalog connector 'U' entry in the VSAM master catalog for the correct volser. Make sure that the correct volume is mounted.

42, 44, and 46:
Contact IBM for programming support.

48 Be sure that the name specified is the correct name of the catalog on the volume.

50 Issuer of CLOSE or EOV for SDS (VVIC) must be running key 0 or supervisor state.

52 Contact IBM for programming support.

54 See associated message IEC251I for information about the CLOSE error.

56 and 58:
Contact IBM for programming support.

60 Increase REGION size.

62, 64, 66, 68, 70, 72, 74, 80, 81, and 82:
Contact IBM for programming support.

83 Do not use the catalog (or a new catalog with the same name) until all jobs allocated to the old catalog terminate or logoff.

84 Do not use the catalog until one of the current jobs allocated to it terminates or logs off.

85 Increase size of CSA or run job when more CSA is available.

86 See associated message IEC161I and/or IEC331I for information about the OPEN error.

87, 90, 92, 94, 96, and 98:
Contact IBM for programming support.

8 Entry does not exist, if action is one that locates the entry; or entry already exists, if action is one which adds an entry to a catalog.

0 Entry not found on LOCATE REQUEST

2 Catalog cluster record not found.

4 Get for update found a free record instead of correct record.

6 No record found from record management.

8 A request to place a record by key into a catalog resulted in a duplicate key error from VSAM.

12 Invalid entry type for Super-Locate on the entry named. The data set was not found in a catalog.

14 A generation data group entry type for Super-Locate did not find the specified entry in a catalog.

16 A generation data group entry was found to be deleted from a catalog.

18 A generation data group type of Super-Locate request specified an invalid generation number.

20 Volume occurrence entry does not exist in record.

24 Record not found in CRA.

26 Catalog CI number not found in CRA CI translate table.

28 Volume serial number not found in CRA volume time stamp table.

30 The catalog control record was incorrectly retrieved.

36 Entry does not exist. A CONVERTV command was issued for a volume which is owned by a VSAM catalog: however, no record for the volume was found in any available VSAM catalog.

38 A duplicate entry name or high level index name was found in the target catalog during a DEFINE command.

40 DEFINE GDG command not issued prior to the DEFINE NONVSAM command with GDG entry name.

42 A no-record found or end-of-date occurred reading the Integrated Catalog Facility catalog.

44 A request to place a record by key into an Integrated Catalog Facility catalog resulted in a duplicate key error from VSAM.

46 A base record was not found on delete of a cluster, AIX or GDG in an Integrated Catalog Facility catalog.

48 A record passed to the catalog management has a record length of zero and is invalid.

Programmer Response: For reason codes:

0 Ensure that the proper entry was specified.

2 Call IBM for programming support.

4 Because it is possible during an Access Method Services DELETE command to leave partial structures in the catalog if the DELETE does not complete, this error can occur. Correct the error that caused DELETE to terminate and rerun the DELETE. If this error is not related to a DELETE then call IBM for programming support.

6 Check that the entry name is spelled correctly. In the instance of an improper DELETE command entry type, either remove the type specification or correct it. Check also that the proper catalog is being searched for the name you specified.

8 Check that the entry name is spelled correctly and that you are using the proper catalog.

12,14,16,18
Ensure that the proper data set name was specified in the job control language DD statement.

20 Catalog volume entry record indicates certain VSAM data sets reference it, but that was not found to be correct. The catalog should be listed and recovery procedures may be necessary to synchronize the catalog to correspond with the proper VSAM data sets.

24 Catalog and a recovery area do not correspond. Recovery procedures should be used to synchronize the catalog and the volumes.

26,28 System error while using Access Method Services EXPORTRA command. Contact IBM for programming support.

30 This is a system error and indicates a problem with a VSAM catalog. It may be necessary to rebuild the catalog, however, it should first be determined that the catalog in fact is in error.

36 Supply the name of the VSAM catalog which owns the volume in the CATALOG parameter of the CONVERTV command, or provide a STEPCAT or JOBCAT DD statement for the VSAM catalog.

38 Specify in the DEFINE command a name that does not already exist in the target catalog.

40 Insure that the GDG base is defined prior to defining the non-VSAM with GDG entry name.

42 Insure that the entry name specified on the Access Method Services command is in the catalog specified.

44 Check that the entry name is spelled correctly and that you are using the proper catalog.

46 Run the DIAGNOSE command to analyze the catalog. The Integrated Catalog Facility catalog may have to be restored or rebuilt.

48 Call IBM for programming support.

10 Invalid record type found.

0 Incorrect record type is found when trying to find a subrecord to be moved.

2 Invalid record type found during field management request.

4 Incorrect record type is found when trying to move a subrecord to another record.

6 Incorrect record type is found when scanning for a component.

8 An invalid catalog VVR was read from the VVDS and was detected during a control block refresh.

10 An invalid VSAM Volume Record was read from the VSAM Volume Data Set and was detected while modifying the catalog's VSAM Volume Record.

12 The record type for a data set was found to be invalid during reset of a reusable data set.

14 On a disconnect request, the connector record was missing or invalid.

20 Volume cell in VVDS catalog record could not be found.

22 On a DELETE request, a damaged catalog record was detected.

26 Record type is not cluster or VSAM extension record when locating a subrecord.

28 Component type is not cluster when trying to find VSAM sub-record information.

30 Incorrect record type is found when trying to count number of volume cells.

32 Incorrect Record type is found when trying to move a subrecord.

34 Invalid record pointer found during field retrieval.

36 Incorrect record type found when processing associations.

38 Incorrect record type is found when processing a path over a cluster.

40 Invalid record request for processing associations.

42 VVR type is incorrect: The first VVR is not primary or the following VVR's are not secondary.

Programmer Response: For reason codes: 0, 2, 4, 6, and 8: Run the DIAGNOSE command to check for a damaged catalog record.

10 The catalog must be rebuilt or restored.

12 Insure that the target of a reset is a VSAM data set. Call IBM for programming support.

14 Run the DIAGNOSE command to determine if the user catalog connector record is damaged and take the recommended action.

20 Run the DIAGNOSE command to determine if the VVDS catalog record is damaged and take the recommended action.

22, 26, 28, 30, and 32:
Run the DIAGNOSE command to check for a damaged catalog record.

34 System interface errors. Call IBM for programming support. 36, 38, and 40: Run the DIAGNOSE command to check for a damaged catalog record.

42 Run the DIAGNOSE command to check for a damaged VVDS record.

12 Component not found.

0 AIX not found when processing path associations.

2 Cannot find data component in a cluster record when trying to process associations.

4 Cannot find data component in an AIX record when trying to process associations.

6 Cannot find index component following data component when trying to process second association for an AIX record.

8 Incorrect component type found in catalog record while processing associations.

10 Data component name not found during reset of a reusable data set.

12 Index component is not found after the data component of an Alternate Index.

14 Data component is not found after alternate index subrecord.

16 Wrong component type (not cluster AIX, GDG, GDS).

18 Component type is not data, index or GDS when searching for volume cell.

22 Data component not found after a cluster component.

24 Data component not found for an AIX.

26 Index component of an AIX is not found for an AIX.

28 Invalid component is found.

30 Data component not found in a cluster record.

32 Data component not found for an extention record.

34 Invalid component is found when processing associations.

36 Invalid component is found when processing associations.

38 Invalid component is found when processing associations.

40 Component not found when processing associations.

54 Record area not found when trying to get a bigger buffer.

Programmer Response: For reason codes:

0, 2, 4, 6, and 8:
Run the DIAGNOSE command to check for a damaged catalog record.

10 Call IBM for programming support.

12, 14, 16, 18, 22, 24, 26, 28, 30, 32, 34, 36, 38, and 40:
Run the DIAGNOSE command to check for a damaged catalog record.

54 System programming error.

14 Cell not found.

0 Cell not found.

2 The first volume cell in the base clusters data or index component is not the primary volume cell. This was a DEFINE AIX command being processed.

4 The generation data set subrecord in the generation data group base sphere record has an invalid type.

6 Data ownership cell or volume cell in an Integrated Catalog Facility catalog was not found during reset of a reuseable data set.

8 The AIX entry name was not found in the base cluster sphere record relate cell.

10 The generation aging table cell entry for the moved generation data set subrecord was not found.

12 Cannot find a volume cell in the data or index component before trying to find data set information cell in VVR.

14 Owner cell not found in a cluster record.

16 GAT cell does not follow owner cell in GDG record.

18 Owner cell was not found in GDG record.

20 GAT cell not follow owner cell in GDG record.

22 Owner cell not found in GDG record.

24 Owner cell not found in a Non-GDS component.

26 Owner cell not found in a path, non-VSAM or user catalog connector record.

28 Owner cell not found in a component.

30 Owner cell not found in a path record.

32 Owner cell not found in a path, non-VSAM or user catalog connector record.

34 Owner cell not found in a path, non-VSAM or connector record.

36 Owner cell not found in a component.

38 Owner cell not found in a catalog record.

40 GAT cell not found in GDG component.

42 Invalid cell type: Association cell not found.

44 Cannot find association cell in alias record.

Programmer Response: For reason codes:

0 Run the Access Method Services DIAGNOSE command to check for a damaged catalog record.

2 Run the Access Method Services DIAGNOSE command. The base cluster may have to be deleted with the NOSCRATCH option and redefined with the recatalog option.

4 Run the Access Method Services DIAGNOSE command for additional information and call IBM for programming support.

6 Call IBM for programming support.

8 Run the Access Method Services DIAGNOSE command to check for a damaged catalog record.

10 Run the Access Method Services DIAGNOSE command for additional information and call IBM for programming support.

12, 14, 16, 18, 20, 22,24,26,28,30,32,34,36, 38, 40, 42, and 44:
Run the Access Method Services DIAGNOSE command to check for a damaged catalog record.

20 Insufficient space in VSAM catalog.

0 The catalog is full. It is impossible to obtain another extent, because there is no more space on the volume in which the catalog resides, or the maximum number of extents has been reached.

2 Two low keyrange CIs were not available for required end-of-volume processing.

Programmer Response: For reason codes:

0 Scratch unneeded data sets from the volume and delete all unnecessary entries from the catalog.

2 Use the AMS REPRO command to copy the catalog, or either unload or reload the catalog into a larger catalog.

22 FVT (Field Vector Table) address is zero or an invalid FVT field found.

0 FVT address is zero on entry to cluster name cell build routine.

2 FVT address is zero on entry to ownership build routine.

4 FVT address is zero on entry to security cell build routine.

6 FVT address is zero on entry to volume cell build routine.

8 FVT type is not Data "D" or Index "I."

10 FVT type not cluster "C" or Alternate Index "G."

12 FVT type not Data "D" or Index "I" on entry to build JFCB routine.

Programmer Response: For reason codes:

0, 2, 4, 6, 8, 10, and 12:
Contact IBM for programming support.

24 Permanent read error in VSAM catalog.

2 I/O error occurred while attempting to read information from the catalog.

6 Permanent I/O error occurred while reading from a CRA (catalog recovery area).

Programmer Response: For reason codes:

2,6 Messages IEC331I, IEC332I, and IEC333I have been printed to aid in determining the cause of the error and where the error occurred. If a hardware error is not causing the problem, you must restore or rebuild the catalog.

26 Integrated Catalog Facility/VSAM record management error.

2 A VSAM record management PUT-add was issued to an Integrated Catalog Facility catalog, but either the record area was too small or non-existent.

Programmer Response: For reason codes:

2 Call IBM for programming support.

28 Permanent I/O error in VSAM catalog.

2 I/O error processing the catalog while executing an Access Method Services command that requires modifying the catalog.

4 I/O error during catalog OPEN.

6 One or more entries were not deleted due to an I/O related error during DELETE processing.

8 I/O error processing a catalog recovery area.

10 GET error on the source catalog during REPRO copy catalog or free chain rebuild function.

12 Target catalog of REPRO copy catalog is not empty. Copy is terminated.

14 Target catalog of REPRO copy catalog is too small. Copy is terminated.

16 Bad CI number encountered in the source catalog during REPRO copy catalog. Copy is terminated.

18 PUT error to target catalog during REPRO copy catalog or free chain rebuild function.

20 GET error on target catalog during REPRO copy catalog or free chain rebuild function.

22 Multiple CCR records exist in the source catalog during REPRO copy catalog.

26 I/O error occurred while writing the ICF catalog's self-describing records.

28 A close error occurred after the writing of the ICF catalog's self-describing records.

30 An I/O error occurred writing records to the ICF catalog.

Programmer Response: For reason codes: 2,4,6,8 Messages IEC331I, IEC332I, and IEC333I have been printed to aid in determining the cause of the error and where the error occurred. If a hardware error is not causing the problem, you must restore or rebuild the catalog.

10 See associated messages IEC331I, IEC332I, and IEC333I for a description of the error.

12 Target must be a newly defined empty catalog.

14 Define a larger target catalog.

16, 18, and 20:
See associated messages IEC331I, IEC332I, and IEC333I for a description of the error.

22 Catalog has been copied before, but the copy function was not correctly completed. This catalog may not be copied again until the first copy is properly completed. Complete the first

copy by using the DELETE CLUSTER command to delete the original source catalog.

26, 28, and 30:
Contact IBM for programming support.

32 Error in VSAM catalog parameter list. Such a condition indicates an internal error in the Access Method Services.

2 This is a system error indicating that catalog management was unable to return the requested data in the catalog parameter list to extend a data set. The proper volume occurrence was not found.

4 Invalid catalog parameter list, failed storage validity check.

6 User provided work area (from catalog parameter list) outside user region.

8 Error in parameter list - no pointer to work area.

10 Pointer to catalog volume list but no length provided in work area.

12 Length of volume list but no pointer to volume list provided in work area.

14 Non-system caller issued update.

16 No volume list address or length specified.

Programmer Response: For reason codes: 2,4,6,8

10,12 Call IBM for programming support.

14 If user programs are interfacing directly with VSAM catalog management, this is a user error.Otherwise, contact IBM for programming support.

16 If user programs are interfacing directly with VSAM catalog management, this is a user error. Otherwise, contact IBM for programming support.

36 Data set not found.

2 Incorrect record type found in Access Method Services ALTER command.

4 Data set name not found on the volume table of contents.

12 A Super-Locate request to VSAM catalog management requires dynamic access of a catalog.

Programmer Response: For reason codes:

2 Determine if the correct name was specified in the command or if the proper fields are requested to be modified for the entry type.

4 Check that the proper versions of the volume and catalog are being processed and that the volume is synchronized with the catalog.

12 If this error causes a job to terminate, the user should ensure that the master catalog references the proper catalogs and that they are available to the system when the job stream is executed.

40 Volume list or work area too small. An attempts to provide VSAM catalog management with sufficient virtual storage in which to return cataloged information failed, because the indicated storage requirement proved to be insufficient. This condition should not normally occur: it can happen when two or more tasks are modifying a catalog entry, causing it to be extended in size, and one task finds that if was unable to specify sufficient virtual storage for catalog management's new requirements.

Programmer Response: For reason codes:

0 Rerun the job in a larger region.

44 Caller's work area too small.

2 Delete catalog work area too small.

4 Caller work area too small.

6 An Access Method Services DELETE command to delete an entire generation data group, with the FORCE parameter, encountered a work area too small to contain names of entries deleted. However, the entire generation data group was successfully deleted.

8 Required work area length for a generic locate request is greater than 65,535 bytes. The exact length cannot be returned.

Programmer Response: For reason codes:

2,4 Contact IBM for programming support.

6 This is merely a warning condition, no response is necessary.

8 A user program should not interface directly with VSAM catalog management. The catalog parameter list (CTGPL) work area should be converted to a format-2 work area (see *DFEF: Catalog Diagnosis Reference*) and the request reissued.

Otherwise, contact IBM for programming support.

48 Invalid VSAM catalog function.

2 Probable system error. The catalog management driver has been passed a catalog parameter list that is invalid.

6 ALTER of a non-VSAM entry, not allowed for the fields being modified.

8 ALTER of the catalog name is not allowed.

10 Erase option delete, but file name is for incorrect catalog.

12 An Access Method Services ALTER command encountered an inconsistency with the entry type and the UPGRADE/NOUPGRADE or UPDATE/NOUPDATE parameters.

14 Data set is update inhibited.

16 Data set is not reusable.

18 It is only valid to change the attributes or ownerid fields of a generation data group base entry by the Access Method Services ALTER command.

20 Forced delete not allowed on catalog volume.

22 It is not valid to use the NOSCRATCH parameter to DELETE a data set in a recoverable VSAM catalog.

24 It is invalid to attempt to change the name of a user catalog or alias entry via the Access Method Services ALTER Command.

26 It is invalid to attempt to change the name of a non-VSAM entry that is a member of a generation data group via the Access Method Services ALTER command.

28 It is invalid to attempt to delete a GDG base entry that contains non-VSAM entries.

30 It is invalid to delete the master catalog with the FORCE parameter. If the user catalog is being force-deleted, a stepcator jobcat card may be missing or specifies the wrong catalog.

32 Invalid ERASE request. Catalog record is not erased.

34 Invalid PUT would damage the catalog's self-describing records (CIs 0, 1, 2, and 3).

36 ALTER REMOVEVOLUMES volume cleanup function has invalid parameters coded.

40 Invalid catalog management function, ALTER of a VVDS name.

44 An invalid non-Catalog Management Service function specified in CTGPL.

46 The CTGPL specified DEFINE SPACE, but the catalog oriented to was an Integrated Catalog Facility catalog.

48 The CTGPL specified DELETE SPACE, but the catalog oriented to was an Integrated Catalog Facility catalog.

50 The CTGPL specified an invalid catalog management services function.

52 The CTGPL specified LSPACE but the catalog oriented to was an Integrated Catalog Facility catalog.

54 Invalid reset of a non-reusable data set.

56 Data set update inhibited.

58 The CTGPL specified Integrated Catalog Facility catalog only but the catalog oriented to was a VSAM catalog.

60 Define no-allocate or RECATALOG not APF authorized.

62 The CTGPL specified either PASSREC or RETVREC but the caller was not APF authorized.

64 DEFINE of a SYS1.VVDS.Vvolser cannot request space in records.

66 RECOVERY was specified on a VSAM DELETE catalog request. Recovery is an invalid function for VSAM.

68 A define of a VSAM Volume Data Set (VVDS) specified the space request in records.

Programmer Response: For reason codes:

2 Call IBM for programming support.

6 Ensure that the proper entry name was specified on the Access Method Services ALTER command and that only fields that exist for a non-VSAM entry are requested to be changed.

8 Check that you didn't use the catalog name by mistake. Catalog names can only be changed by doing DELETE and then re-DEFINE catalog.

10 Do not use a DD name on the catalog parameter in the Access Method Services DELETE command if erase processing is to be performed.

12 Contact IBM for programming support. This is a system error.

14 Do not open a data set for reset processing that is inhibited for update processing.

16 Do not open a non-empty data set for reset processing that is not reusable.

18,24,26
Do not attempt the invalid ALTER commands. Correct the commands and rerun the job.

20 The FORCE parameter is not allowed on a DELETE SPACE command that is issued against a volume containing a VSAM catalog. Use the DELETE CATALOG command if that is what is desired. Or, use the ALTER REMOVEVOLUMES command if the private catalog on the volume is no longer processible.

22 Do not attempt the invalid DELETE command. Use the NOSCRATCH parameter to DELETE the SPACE if it is desired to remove the volume from the catalog. Or use the FORCE parameter on the DELETE USERCATALOG command if that is desired.

28 Delete the members of the GDG base explicitly. Alternatively, the GDG base and its members may be deleted with the use of the FORCE parameter in the DELETE command.

30 The master catalog cannot be deleted. To delete the user catalog, correct the stepcat or jobcat card and resubmit the job.

32 Contact IBM for programming support.

34 If one of the records read during the request failed validity checking (indicated by message IEC331I 124-22), that record is assumed to be the cause of the error. No dump is produced and the invalid record must be recovered or rebuilt. Otherwise, print the SYS1.DUMP produced by this error (print NUC,CURRENT,SQA,CSA) and contact IBM for programming support.

36 Probable user error. Only the master catalog name, password, and file parameters may be coded for the ALTER REMOVEVOLUMES function.

40 Do not attempt the invalid ALTER commands. Correct the commands and rerun the job.

44 Probable system error. Call IBM for programming support.

46 Insure that the target catalog for Define space is a VSAM catalog.

48 Insure that the target catalog for Delete Space is a VSAM catalog.

50 Probable system error. Call IBM for programming support.

52 Insure that the target catalog of LSPACE is a VSAM catalog.

54 Do not open a non-empty data set for reset processing that is not reusable.

56 Do not open a data set for reset processing that is inhibited for update processing.

58 Insure that the CATALOG parameter specified an Integrated Catalog Facility catalog.

60 Probable user error. Insure that Access Method Services is APF authorized.

62 Probable system error. Call IBM for programming support.

64 Change records to tracks or cylinders and rerun the DEFINE command.

66 Remove the RECOVERY parameter and rerun the job.

68 Change the space request to tracks or cylinders and rerun the DEFINE command.

50 VVDS manager error.

2 An error has occurred while processing a VVDS. A VVR has been written to a VVDS. The catalog named in the VVR has not previously referenced the VVDS, and this condition was not expected.

4 VVR type is incorrect: The first VVR is not primary or the following VVR's are not secondary.

6 A requested VVR was not found.

8 DEFINE command for a VVDS has failed because a VVDS already exists on the volume.

10 A VVDS volume could not be allocated to the job step.

12 An attempt to create a VVDS has failed.

14 A DELETE command has been issued for a VVDS. The VVDS could not be deleted because it is not empty.

16 Insufficient virtual storage available for VVDS Management.

18 I/O error processing a VVDS.

20 The name of the catalog being processed was not found when expected in the control record of a VVDS.

22 A request to write a VVR into a VVDS could not be processed because the maximum number of catalogs that can have VSAM data on a volume has been reached.

24 Error initializing a VVDS for I/O.

26 Error obtaining a DSCB for a VVDS.

28 An attempt to extend a VVDS has failed.

30 A request to write a VVR into a VVDS could not be processed. The VVDS has insufficient space for the VVR, and cannot be extended because it already has the maximum number of extents.

32 A request to write a VVR into a VVDS could not be processed. The VVDS is of maximum size and has insufficient space for the VVR.

34 VVDS Management has been invoked with no valid function requested.

36 A request to write a VVR could not be processed because the VVR was larger than the maximum size of a valid VVR.

38 A DELETE command with the NOSCRATCH parameter has been issued for a VVDS. The VVDS entry was not deleted from the catalog because the catalog has VSAM data on the VVDS volume.

40 An attempt to scratch a VVDS has failed.

80 An invalid CI was read from the VVDS.

90 The VVDS manager attempted to write a CI to the VVDS, but the CI was invalid. The system writes a dump to SYS1.DUMP.

92 The VVDS manager attempted to add a VVR to a VVDS CI, but the VVR was invalid. The system writes a dump to SYS1.DUMP.

94 The VVDS manager, while attempting to remove a VVR from a VVDS CI, found that the CI was invalid. The system writes a dump to SYS1.DUMP.

96 The VVDS manager, while searching a VVDS CI for a VVR, found that the CI was invalid.

Programmer Response: For reason codes:

2 Run the DIAGNOSE command against the VVDS, comparing it with the catalog. If any problem is detected, recover as necessary.

4 Contact IBM for programming support.

6 Make sure that the volume serial numbers provided in VOLUME parameters and DD statements are correct. If all the commands are specified correctly, this condition may indicate an error in the catalog or VVDS. Run the DIAGNOSE command to determine if any catalog records are in error.

8 If the existing VVDS is to be replaced, delete it before defining the new VVDS.

10 Make sure that the VVDS name or the volume serial number provided is correct. If an Access Method Services command was being processed, ensure that all required FILE parameters are supplied. You can ensure that the volume will be mounted and available by providing a DD statement for the volume.

12 Ensure the volume has enough space available to define the VVDS. A minimum of three or four tracks is required. If sufficient space was available, contact IBM for programming support.

14 If the VVDS is to be deleted, first delete the VSAM data sets on the volume and then rerun the DELETE command; or, if the VVDS is to be recovered, rerun the DELETE command with the RECOVERY parameter.

16 Increase the region size available to the step.

18 Rerun the job.

20 Contact IBM for programming support.

22 Use a catalog that already has VSAM data on the volume; or, use a different volume.

24 Contact IBM for programming support.

28 There is probably insufficient space on the volume or in the VTOC to extend the VVDS, in which case no more VSAM data sets can be defined on that volume until space is made available to extend the VVDS. If sufficient space is available at the time this error occurs, contact IBM for programming support.

30 This error can sometimes be avoided by increasing the primary or secondary allocation quantities when defining the VVDS. Otherwise, use an alternate volume for the VSAM data.

32 Use an alternate volume for the VSAM data.

34 and 36:
Contact IBM for programming support.

38 Make sure that the correct catalog is being used and that the VVDS is correctly specified.

40 Contact IBM for programming support.

80 Contact IBM for programming support.

90, 92, and 94
Print the SYS1.DUMP data set, and contact IBM for programming support.

96 Contact IBM for programming support.

52 Permanent I/O error on user volume. An attempt to modify the VTOC of the volume on which a user specified data set is being defined of modified failed because of a read or write error.

x Reason codes are error codes returned from OS/VS DADSM.

Programmer Response: For reason code: See *OS/VS System Programming Library: Data Management* for the explanation of the DADSM return code. Correct the problem and rerun the job that failed.

56 Security verification failed.

2 All attempts to provide a password via the system operator were made without success or the user's RACF authorization was inadequate.

4 Non-system caller has specified password level (not master) in catalog parameter list.

6 No prompt allowed and password not provided on the Access Method Services command or the user's RACF authorization was inadequate.

8 User-specified verification routine did not authorize use of the data set.

10 It is detected that a system with the Time Sharing Option required a prompt to a terminal, but user terminal prompts were disallowed by the system attributes.

12 A prompt of a user terminal for security data encountered a system error.

14 System caller has provided incorrect password and has indicated that the system operator will not be prompted.

Programmer Response: For reason codes:

2 Message IEC301A has been printed until the number of ATTEMPTS is exceeded. The operator did not know the password needed to access this data set. Provide the operator with the correct password or obtain the required RACF authorization and rerun the job.

4 Contact IBM for programming support if user written programs are not calling VSAM catalog management.

6 Either ALTER the passwords to allow operator prompting or supply the password on the Access Method Services command or obtain the required RACF authorization.

8 Evaluate your user-specified verification routine to determine why register 15 was not zero when control was given back to the catalog verification routine.

10 Supply the proper password in the command or change the system to allow terminal prompting.

12 This is a system error. If there are no hardware problems, contact IBM for programming support.

14 System caller will prompt user for correct password.

60 Invalid entry type for requested action.

2 Probable system error. Invalid entry type for extract operation.

4 Invalid entry type (cluster or non-VSAM).

6 Invalid cluster entry for ALTER of data set attributes.

8 Invalid cluster or index entry for ALTER of buffer size.

10 Invalid entry type (CLUSTER) to ALTER the FREESPACE or WRITECHECK parameters.

12 Invalid entry type (CLUSTER) to ALTER volumes.

14 Probable system error. An invalid catalog parameter list was supplied in an attempt to add a volume.

20 System error. Upgrade set association in base cluster data record does not point to an upgrade set record.

22 System error. Data association in cluster record does not point to a data record.

26 ALTER of EXCEPTIONEXIT but the entry is not a data or index component.

28 ALTER of average RECORDSIZE but the entry is not a data or index component.

30 ALTER of expiration date but the entry is not a cluster, alternate index, or path.

36 An alias entry may only be DEFINED for non-VSAM or user catalog entries.

38 Locate for a GDG base and entry is not a GDG.

40 System error. Input base record to catalog upgrade management is not an alternate index, cluster or data type entry.

42 System error. Input base record to catalog reusable processing is not a data type entry.

44 An invalid entry type was encountered in a DELETE operation; other than the expected alias entry.

46 An invalid entry type was encountered in a DELETE operation, other than the expected VVR type.

Programmer Response: For reason codes:

2, 4, 6, 8, 10, 12, 14, 20, 22, 26, 28, 30, 40, 42
Ensure that the name of the entry specified in the command is correct; ensure that the catalog entry is still valid, by performing a LISTCAT run. If the reason code indicates a system error, list the catalog using the PRINT command with the DUMP 11 option and call IBM for programming support; otherwise correct the error and rerun the job.

36 Do not attempt an invalid DEFINE operation.

38 GDGs must have qualified names (for example, A.B). Ensure that all levels of qualification are specified for GDG, and resubmit the job.

44 Ensure that the proper entry name was specified and that the catalog reflects the expected structure. It may be necessary to rebuild the catalog.

46 Ensure that the proper entry name was specified.

64 Associated entry does not exist. This condition indicates that a system error has occurred such that the VSAM catalog cannot find either a data or an index entry which is associated with a cluster or alternate index entry.

2 Test field name not present in group space header.

4 Associated entry names do not exist.

6 The association of a truename record in an Integrated Catalog Facility catalog is invalid.

Programmer Response: For reason codes:

2,4 Call IBM for programming support.

6 Use Access Methods Services to define the associated base of the truename record.

68 No space available on user volume.

2 Cannot extend unique data set, no space on volume.

4 No secondary extent value specified.

6 No space for suballocation.

8 Maximum number of extents on volume reached and no space on volume.

10 A DADSM error was encountered other than the following return codes: 4, 8, and 12.

12 More than 16 extents per volume for reusable file.

16 No DA space available for extending a CRA.

Programmer Response: For reason codes:

2,4,8,16
Scratch unneeded data sets from the volume, or execute an Access Method Services ALTER command to add more candidate volumes to the catalog entry for the data set or execute an Access Method Services DEFINE command to add more suballocatable space to the volume.

6 Either DEFINE more space on the volume, DELETE unused data sets to make more space or use the ALTER volume command with the ADDVOLUMES parameter to the data set to provide space on a new volume.

10 System error. Contact IBM for programming support.

12 Reload the data set using larger primary allocation.

70 Component not found.

0 A generation data set component was not found in the GDG sphere record.

Programmer Response: For reason codes:

0 Contact IBM for programming support.

72 User volume not mounted.

x Reason codes are from VSAM open/close/end-of-volume, volume mount and verify routine. See codes associated with message IEC161I for reason code meaning.

Programmer Response: For reason codes:

x Ensure proper volumes are implicitly or explicitly allocated via Job Control Language. Also, verify that the volume and the volume information (time stamps) contained in the VSAM catalog are at the same level.

74 Cell not found.

0 The volume cell for a base clusters Data or Index Component was not found. This was a DEFINE Alternate index command being processed.

2 The relate cell was not found in the base cluster sphere record while a moved subrecord update was in progress.

4 Association cell not found for a path or alias record while a subrecord move update was in progress.

Programmer Response: For reason codes:

0 Run Access Method Services DIAGNOSE command for additional information. The base cluster may have to be deleted with the NOSCRATCH option and redefined with the RECATALOG option.

2,4 Run Access Method Services DIAGNOSE command against the catalog and then determine the action to be taken. Delete with the NOSCRATCH parameter and then define with the RECATALOG parameter.

76 No unit available for mounting or volume not mounted.

0 Access Method Services ALTER name change of a unique object but no volumes containing any part of the data set were mounted.

2 Volume not mounted when expected.

4 Unit not available to mount a volume required for catalog recovery area (CRA) processing.

6 Catalog Recovery Area (CRA) volume not mounted during end-of-volume or close request for a VSAM data set when the catalog update was required.

8 A scan of the task I/O table (TIOT) failed to find the user specified JCL DDname statement.

Programmer Response: For reason codes:

0,2,4,6,8
Ensure that JCL statements cause the proper volumes and units to be allocated. Also, that all DDnames specified match the Access Method Services dname parameter when specified. Also, determine a minimum unit count and have sufficient units available for the job execution. Ensure that volumes are allocatable by the use of dynamic allocation.

80 Invalid related object. The object specified in the RELATE parameter of a DEFINE command does not exist, or is improper for the type of object being defined.

0 Related object is reusable.

2 Related object is a relative-record data set.

4 Related object does not exist.

6 Alternate index or path is not allowed to be built over a catalog.

8 Name of alternate index or path and related object are identical.

10 No pointer to a related object of an alternate index or path.

12 Alternate index is not to be built over a base cluster or related path object is not a cluster or an alternate index.

14 A DEFINE PATH command specified a PATHENTRY name of a PAGESPACE object.

16 A DEFINE PATH command has specified a PATHENTRY name for a VSAM Volume Data Set.

20 The related object for a DEFINE ALTERNATEINDEX is a VSAM Volume Data Set (VVDS).

24 The entry type specified in the Catalog Parameter List is not valid for a define request.

26 The FVT passed to build the VVR records is not a Data or Index FVT.

28 The Related name specified for a DEFINE ALIAS command is for a record type other than NONVSAM or USERCATALOG.

30 The version number of the related Generation Data Set name does not match the version number in the base Generation Data Group. The DEFINE ALIAS will fail.

Programmer Response: For reason codes:

0,2,4,6,8,10,12
Correct the DEFINE command so that the entry named in the RELATE parameter is proper for the type of object being defined.

14 and 16:
Correct the pathentryname and rerun the DEFINE PATH command.

20 Correct the related name and rerun the DEFINE AIX command.

24 and 26
Contact IBM programming for support.

28 Insure the related name is correct and that a DEFINE ALIAS command is wanted. If the above is true refer to Access Method Services DIAGNOSE command to obtain additional information.

30 Correct the version number in the GnnnnVnn part of the generation data set name and rerun the DEFINE ALIAS command.

84 Unexpired purge date.

0 An attempt to delete an entry failed because its expiration date has not been reached, and the DELETE command did not specify the PURGE option.

Programmer Response: For reason code:

0 Specify the PURGE option, if desired, and rerun the DELETE command.

86 Recatalog error.

0 No related PATHENTRY name was found on the path catalog record.

2 The recatalog flag was not on in the CLUSTER Alternate Index FVT.

4 Something other than a CLUSTER or Alternate Index type object had the RECATALOG parameter specified.

6 The primary VVR (VSAM Volume Record) for the object that is being recatalog was not found on the first volume serial number specified. The primary VVR contains the data set information need to recatalog the object.

8 The RECATALOG parameter is invalid on the DEFINE command for an ICF catalog.

10 The RECATALOG parameter on the Define of a pagespace is invalid. Pagespaces cannot be recataloged.

Programmer Response: For reason codes:

0 Insure the PATHENTRY name is correct. If it is refer to Access Method Services, DIAGNOSE command to obtain additional information.

2 If this error occurs, contact IBM for programming support.

4 Insure that the object being recataloged is a cluster or alternate index.

6 Specify the primary volume serial number first in the VOLUMES parameter and rerun the DEFINE RECATALOG operation. (The primary volser is the first volume allocated DASD space). Remove the RECATALOG parameter and rerun the Define for the ICF catalog.

10 Remove the RECATALOG parameter from the DEFINE command. Any VVR records for the pagespace on the volume must first be deleted. Refer to the Access Method Services "DELETE" command for removing the VVR records. When all VVR records are removed from the VSAM Volume data set, then rerun the DEFINE PAGESPACE Command.

88 Error with a catalog recovery area (CRA) define operation.

6 The total space specified on an Access Method Services DEFINE RECOVERABLE CATALOG was not able to contain the size specified for the catalog and the one cylinder of space required for the catalog recovery area (CRA).

Programmer Response: For reason code:

6 Allow for a 1 cylinder CRA and the total catalog size in the total space on the DEFINE RECOVERABLE CATALOG operation. The VSAM data set or catalog cannot be extended beyond its current space allocation because it has already reached the maximum number of extents permitted within its data spaces, namely 123 for a VSAM data set that is not a catalog.

90 Delete error.

2 Attempted to delete the Master Catalog.

4 Unable to determine if catalog is empty.

6 Invalid DELETE TRUENAME request, associated base object exists.

8 Pagespace record damaged; it could not be determined if pagespace was active.

10 Generation data set not found in generation data group.

12 Required FILE parameter not specified on DELETE VVR command.

14 No DD found to match supplied DD name on DELETE VVR request.

16 DELETE VVR request for a VVR with an associated catalog.

Programmer Response: For reason codes:

2 Determine if correct catalog is specified. If so, rerun job with different master catalog.

4 Specify FORCE, RECOVERY, or run DIAGNOSE and recommended action.

6 User error.

8 Run DIAGNOSE and take recommended action.

10 Run LISTCAT to determine the generation data sets in the generation data group and rerun the delete job with the correct generation/version number.

12 Specify FILE parameter and rerun the job.

14 Check FILE parameter and rerun the job with correct DD name.

16 User error.

92 Maximum number of extents reached.

Programmer Response: For reason code:

0 List the catalog, in order to determine space fragmentation. Delete and redefine data spaces in order to reduce fragmentation. Use the REPRO command to reorganize the data set in order to reduce fragmentation.

94 An OS/VS DADSM Obtain request failed during a VSAM catalog delete request.

4 Correct volume was not mounted for OBTAIN.

8 OBTAIN did not find requested format-1 DSCB on specified volume.

12 OBTAIN encountered I/O error in the volume's VTOC.

x The reason code is the Obtain return code.

Programmer Response: For reason codes:

4 Check JCL and file parameters, and make sure required volume is mounted.

8 Make sure the correct volume is mounted.

12 Check for possible hardware error.

x Determine the meaning of the obtain return code. See *OS/VS2 System Programming Library: Data Management* for these return codes and take the appropriate corrective action before rerunning the job that failed.

96 Error in specifying key length, key position, or record size for an alternate index or spanned cluster.

0 Key specified for spanned record exceeds control interval size.

4 Maximum logical record size for spanned records exceeds control area size.

6 Alternate index key position plus key length for base cluster is larger than control interval size minus 10 for spanned records.

8 Alternate index key position plus key length for base cluster is larger than record size.

Programmer Response: For reason codes:

0,4,6,8
Correct the erroneous parameter (KEYS or RECORDSIZE) and rerun the job.

98 An unusual condition occurred during ALTER name of a unique or non-VSAM data set.

x The reason code is the same as returned by the OS/VS DADSM RENAME function in the status byte of the RENAME volume list.

Programmer Response: For reason code:

x Determine the meaning of the RENAME return code. See *OS/VS2 System Programming Library: Data Management* for these return codes and take the appropriate corrective action before before rerunning the job that failed.

102 An OS/VS DADSM SCRATCH request failed during a VSAM catalog delete request for a unique or non-VSAM data set.

x The reason code is the OS/VS DADSM SCRATCH function return code.

Programmer Response: For reason code:

x Determine the meaning of the SCRATCH return code. See *OS/VS2 System Programming Library: Data Management* for these return codes and take the appropriate corrective action before rerunning the job that failed.

104 A DEFINE command is attempting to define a second VSAM master catalog when a VSAM master catalog already exists and is open.

Programmer Response: Delete the original catalog, if required.

106 A format-4 DSCB processing error was encountered.

0 A read of a format-4 DSCB on a volume returned an erroneous record.

2 The format-4 DSCB time stamp mismatches the corresponding catalog time stamp.

4 A DEFINE SPACE was attempted. The catalog contains a volume record indicating prior ownership of the volume, but the format-4 DSCB does not indicate VSAM ownership. The DEFINE operation is failed.

Programmer Response: For reason codes:

0 Determine if the volume table of contents on the volume has been destroyed and perform an IEHDASDR operation to repair the volume. If the volume has to be restored, the information in the VSAM catalog must be updated to match the restored version of the volume. This may require deleting all VSAM data sets and VSAM space from the catalog and redefining the VSAM space and importing the data sets.

2 The physical contents of the volume implicated disagree with the information about the volume in the VSAM catalog that own the volume. This may be due to IEHDASDR DUMP/RESTORE activity or to Access Method Services REPRO activity. Determine whether the volume or the catalog is down-level and restore it to the proper version of the data. This will only be encountered with recoverable VSAM catalogs.

4 Probable user error. Incorrect volume (with correct volser) has been mounted, or the volume has been restored or formatted and is no longer consistent with the catalog.

108 Invalid field name in field parameter list. The field name does not exist in the VSAM Catalog Management Dictionary. This is a system error.

Programmer Response: For reason code:

0 Call IBM for programming support.

110 Unable to modify or delete RACF profile.

4 The data set to which an ALTER RENAME command is directed is RACF indicated. However, there is no RACF profile.

8 An ALTER RENAME command has been issued for a RACF-protected data set. This failed because as a result of the new name, the data set cannot be defined to the Security Subsystem.

Programmer Response: For reason codes:

4 Make the data set RACF-protected, or remove the RACF indicator.

8 Use a new name acceptable to the Security Subsystem.

112 Invalid Field Parameter List (FPL).

2 Invalid group code in FPL, combination name in test FPL, or no test condition specified, or inconsistent group code.

Programmer Response: For reason code:

2 Probable system error in which case one should contact IBM for programming support. However, if a user program is interfacing directly with VSAM catalog management, the Field Parameter List contains improper data.

114 A duplicate RACF profile exists.

0,4,8, As a result of an IMPORT, IMPORTRA, or DEFINE command, VSAM has attempted to establish a RACF profile for a cluster/alternate index, data, or index object (0, 4, and 8 respectively). This failed because a profile with the same name already exists.

Programmer Response: For reason codes:

0,4,8 Either (1) issue an IMPORT or DEFINE command for the data set with a different cluster/alternate index, data, or index name, or (2) have the owner of the profile with the name you wish to use delete that profile and associated data, if any.

116 VSAM catalog records are invalid. VSAM catalog records (with the exception of volume records) connected with the current operation cannot be properly interpreted.

2 No data returned from EXTRACT for cluster/alternate index (AIX) processing.

4 Index entry type not obtained in cluster/AIX processing.

6 Data entry type not obtained in cluster/AIX processing.

8 No data returned from EXTRACT for path processing.

10 Error attempting to obtain AIX data record.

12 Error attempting to obtain AIX index record.

14 Error attempting to obtain data record for upgrade entry.

16 Error attempting to obtain index record for upgrade entry.

18 GENLVLS cannot be resolved for GDG.

20 Error attempting to obtain base cluster data record.

22 Error attempting to obtain base cluster index record.

24 Invalid association returned during upgrade retrieval.

Programmer Response: For reason codes:

2,4,6,8,10,12,14,16,20,22,24
The VSAM catalog may need to be restored if the entries in error cannot be deleted by use of the Access Method Services DELETE command.

18 If the request was for a level which does not exist (for example, A.B (-4)), specify proper level. If the GDG base is bad, delete the GDG base and redefine it.

118 Data set name ineligible for RACF definition.

0,4,8 As the result of a DEFINE, IMPORT, or IMPORTRA command, VSAM attempted to define a RACF profile for a cluster/alternate index, data, or index object (reason code 0, 4, or 8 respectively). The profile could not be established because this data set cannot be defined to the Security Subsystem.

Programmer Response: For reason codes:

0,4,8 Examine the requirements for defining a data set in the Security Subsystem as specified in your installation's security subsystem documentation. Modify the data set characteristics (usually, name) accordingly.

120 Attempt to modify non-existent or system field. This is a system error.

Programmer Response: For reason codes:

0 Call IBM for programming support.

124 Invalid control interval number.

2 Invalid RBA return code from VSAM record management.

4 Define of a VSAM catalog and the VSAM open encountered an incorrect record.

6 Catalog Control Record (CCR) was retrieved erroneously.

8 Invalid catalog recovery area (CRA) control interval number encountered.

10 Control interval pointer in the true name record points to a free record.

12 The chain of deleted CIs is incorrect. If CIs are available that have never been used, the operation will complete normally and this message is a warning. Otherwise, the operation is failed.

14 The RDF or CIDF in catalog buffer has been overlaid during PUT processing of a record. The record is not written to the catalog.

16 The count of variable fields is incorrect, indicating that record header information has been overlaid during PUT processing of a record. The invalid record is not written to the catalog.

18 Invalid RBA on PUT UPDATE or DELETE. The record is not written to the catalog.

20 There was an attempt to add an invalid key for high keyrange truename. The operation is failed.

22 See the xx field in associated message IEC333I to determine if the requested operation was a PUT or a GET.
On PUT-- The record being PUT to low keyrange has an invalid record size field at X"2D." Either the record size field is greater than X"01F9," or the calculated sum of the record header, the GOPs (group occurrence pointers), and sets of fields does not equal record size field. The invalid record is not written to the catalog. On GET-- A record with invalid record size field at X"2D" existed in the catalog prior to the installation of the validity check logic developed in response to APAR OZ38467. On GET, this message is a warning and the function will attempt to continue.

26 An invalid CI number was passed to catalog via the CTGENT field of the CTGPL.

28 An invalid CI member was passed to an ICF catalog via the CTGENT field of the CTGPL.

30 An invalid CI number was passed to an ICF catalog via the CTGENT field of the CTGPL.

32 A CI number was requested for an ICF catalog record. The limit of CI numbers returned has been exceeded.

Programmer Response: For reason codes:

2,4,6,8,10
System error indicating that the VSAM catalog or catalog recovery area may need to be restored. Use of the Access Method Services List catalog (LISTCAT) or list catalog recovery area (LISTCRA) may be in error. It may be necessary to contact IBM for programming support.

12 Run the REPRO rebuild freechain function to correct the chain of free records.

14, 16, 18, and 20:
If one of the records read during the request failed validity checking (indicated by message IEC331I 124-22), that record is assumed to be the cause of the error. No dump is produced and the invalid record must be recovered or rebuilt. Otherwise, print the SYS1.DUMP produced by this error (print NUC,CURRENT,SQA,CSA) and contact IBM for programming support.

22 On PUT-- Print the SYS1.DUMP produced by this error (print NUC,CURRENT,SQA,CSA), and contact IBM for programming support.
On GET-- The record is identified by message IEC333I. The structure containing the record must be recovered or rebuilt.

26, 28, and 30:
Correct invalid CI number and resubmit the job. If the invalid CI number was passed by an IBM program, call IBM for programming support.

32 Either reorganize the program so the limit is not exceeded or specify CTGBOTH in CTGPL. If an IBM program is requesting CIs to be returned, call IBM for programming support.

128 User-provided storage is outside user region. Probable system error.

0 Integrity check of user catalog parameter list (CPL), field parameter list (FPL), or field vector table (FVT) failed.

2 Storage validity check failed on user Field Parameter List (FPL) or on the user work area referenced from the Catalog Parameter List (CPL).

6 Catalog Parameter List (CPL) field that references the work area is zero.

Programmer Response: For reason codes:

0,2,6 Contact IBM for programming support unless a user-written program is interfacing directly with VSAM catalog management.

132 Invalid pointer value in argument list. Probable system error.

2 No pointer to volume list.

4 No catalog Field Parameter List to access method data statistics block of data.

6 No catalog Field Vector Table from cluster level.

8 No pointer in catalog Field Parameter List to data set attributes.

10 No catalog Field Parameter List for volume space parameters.

12 No pointer to expiration date value.

14 No pointer to creation date in catalog Field Parameter List.

16 No pointer to device type in catalog Field Parameter List.

18 No catalog Field Parameter List in catalog Field Vector Table.

20 No pointer to the work area.

22 No pointer to password data of related object.

24 No pointer to OWNERID in catalog Field Parameter List.

26 No pointer to cluster space parameter in catalog Field Parameter List.

28 No pointer to data space parameter in catalog Field Parameter List.

30 No pointer to index space parameter in catalog Field Parameter List.

32 No buffer size catalog Field Parameter List in data catalog Field Vector Table.

34 No buffer size catalog Field Parameter List in cluster catalog Field Vector Table.

36 No buffer size catalog Field Parameter List in index catalog Field Vector Table.

38 No logical record size catalog Field Parameter List in cluster or data catalog Field Vector Table.

40 No pointer to file sequence number in volume list catalog Field Parameter List.

48 AMDSB not found.

50 Component length is zero because of damaged record or incorrect pointer.

52 Cell length of a VSAM extension or GDG extension is zero.

54 Pointer to record does not exist when searching for a component.

56 The data component volume cell address is zero while attempting to build an index component sequence set volume cell.

58 Pointer to first cell does not exist before searching for a particular cell type.

60 Pointer passed end of search when searching for cluster component subrecord.

62 Pointer passed end of search when searching for an alternate index component subrecord

64 Searching length limit exceeded when searching GDG subrecord.

66 Searching length limit exceeded when searching GDS subrecord.

68 Component length is zero.

70 Component length of a GDS is zero.

72 Cell length of zero is encountered when searching for a cell.

74 Cell length of zero encountered when searching for volume cell in catalog record.

76 Cell length of a volume cell is zero when trying to update CIRBA in the appropriate volume cell.

Programmer Response: For reason codes:

2,4,6,8,10,12,14,16,18,20,22,24,26,28,30,32,34,36, 38,40
Contact IBM for programming support unless a user-written program is interfacing directly with VSAM catalog management.

48, 50, and 52:
Run the DIAGNOSE command to check for a damaged catalog record.

54 Programming error.

56 Call IBM programming support for assistance.

60, 62, 64, 66, 68, 70, 72, 74, and 76:
Run the DIAGNOSE command to check for a damaged catalog record.

136 Required parameters not supplied. Probable system error.

2 No length for volume serial list area.

4 Missing dname parameter with define unique data set.

6 Missing cluster entry name.

8 Missing space parameter catalog Field Parameter List in space catalog Field Vector Table.

10 Missing VOLSER list pointer in space catalog Field Vector Table.

12 Missing dname pointer in space catalog Field Vector Table.

16 No space parameter on "cluster" or "data" catalog Field Vector Table.

18 Average logical record size missing.

20 No key specified.

22 Unique data set needs DD statement for rename or DD statement missing.

24 No entries in volume list.

26 No entries in device type list.

32 An alias name was not provided on a DEFINE command.

34 Generation data group limit or attribute data were not provided on a DEFINE command.

36 No Volume Mount Table (VMT) address supplied in the Catalog Parameter List (CPL) from VSAM open/close/end-of-volume.

40 Required DD statement missing for mountable unit. Unable to mount volume required for DELETE NONVSAM SCRATCH processing.

42 Error from IDA0192V attempting to mount volume required for DELETE NONVSAM SCRATCH processing.

Programmer Response: For reason codes:

2,4,6,8,10,12,16,18,20,24,26,36
Contact IBM for programming support.

22 Supply a dname job control statement.

32,34 Correct the DEFINE command and rerun the job.

40 Use file parameter on DELETE and allocate a mountable unit to the job via a DD statement (specify DEFER mount).

42 Be sure that mountable unit was allocated for DELETE processing.

140 Inconsistent or conflicting arguments provided.

2 Index component found for relative record data set or entry-sequenced data set. This is a system error.

4 Key range is invalid for catalog define or the Key ranges are not specified in ascending sequence in the DEFINE of a VSAM Key sequenced data set.

6 Key ranges found on both data and cluster catalog Field Vector Table. This is a system error.

8 Work area too small. This is a system error.

10 Space parameters found on both cluster and data catalog Field Vector Table. This is a system error.

12 Buffer size specified more than once. This is a system error.

14 Average logical record specified on index catalog Field Vector Table. This is a system error.

16 Average logical record not valid for catalog DEFINE. This is a system error.

18 Average logical record size size specified on cluster and data catalog Field Vector Table. This is a system error.

20 The key lengths for data and index are not equal. This is a system error.

22 Inconsistent volume lists with different names in each list.

24 Primary allocation for data space less than required for the catalog.

26 Invalid space request type for catalog DEFINE. This is a system error.

28 Unequal number of volume serial numbers and file sequence numbers in list entries.

30 More device type entries exist than volume serial numbers.

34 Invalid space request type on DEFINE. This is a system error.

40 Dname not specified for a recoverable catalog.

44 Relative-record data set has a maximum record length which is not equal to the average record length.

46 EXCEPTIONEXIT was specified for a VSAM (not enhanced VSAM) entry.

48 Access Method Services ALTER of the expiration date field for a non-VSAM (not enhanced VSAM) catalog entry.

50 Invalid update extend request.

52 Invalid input to VSAM catalog upgrade management.

54 Index component control interval number not provided as input for reset of a reusable data set processing in VSAM Catalog Management.

56 Invalid password or code specified-- must be alphanumeric or special characters.

60 The maximum logical record size for an ICF catalog has been exceeded.

62 The maximum average logical record size is less than 4086 bytes for an ICF catalog define.

64 Invalid group code for field management.

66 Component key length exceeds limit.

70 The volume serial number on the VOLUME parameter does not match the volume serial number in the name of the VSAM volume data set (VVDS) name.

74 The define of a VSAM Volume Data Set (VVDS) had the INDEX option specified. A VVDS is an entry sequenced data set.

76 More than one volume serial number specified for the define of an ICF catalog.

78 Not a valid request to field management.

80 The size of the Generation Data Set subrecord exceeds the maximum spanned record size of the ICF catalog.

82 Key ranges not allowed on a DEFINE of an ICF catalog.

84 REUSE parameter specified with UNIQUE or KEY ranges.

86 Invalid group code is found when processing RELREPNO in field management

88 Volume serial in user catalog connector record does not match that in the parameter list for CONVERTV.

90 More than one volume serial number is specified for the DEFINE request of a non-VSAM data set, and one of the volume serial numbers is ******.

Programmer Response: For reason codes:

2,6,8,10,12,14,16,18,20,26,34
If the reason code indicates a system error, contact IBM for programming support. Otherwise, follow the programmer response indicated by the reason code.

4 Correct the DEFINE command.

22 Correct the VOLUMES parameter or the dname job control statement.

24 Increase the space quantity and rerun the job.

28,30,44
Correct the input and rerun the job.

40 Supply the FILE parameter and rerun the job.

46 ALTER exception exit is not possible for VSAM (not enhanced VSAM) data sets.

48 Do not attempt to alter non-existent data.

50,52,54
System error. Contact IBM for programming support.

56 Correct password or code specification, using only alphanumeric and special characters.

60 Change the maximum logical record size to something less than 32,400 bytes and rerun the define of an ICF catalog.

62 Increase the maximum average logical record size and rerun the DEFINE command.

64 System programming errors.

66 Run the DIAGNOSE command to check for a damaged catalog record.

70 Correct the wrong volume serial number and rerun the DEFINE of the VVDS.

74 Remove the INDEX option and rerun the define operation.

76 Remove the extraneous volume serial number and rerun the Define ICF catalog operation.

78 Check Catalog Parameter List for calling field management.

80 Do one of the following:

1. Reduce the size of the Generation Data Set by removing unused volume serial numbers.
2. Define a new ICF catalog with a larger maximum spanned record size. The default is 32,400 bytes.

82 Remove the KEYRANGES parameter and rerun the DEFINE command.

84 Remove one of the conflicting parameters and rerun the DEFINE command.

86 System interface errors call IBM programming support.

88 Check volume cell in user catalog connector record call IBM programming support.

90 If the indirect volser feature (a non-VSAM data set defined with a volser of ******) is wanted, remove the other volsers from the DEFINE request.

144 Invalid entry name format or the name has an initial character as a numeric.

2 Invalid first character (non-alphabetic). Alternate index or path name is invalid; first character must be alphabetic.

4 Unique name invalid because it uses Z999999 which is restricted.

6 Data and index names are not allowed for a catalog.

8 A syntax error was encountered in examining a generation data group name.

10 A reserved high-level qualifier name was specified on an ICF define operation. The following are reserved high-level qualifiers:

Z9999992
Z9999994
Z9999996
CATINDEX

Programmer Response: For reason codes:

2 Correct the entry name.

4 Correct the name to avoid Z999999.

6 Avoid the use of names at the INDEX and DATA level of DEFINE MASTERCATALOG and DEFINE USERCATALOG.

8 Correct the name and rerun the job.

10 Change the restricted high-level qualifier to something else and rerun the define operation.

148 Volume already owned by another VSAM catalog.

Programmer Response: For reason code:

0 Specify a different volume and rerun the command or use the Access Method Services ALTER REMOVEVOLUMES command to reset the volume ownership if a catalog should not own the volume.

152 Cannot delete a non-empty catalog.

Programmer Response: For reason code:

0 If it is desired to delete the catalog without deleting all of its entries, the FORCE parameter can be specified on the Access Method Services DELETE CATALOG command.

156 Volume does not contain a data space with sufficient space for another VSAM data set. There is insufficient space in the data spaces allocated on the volume to satisfy a request for suballocation. There is not enough contiguous space on the volume and contiguous space is required for a recoverable catalog's CRA. A VSAM request for space cannot be satisfied within five extents.

Programmer Response: For reason code:

0 Use the DEFINE command to create more data spaces; or delete unneeded VSAM data sets; or decrease the amount of storage required by the object being defined; or scratch some non-VSAM data sets in order to create additional contiguous space. If the failure was a result of an SMF error, define at least one cylinder of data space on the volume and rerun the job that failed.

160 Deletion of space object did not cause volume to be deleted. A DELETE command which deletes a space object will cause all data spaces found on the volume to be deleted, except for those which still contain data belonging to non-deleted VSAM data sets. This is merely an informational message.

Note: This error code is always returned when DELETE space is requested for a volume containing a catalog.

Note: (This error code can be returned with message IDC0526I if an ALTER REMOVEVOLUMES command was issued specifying a volume owned by the master catalog.)

Programmer Response: For reason code:

0 If it is desired to delete all VSAM space and relinquish volume ownership without deleting all of the objects, the FORCE parameter may be used. This cannot be used on a catalog volume. Also, all VSAM objects on the volume must still be explicitly deleted from the catalog. If this error code was returned with message IDC0526I, the DELETE SPACE FORCE command may be used for volume cleanup of volumes owned by the master catalog.

164 Insufficient storage available for work area. This condition arises when there is insufficient virtual storage available for VSAM catalog management.

2 GETMAIN failure, insufficient virtual storage available.

10 GETMAIN failure, insufficient virtual storage available for the Catalog Communication Area.

Programmer Response: For reason codes:

2,10 Increase the region size available to the step.

168 Unsupported device type.

2 An Access Method Services DEFINE or IMPORT command specifies a device type that was not system generated into the system, or is not acceptable for a VSAM catalog or data set.

4 An invalid device name was specified on a define of a non-VSAM entry.

Programmer Response: For reason codes:

2,4 Specify a device type or device name that is acceptable to the system.

172 Duplicate data space name on volume. A DEFINE command specifies the name of a data set, with the UNIQUE attribute, but there is already a data set on the specified volume with that name; such a data set might be a non-VSAM data set. This will also occur when a key-sequenced data set with the UNIQUE attribute specifies more than one key range on the same volume.

2 Duplicate name on volume during a define of a unique data set.

4 Duplicate name on volume during an update extend request in VSAM catalog management.

Programmer Response: For reason codes:

2,4 Select another data set name, scratch the original data set from the volume or ensure that there are as many volumes as key ranges for define of a unique KSDS.

176 No space in VTOC (volume table of contents) for DSCB (data set control block). During the definition or extension of a data space, an attempt was made to perform a DADSM allocate or extend function on a volume in which a new DSCB was to have been written, but there is no space in the VTOC for an additional DSCB.

Programmer Response: For reason code:

0 Delete any unneeded data sets or data spaces from the volume, in order to make additional DSCBs available, or recreate the volume with a larger VTOC.

180 Data space name not found. Probable system error.

Programmer Response: For reason code:

0 Perform the problem determination action. The catalog or a volume may have been totally or partially destroyed.

184 Data set currently open and cannot be deleted or altered. This condition arises when two different jobs are referencing the same VSAM data set simultaneously, or an attempt was made to delete a pagespace while there was an active pagespace on the same volume.

4 The data or index component (or both) is (are) in use and the data set cannot be deleted.

6 Attempted DELETE or ALTER of a PAGESPACE cannot be allowed. UCB indicates the possibility of an active PAGESPACE on the volume.

Programmer Response: For reason code:

4 Rerun the command, and to ensure proper completion, specify a disposition parameter of OLD, not SHR.

6 If a PAGESPACE is to be deleted or altered, it must not be known at IPL as an eligible PAGESPACE, or the volume must not be online at IPL.

188 (As a catalog management return code)

2 A required JOBCAT or STEPCAT is not available for processing of a VSAM catalog request. The request is ignored until the catalog is available.

4 The catalog time stamp in the CCR is not the same as the value that was moved into the CAXWA when this system opened a catalog on this volume. The catalog that was opened has been deleted and cannot be used.

Programmer Response: For reason code:

2 If this error causes a job to terminate, contact IBM for programming support. Otherwise, it is only a means of communicating a condition within the system that is not an error.

4 All jobs allocated to this catalog must terminate or logoff to cause the catalog control blocks to be freed.

188 (as a volume error code) Catalog unavailable for the remainder of processing which establishes volumes as candidates for future extension. This occurs during define of VSAM data sets only when another error is encountered during candidate processing. This code appears as a volume error code for the volumes that are not processed due to the other error code which will appear in the Access Method Services jobstream output.

Programmer Response: Correct the error associated with the other error code and rerun the job.

192 Maximum logical record length specified is greater than 32,761 for a non-spanned data set.

Programmer Response: For reason code:

0 Reduce the maximum logical record length or define the data set as spanned.

196 Data component control interval size specified is greater than 32,767.

Programmer Response: For reason code:

0 Reduce the control interval size of the data component.

200 The specified or defaulted control interval size of the index component is greater than the maximum block size of the index device.

Programmer Response: For reason code:

0 Reduce the control interval size of the index component or use a different device with a larger maximum block size.

204 Key specification extends beyond end of maximum logical record.

Programmer Response: For reason code:

0 Reduce the key length, change the key position, or increase the logical record length.

208 Buffer space specified is too small. The buffer size specified during a define action is too small to contain the minimum number of control intervals for the type of VSAM data set being defined. An indexed data set requires enough virtual storage for two data component control intervals, plus one for an index component control interval; a non-indexed data set requires two for the data component.

Programmer Response: For reason code:

0 Increase the buffer size specified (via the BUFFERSPACE parameter of the DEFINE command).

212 Control interval size calculation unsolvable. This condition arises should VSAM Catalog Management be unable to compute an acceptable control interval size value. This condition only occurs in the DEFINE and IMPORT commands.

0 Control interval and/or control area calculations are unsolvable with specified parameters.

4 Specified and default values result in only one control interval per control area for a key-sequenced data set.

6 Using the specified or default values, the maximum index control interval size for the device would be exceeded (for nonunique).

8 Using the specified or default values, the maximum index control interval size for the device would be exceeded (for unique).

10 Buffer space too small for nonunique object.

Programmer Response: For reason codes:

0 Refer to *OS/VS Virtual Storage Access Method (VSAM) Programmer's Guide* to determine which of the specifications (buffer size, control interval size, device type, logical record size, and the UNIQUE attribute) may have caused the problem. The UNIQUE attribute is not applicable for ICF catalogs or objects defined into ICF catalogs.

4 Correct the input and rerun the job.

6,8 Increase the data control interval size or decrease the data control area size.

10 Correct the buffer size and rerun the job.

216 VTOC (volume table of contents) of volume is invalid. The volume's VTOC is not interpretable.

4 Invalid VTOC deleted during update extend processing for a VSAM data set.

Programmer Response: For reason code:

4 Have the volume restored in order to correct the VTOC.

220 DOS VTOC cannot be converted to an OS VTOC.During the initial allocation or extension of a data space on a DOS formatted volume, an error occurred in DADSM when it attempted to convert the DOS VTOC to an OS VTOC.

x The reason code represents the OS/VS DADSM error return code passed back to the VSAM catalog update extend function. See *OS/VS System Programming Library: Data Management* for an explanation of the reason code.

Programmer Response: For reason code:

x Restore the volume in order to correct the VTOC.

224 A field in a catalog entry has exceeded the maximum allowable number of repetitions. This condition arises should one of the repeating fields within the catalog entry be requested to be extended, and the extension is not possible; for example, should more than 255 volume serials be attempted to be placed in the entry, as might happen when an ALTER command attempts, through the ADDVOLUMES parameter, to add more candidate volumes to the entry.

0 Maximum number of volume extent (group occurrence) pointers have been processed.

2 More than 255 volume extent (group occurrence) pointers in a record, or more than 125 alternate indexes in the upgrade set.

System Action: The additional values are not added to the entry.

Programmer Response: For reason codes:

0,2 Determine why the excessive values are being supplied.

226 Test authorization macro failed. User is not authorized to perform the requested function.

04 For module IFG0191X-- To OPEN a catalog or CRA, the user must be running in key 0 - 7, or be in supervisor state, or be APF authorized. For module IFG0200N-- To do CLOSE or EOV processing for a catalog or CRA, the user must be running in key 0 - 7, or be in supervisor state, or be APF authorized. For module IGG0CLBZ-- To execute the CONVERTV function, the user must br APF authorized. For module IGG0CLC9-- Scheduler type superlocate (non-generic) is restricted. To issue LOCATE SVC, the user must be running in key 0 - 7, be in supervisor state, or be APF authorized.

Programmer Response: For reason code:

4 The response depends on the particular error.

228 Time-of-day clock read encountered a hardware error.

Programmer Response: For reason code:

0 Contact IBM for system support.

230 VSAM catalog retrieve of a control interval failed to get a low range record from the VSAM catalog. Probable system error.

Programmer Response: For reason code:

0 Contact IBM for programming support.

232 An error was encountered while VSAM Catalog Management was performing SMF (System Management Facility) processing.

x The reason code represents the VSAM catalog management return code encountered while performing SMF processing. The VSAM catalog management return codes correspond to the return codes listed for this message.

Programmer Response: For reason code:

x Examine the reason code returned and rerun the job after performing the required corrective measures.

234 End of data encountered while reading the low data key range of the VSAM catalog. Probable system error.

Programmer Response: For reason code:

4 Contact IBM for programming support.

236 Error encountered in space-map. This condition arises when the catalog's volume entry is invalid.

2 Error while scanning the space-map.
4 Invalid run length code found in the space-map.

Programmer Response: For reason codes:

2,4 The volume entry record needs to be reconstructed. If that is not possible the catalog needs to be restored.

238 No user catalog entry in the master catalog for Convert Volume processing.

Programmer Response: For reason code:

0 Use the Access Method Services IMPORT CONNECT command to put an entry for the user catalog into the master catalog.

240 Required DD statement not supplied.

4 The OS/VS DEVTYPE function failed during DEFINE processing.

8 Invalid device type encountered during DEFINE processing.

14 Delete of a unique object but no DD statement supplied.

16 Delete of a non-VSAM object with the scratch option but no DD statement supplied.

18 Delete of a VSAM object with the erase option but no DD statement supplied.

22 No DDname match found in the TIOT.

34 Unable to determine the DD statement name for a catalog recovery area (CRA).

36 A required DD statement is missing.

Programmer Response: For reason codes:

4,8,14,16,18,22,34,36
Provide the required parameter, or ensure that the DD statement name is correctly spelled, or that the DD statement is present for the step. Also, ensure that the volumes can be allocated by dynamic allocation. If all of this seems to be proper, contact IBM for programming support.

242 A physical I/O error occurred trying to erase the data set being deleted.

x The reason codes correspond to the VSAM Record Management error codes. See *OS/VS Virtual Storage Access Method (VSAM) Programmer's Guide* for an explanation of these codes.

Programmer Response: For reason code:

x Rerun with the NOERASE option. Data set cannot be deleted.

244 Erase action failed. This condition arises should VSAM Catalog Management be unable to open the VSAM data set being deleted.

x The reason codes correspond to the VSAM OPEN error codes. See *OS/VS Virtual Storage Access Method (VSAM) Programmer's Guide* for an explanation of these codes. The codes are also listed in this book under message IEC161I.

System Action: The delete action on that data set is voided.

Programmer Response: For reason codes:

x Determine why the erasure was impossible. Alternatively, rerun the DELETE command with the NOERASE option.

248 Volume record not found. This condition arises when a function requires a volume that is not owned by the VSAM catalog being used.

Programmer Response: For reason code:

0 If this occurs during a define action, check whether the volumes specified in the VOLUMES parameter have been defined in the catalog in which the present DEFINE command is cataloging a new VSAM object; if not, execute a define of a space object against the volumes. Further, the volumes might already be owned by a catalog other than the one in which the current object is being defined. In this case, choose other volumes or cause the volume to be owned by the current catalog. Similarly, this condition may arise during an IMPORT or ALTER operation.

250 VSAM Record Management has found a logical error during erase processing while deleting a VSAM data set.

x The reason codes correspond to the VSAM record management logical error codes. See *OS/VS Virtual Storage Access Method (VSAM) Programmer's Guide* for an explanation of these codes.

System Action The delete action on that data set is ignored, processing continues.

Programmer Response: For reason codes:

x The data set cannot be erased. Rerun the DELETE command with the NOERASE option.

IDC3010I UNABLE TO OPEN dsn

Explanation: The dname specified in the command with dsn indicated either concatenated catalogs or a data set different from dsn.

System Action: The command terminates with a condition code of 12.

Programmer Response: Ensure that the dname specified in the command does not identify a DD statement that defines concatenated catalogs, unless the desired catalog is the first in the concatenation. Ensure that the command and the JCL specify the same data set.

Problem Determination: Table I, items 1, 2, 3, 4, 29.

IDC3012I ENTRY entry name NOT FOUND

Explanation: The data set name supplied by the user (entry name) is not in the specified catalog. If a catalog was not specified, entry name is the first-level qualifier of a qualified data set name and not the name of a user catalog or an alias or a user catalog, as expected. See the associated second-level message for the specific catalog management error code values. In the TSO environment the second-level message is not displayed, except by request. To request it, enter a question mark (?) after the TSO READY message.

System Action: Processing associated with the entry name terminates.

Programmer Response: Verify that the entry name is spelled correctly. If a catalog was specified in the command or in a JOBCAT or STEPCAT statement, be sure it is correct. If no catalog was specified, be sure the first-level qualifier of the data set name is the name of a user catalog or the alias of a user catalog.

IDC3013I DUPLICATE DATA SET NAME

Explanation: One of the following conditions has occurred:

- The data set name supplied by the user already exists in the specified catalog.
- The data set name supplied by the user already exists as the first-level qualifier of a data set name in the specified catalog.
- The first-level qualifier of the data set name supplied by the user already exists as a data set name in the catalog.

See the associated second-level message for the specific catalog management error code values. In the TSO environment the second-level message is not displayed, except by request. To request it, enter a question mark (?) after the TSO READY message.

System Action: Processing of the command is terminated.

Programmer Response: Verify that the entry name is spelled correctly; check the use of the JOBCAT and STEPCAT catalogs, if employed. Be sure that the data set name or the first-level qualifier of the data set name you specify is not the same as a data set name or the first-level qualifier of a data set name that already exists in the specified catalog.

IDC3014I CATALOG ERROR

Explanation: An error occurred during a catalog operation. See the associated second-level message for the specific catalog management error code values. In the TSO environment the second-level message is not displayed, except by request. To request it, enter a question mark (?) after the TSO READY message.

System Action: Processing associated with the catalog error is terminated.

Programmer Response: See the programmer response associated with the second-level message.

IDC3016I CATALOG IS NOT AVAILABLE

Explanation: A required catalog is unavailable to perform the specified command. See the associated second-level message for the specific catalog management error code values. In the TSO environment the second-level message is not displayed, except by request. To request it, enter a question mark (?) after the TSO READY message.

System Action: The command is terminated.

Programmer Response: Ensure that the catalog specified by the command exists or determine why it cannot be accessed.

IDC3017I INSUFFICIENT SPACE IN CATALOG

Explanation: The catalog is full. There is no more space on the volume in which the catalog resides, or the maximum number of extents has been reached. See the associated second-level message for the specific catalog management error code values. In the TSO environment the second-level message is not displayed, except by request. To request it, enter a question mark (?) after the TSO READY message.

System Action: The command is terminated.

Programmer Response: Scratch unneeded data sets from the volume; delete unneeded VSAM data sets. See your system programmer for assistance in reorganizing the catalog.

IDC3018I SECURITY VERIFICATION FAILED

Explanation: The number of attempts (see the ATTEMPTS parameter of the DEFINE command in *OS/VS2 Access Method Services* was exceeded by the operator, or the user-specified verification routine (see the AUTHORIZATION parameter of the DEFINE command) failed to authorize use of the data set or the user's RACF authorization was inadequate. See the associated second-level message for the specific catalog management error code values. In the TSO environment the second-level message is not displayed, except by request. To request it, enter a question mark (?) after the TSO READY message.

System Action: The command is terminated.

Programmer Response: Correct the password specified, obtain the required RACF authorization, or determine why the verification routine did not allow access.

IDC3019I INVALID ENTRY TYPE FOR REQUESTED ACTION

Explanation: This condition arises if, for example, an attempt was made to DELETE an index component of a VSAM data set. See the associated second-level message for the specific catalog management error code values. In the TSO environment the second-level message is not displayed, except by request. To request it, enter a question mark (?) after the TSO READY message.

System Action: The command is terminated.

Programmer Response: Ensure that the specified action is allowed for this entry type. The entry type can be validated by the LISTCAT command.

IDC3020I INSUFFICIENT SPACE ON USER VOLUME

Explanation: A specified volume cannot accommodate either the initial allocation of space or a subsequent extension. See the associated second-level message for the specific catalog management error code values. In the TSO environment the second-level message is not displayed, except by request. To request it, enter a question mark (?) after the TSO READY message.

System Action: The command is terminated.

Programmer Response: Scratch unneeded data sets from the volume, or execute an ALTER command to add candidate volumes for the data set.

IDC3021I USER VOLUME NOT MOUNTED

Explanation: An attempt to update the VTOC on a volume failed because the volume was not mounted. See the associated second-level message for the specific catalog management error code values. In the TSO environment the second-level message is not displayed, except by request. To request it, enter a question mark (?) after the TSO READY message.

System Action: The command is terminated.

Programmer Response: Ensure that the volume is mounted.

IDC3022I INVALID RELATED OBJECT

Explanation: The object specified in the RELATE parameter of a DEFINE command does not exist, or is improper for the type of object being defined. See the associated second-level message for the specific catalog management error code values. In the TSO environment the second-level message is not displayed, except by request. To request it, enter a question mark (?) after the TSO READY message.

System Action: The command is terminated.

Programmer Response: Correct the DEFINE command so that the entry named in the RELATE parameter is correct.

IDC3023I UNEXPIRED PURGE DATE

Explanation: An attempt to delete an entry failed because its expiration date has not been reached, and the PURGE option was not specified. See the associated second-level message for the specific catalog management error code values. In the TSO environment the second-level message is not displayed, except by request. To request it, enter a question mark (?) after the TSO READY message.

System Action: The command is terminated.

Programmer Response: Specify the PURGE option, if desired, and rerun the command.

IDC3024I VOLUME OWNED BY ANOTHER CATALOG

Explanation: Only one catalog may own (that is, allocate space upon) a given volume. See the associated second-level message for the specific catalog management error code values. In the TSO environment the second-level message is not displayed, except by request. To request it, enter a question mark (?) after the TSO READY message.

System Action: The command is terminated.

Programmer Response: Specify an unowned volume and rerun the command, or use the ALTER REMOVEVOLUMES command to reset the volume ownership if a catalog does not own the volume.

IDC3025I INSUFFICIENT SUBALLOCATION DATA SPACE

Explanation: A volume does not contain a data space with sufficient room for allocation of another VSAM data set. See the associated second-level message for the specific catalog management error code values. In the TSO environment the second-level message is not displayed, except by request. To request it, enter a question mark (?) after the TSO READY message.

System Action: The command is terminated.

Programmer Response: Use the DEFINE command to create additional data space, delete unneeded VSAM data sets, or decrease the amount of storage required by the object being defined.

IDC3026I DUPLICATE DATA SPACE NAME ON VOLUME

Explanation: A DEFINE operation specifies the name of a data set, with the UNIQUE attribute, but there is already a data set on the volume with the same name. This will also occur when attempting to define a KSDS, with the UNIQUE attribute, which has more than one key range on the same volume. See the associated second-level message for the specific catalog management error code values. In the TSO environment the second-level message is not displayed, except by request. To request it, enter a question mark (?) after the TSO READY message.

System Action: The command is terminated.

Programmer Response: Choose another data set name; scratch the original data set from the volume; or if duplication is due to key ranges, ensure each UNIQUE key range is on a separate volume.

IDC3027I NO SPACE IN VTOC FOR DSCB

Explanation: During the definition or extension of a data space, an attempt was made to perform a DADSM allocate or extend function, but there was no space in the VTOC for an additional DSCb. See the associated second-level message for the specific catalog management error code values. In the TSO environment the second-level message is not displayed, except by request. To request it, enter a question mark (?) after the TSO READY message.

System Action: The command is terminated.

Programmer Response: Delete any unneeded data sets or data spaces from the volume to make additional DSCBs available, or recreate the volume with a larger VTOC.

IDC3028I DATA SET IN USE

Explanation: The data set is currently open and cannot be deleted. This condition arises when two different jobs are referencing the same VSAM data set simultaneously. See the associated second-level message for the specific catalog management error code values. In the TSO environment the second-level message is not displayed, except by request. To request it, enter a question mark (?) after the TSO READY message.

System Action: The command is terminated.

Programmer Response: Rerun the command and specify disposition of OLD, not SHR.

IDC3029I LOGICAL RECORD LENGTH EXCEEDS 32761

Explanation: The maximum logical record length specified is greater than 32,761 for a non-spanned data set. See the associated second-level message for the specific catalog management error code values. In the TSO environment the second-level message is not displayed, except by request. To request it, enter a question mark (?) after the TSO READY message.

System Action: The command is terminated.

Programmer Response: Reduce the maximum logical record length or define the data set as spanned.

IDC3030I CONTROL INTERVAL SIZE TOO LARGE

Explanation: The data component control interval size specified is greater than 32,768; or the index component control interval size is greater than the maximum block size of the index device. See the associated second-level message for the specific catalog management error code values. In the TSO environment the second-level message is not displayed, except by request. To request it, enter a question mark (?) after the TSO READY message.

System Action: The command is terminated.

Programmer Response: Reduce the control interval size; or use a different device with a larger blocksize, if the error occurred due to the index component's device type.

IDC3031I KEY EXTENDS BEYOND MAXIMUM RECORD LENGTH

Explanation: The KEY specification extends beyond the end of the maximum logical record. See the associated second-level message for the specific catalog management error code values. In the TSO environment the second-level message is not displayed, except by request. To request it, enter a question mark (?) after the TSO READY message.

System Action: The command is terminated.

Programmer Response: Reduce the key length, change the key position, or increase the record length.

IDC3032I BUFFERSPACE TOO SMALL

Explanation: The buffersize specified during a define operation is too small to contain the minimum number of control intervals for the VSAM data set being defined. See the associated second-level message for the specific catalog management error code values. In the TSO environment the second-level message is not displayed, except by request. To request it, enter a question mark (?) after the TSO READY message.

System Action: The command is terminated.

Programmer Response: Increase the BUFFERSPACE parameter of the DEFINE command.

IDC3033I VOLUME RECORD NOT FOUND IN CATALOG

Explanation: This condition arises when a function requires a volume that is not owned by the VSAM catalog being used. See the associated second-level message for the specific catalog management error code values. In the TSO environment the second-level message is not displayed, except by request. To request it, enter a question mark (?) after the TSO READY message.

System Action: The command is terminated.

Programmer Response: Ensure that the volumes specified have been defined in the catalog against which the request is being issued.

IDC3034I COMMAND FAILED DUE TO DUPLICATE RACF PROFILE

Explanation: As the result of an IMPORT, IMPORTRA or a DEFINE command, VSAM Catalog Management has attempted to establish a profile. This attempt failed because a profile with the same name exists. Note that in addition to this message, an IDC3009I message with a 114 return code will also be issued.

System Action: The command is terminated.

Programmer Response: Check the reason code on the accompanying IDC3009I message. Take the recommended action for this reason code and rerun the job.

IDC3036I DATA SET COULD NOT BE DEFINED TO SECURITY SUBSYSTEM

Explanation: Catalog management attempted to define a RACF profile for the data set. The security Subsystem rejected the RACF DEFINE command because the characteristics of the user and/or the data set makes the data set not eligible for definition.

System Action: The command is terminated.

Programmer Response: Compare the characteristics of the data set with the inclusion standards of the Security Subsystem package as specified in your installation's security subsystem documentation. Modify the data set characteristics accordingly and rerun the job.

IDC3062I ** CARTRIDGE LABELS AND INVENTORY RECORD NOT RESTORED

Explanation: An error was encountered while relabeling a mass storage volume. The attempt to restore the labels of the cartridges and Inventory data set to their original status failed. The volume serial mismatch may exist between the cartridge labels and volume label for the volume. See the preceding message for further explanation of the problem.

Programmer Response: Correct the problem as identified in the preceding message and take the following actions for the command that failed:

- If a Rename Operation Failed for ADDV Run ADDV to backout or retry the rename operation if the volume is inactive. If the volume is active, run MODIFYV or STOREV to either backout or retry the rename operation. If the ADDV, MODIFYV, or STOREV commands are run to recover from a rename failure, a DD statement for the volume is required and must specify deferred mounting. The values specified for the VOLUME and NEWSERIAL parameters depend upon how the volume record is recorded in the Inventory data set. If the cartridge labels have been updated, the volume record will be identified by the new volume serial number. For the VOLUME parameter, specify the volume serial number as recorded in the cartridge labels and the volume record. For the NEWSERIAL parameter, specify the desired volume serial number. Note that the security check for non-VSAM status and password protected data sets is bypassed only if the NEWSERIAL parameter specifies the same volume serial number as recorded in the Inventory data set for the volume label. This allows the original volume serial number of a VSAM volume to be restored if the volume is left partially renamed. If ADDV, MODIFYV, or STOREV terminates without indicating the status of the rename operation, LISTMSVI can be run to determine whether the volume is flagged for recovery purposes. If the mismatch flag is set in the volume record, LISTMSVI not only lists the standard information for the volume but also highlights the preceding volume and that serial number 'nnnnnn' is recorded in the volume label of the volume.

- If a Rename Operation Failed for MODIFYV To recover from a MODIFYV rename failure 1) run ADDV to activate the volume if the volume is merely inactive and has no volume serial mismatch condition, or 2) run ADDV to both activate the volume and complete the rename operation if the volume is both inactive and has a volume serial mismatch condition, or 3) rerun MODIFYV to complete or retry the rename operation if the volume is active but has a mismatch condition, or 4) run STOREV to complete or retry the rename operation if the volume is active and if a duplicate volume serial number is desired as a result of the rename. For the DD statement requirements, the proper VOLUME and NEWSERIAL parameter values, and use of LISTMSVI, refer to the description above for an ADDV rename failure.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 29, 34a, and 34c.

IDC3066I ** UNABLE TO CLEAR INCOMPLETE - COPY FLAG FROM INVENTORY RECORD

Explanation: The incomplete-copy flag in the Inventory record for the volume could not be cleared. See the preceding message for further explanation of the failure.

System Action: The command terminates with an error message.

Programmer Response: Correct the problem as indicated in the preceding message. Take one of the following actions for the command that failed:

- If a Copy Operation Failed in COPYV Rerun COPYV to complete the copy operation to the incomplete copy volume (COPYV will reuse the cartridges of the incomplete copy volume for the new copy) or run SCRATCHV to scratch the incomplete copy volume before rerunning the COPYV command. If COPYV terminates without indicating the status of the copy operation, LISTMSVI can be run to determine whether the volume is flagged for recovery purposes. If the incomplete copy flag is set in the copy volume record, LISTMSVI not only lists the standard information for the volume but also highlights the volume report with a note that a copy operation failed for the preceding copy volume.

- If a Copy Operation Failed for RECOVERV Rerun RECOVERV to complete the recover operation to the target volume that is flagged as an incomplete copy volume. Otherwise, run SCRATCHV to scratch the target volume. The incomplete copy volume may even be used as the target volume in the CONVERTV command. In all cases, the empty VTOC check or security check for password protected data sets is bypassed. If the SCRATCHV command is run, the DD statement is not required for the volume and if provided, must specify deferred mounting. If the RECOVERV command is rerun, the DD statement is not required for the target volume, which is flagged as an incomplete copy, unless the volume serial number of the target volume is different from the source volume. If a DD statement is provided for the target volume, deferred

mounting must be specified. If a VSAM catalog is on the volume, a DD statement for the catalog is not required; if provided, deferred mounting must be specified. If RECOVERV terminates without indicating the status of the recover operation, LISTMSVI can be run to determine whether the volume is flagged for recovery purposes. If the incomplete copy flag is set in the target volume record, LISTMSVI not only lists the standard information for the volume but also highlights the volume report with a note that a copy operation failed for the preceding volume.

- If a Copy Operation Failed for CONVERTV Rerun CONVERTV to complete the conversion operation to the target volume that is flagged as an incomplete copy volume. Otherwise, run SCRATCHV to scratch the target volume. The incomplete copy volume may even be used as the target volume in the RECOVERV command. In all cases, the empty VTOC check or the security check for password protected data sets is bypassed. If the SCRATCHV command is run, the DD statement is not required for the incompletely copied volume and if provided, must specify deferred mounting. If a VSAM catalog is on the volume and a DD statement for the target volume must be provided and must specify deferred mounting. If a VSAM catalog is on the volume and a DD statement is provided for the catalog, the DD statement must also specify deferred mounting. If CONVERTV terminates without indicating the status of the conversion operation, LISTMSVI can be run to determine whether the volume is flagged for recovery purposes. If the incomplete copy flag is set in the target volume record, LISTMSVI not only lists the standard information for the volume but also highlights the volume report with a note that a copy operation failed for the preceding volume.

Problem Determination: Table I, item 2, 3, 4, 13, 29, 35a, and 35c.

IDC3067I {FROM / TO} VOLUME volser OWNED BY A VSAM CATALOG

Explanation: Volume (volser) is owned by a VSAM catalog and cannot be used. "From" and "to" designate which volume is unusable for those commands processing both a source and target volume having the same volume serial numbers.

System Action: The command terminates with a message.

Programmer Response: Before running the command, either:

- Select a volume not cataloged in a VSAM catalog.
- Use the Access Method Services DELETE command to delete all VSAM data sets and data spaces on the volume, provided the volume is active and mountable.
- Do not specify a new serial number through the NEWSERIAL parameter in the command statement.

Problem Determination: Table I, item 2, 3, 4, 13, 25b, 29, 34, and 35c.

IDC3070I ** {SERIAL / OWNER / SERIAL, OWNER} NOT UPDATED IN IN VOLUME LABEL [OF TO VOLUME]

Explanation: Either the volume serial number or owner name or both was not updated in the volume label as requested. For those commands processing both a source and target volume having the same volume serial number, 'of to volume' indicates which volume could not be updated. A mismatch may exist between the cartridge labels and the volume label for the mass storage volume. See the preceding message for further explanation of the problem.

System Action: The command terminates with a message reflecting the severity of the error.

Programmer Response: Take one of the following actions for the command that failed:

- If a Rename Operation Failed for ADDV Run ADDV to backout or retry the rename operation if the volume is inactive. If the volume is active, run MODIFYV or STOREV to either backout or retry the rename operation. If the ADDV, MODIFYV, or STOREV commands are run to recover from a rename failure, a DD statement for the volume is required and must specify deferred mounting. The values specified for the VOLUME and NEWSERIAL parameters depend upon how the volume record is recorded in the Inventory data set. If the volume record is identified by the new volume serial number because the cartridge labels have been updated, both the VOLUME and NEWSERIAL parameters must specify the new volume serial number. Otherwise, specify the old volume serial number with the VOLUME parameter and the desired value for the Note that the security check for non-VSAM status and password protected data sets is bypassed only if the NEWSERIAL parameter specifies the same volume serial number as recorded in the Inventory data set for the volume label. This allows the original volume serial number of a VSAM volume to be restored if the volume is left partially renamed. If ADDV, MODIFYV, or STOREV terminates without indicating the status of the rename operation, LISTMSVI can be run to determine whether the volume is flagged for recovery purposes. If the mismatch flag is set in the volume record, LISTMSVI not only lists the standard information for the volume but also highlights the volume report with a note that a rename operation failed for the preceding volume and that serial number 'nnnnnn' is recorded in the volume label of the volume.
- If a Rename Operation Failed for MODIFYV To recover from a MODIFYV rename failure 1) run ADDV to activate the volume if the volume is merely inactive and has no volume serial mismatch condition, or 2) run ADDV to both activate the volume and complete the rename operation if the volume is both inactive and has a volume serial mismatch condition, or 3) rerun MODIFYV to complete or retry the rename operation if the volume is active but has a mismatch condition, or 4) run STOREV to complete or retry the rename operation if the volume is active and if a duplicate volume serial number is desired as a result of the rename. For the DD statement requirements, the proper VOLUME and NEWSERIAL parameter values, and use of LISTMSVI, refer to the description above for an ADDV rename failure.

- If a Rename Operation Failed for STOREV Rerun STOREV or run MODIFYV to either backout or retry the rename operation. For the DD statement requirements, the proper VOLUME and NEWSERIAL parameter values, and use of LISTMSVI, refer to the description above for an ADDV rename failure.

Problem Determination: Table I, items 2, 3, 4, 13, 29, 35a, and 35c.

IDC3071I ** COPY NOT COMPLETED

Explanation: The copy operation failed. The target volume is marked incomplete in the Inventory data set and will be reused when the command is rerun. See the preceding message for further explanation of the failure.

System Action: The command terminates with an error message.

Programmer Response: Correct the error as identified by the preceding message. To rerun the command, follow the appropriate recovery actions identified in the recovery section of the publication, *OS/VS Mass Storage System (MSS) Services for Space Management.*

Problem Determination: Table I, items 2, 3, 4, 13, 29, 30, 35a, and 35c.

IDC3072I VOLUME ATTRIBUTES DO NOT AGREE WITH GROUP ATTRIBUTES

Explanation: One or more of the specified volume attributes (bind/nobind, readonly/readwrite, dasderase/nodasderase, exclusive/shared, pagefault/nopagefault) do not agree with the group level specifications for all general-use volumes belonging to the group.

System Action: The command terminates with an error message.

Programmer Response: Use the LISTMSVI command to list the group level specifications. Rerun the command with volume attributes specified that correspond to the group that the volume is being assigned to.

Problem Determination: Table I, items 2, 3, 4, 13, 29, 35a, and 35c.

IDC3077I ** CART csn [csn] NOT IN MSF FOR VOL volser

Explanation: The cartridges assigned to volume (volser) cannot be found in the Mass Storage Facility (MSF). The cartridge serial numbers (csn [csn]) identify the sequence one and/or sequence two cartridge not in the MSF. See the preceding message for additional information.

System Action: The command terminates with a message.

Programmer Response: Correct the problem as indicated in the preceding message. If the cartridges are outside the MSF, reenter the cartridges and rerun the command.

Problem Determination: Table I, items 2, 3, 4, 13, 29, 35a, and 35c.

IDC3081I ** RECORD NOT RETRIEVED FROM INVENTORY FOR COPY yyddd, NO. nnn

Explanation: The record cannot be accessed in the Inventory data set for the copy created on the date indicated by "yyddd" and assigned the copy sequenced number (nnn) for that date. See the preceding message for a further explanation of the error.

System Action: The command terminates with a message unless additional copies are to be processed.

Programmer Response: Correct the error as indicated in the preceding message. Before rerunning the command, ensure that copy date and sequence number are specified correctly.

Problem Determination: Table I, items 2, 3, 4, 13, 29, 30, 35a, and 35c.

IDC3082I ** COPY NOT PERFORMED

Explanation: The copy operation could not be started to the target volume. The target volume remains usable since the original data on the volume has not been destroyed. See the preceding message for a further explanation of the problem.

System Action: The command terminates with an error message.

Programmer Response: Correct the error as identified in the preceding message. To rerun the command, follow the appropriate recovery actions identified in the recovery section of the publication *OS/VS Mass Storage System (MSS) Services for Space Management.*

Problem Determination: Table I, items 2, 3, 4, 13, 29, 30, 35a, and 35c.

IDC3089I A DUPLICATE VOLUME EXISTS WITH SERIAL NO. volser

Explanation: More than one volume with the volume serial number (volser) is recorded in the Inventory data set. Duplicate volumes within the same Mass Storage System occur when:

- The record is deleted from the Inventory data set for an ejected volume and before the volume is reentered the serial number has been assigned to another volume.
- The record for an ejected copy volume is deleted from the Inventory data set and the copy is reentered.
- A volume is entered in the Mass Storage Facility from another Mass Storage System.

System Action: The command terminates with an error message.

Programmer Response: Run the LISTMSVI command to obtain the sequence one and sequence two cartridge serial numbers of the correct volume to be processed. Rerun the command specifying either cartridge serial number with the CARTRIDGE parameter so that the command can select the correct volume.

Problem Determination: Table I, items 2, 3, 4, 13, 29, 35a, and 35c.

IDC3090I VOLUME volser CANNOT BE RELABELED: READONLY ATTRIBUTE IS ASSIGNED

Explanation: Volume (volser) has the attribute assigned which prohibits any changes to be made to the volume.

System Action: The command terminates with a message identifying the severity of the error.

Programmer Response: If the volume is recorded as active in the Inventory data set, use the MODIFYV command to change the READONLY attribute to READWRITE. If the volume to be relabeled is inactive, use the ADDV command and specify the READWRITE parameter.

Problem Determination: Table I, items 2, 3, 4, 13, and 29.

IDC3092I FILE PARAMETER WITH DEFERRED MOUNT REQUIRED

Explanation: The volume is recorded in the Inventory data set as incompletely created, incompletely copied, or as having a volume serial number mismatch. These problems may cause dynamic allocation of the volume to encounter an error. Therefore, this command requires a FILE parameter on the command statement. The FILE parameter must specify the name of a JCL DD statement which allocates a unit with deferred mounting to prevent allocation from mounting the volume.

System Action: The command terminates with a message identifying the severity of the error.

Programmer Response: Rerun the command with the FILE parameter specifying the name of a JCL DD statement which allocates a unit with deferred mounting.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 29, 35a, and 35c.

IDC3094I VOLUME volser CANNOT BE RENAMED; COPIES EXIST

Explanation: The volume serial number cannot be changed on volume (volser) because there are existing copies of the volume made via the COPYV command.

System Action: The command terminates with an error message.

Programmer Response: Run the SCRATCHV command to scratch all existing copies of the volume and rerun the command. If the copies must be saved, run the EJECTV command with the NORECORD option for each copy volume, or run the REMOVEVR command if the copy is already ejected. This deletes the copy volume record information recorded in the Inventory data set and permits the original volume to be renamed. (However, if an ejected copy volume, not recorded in the Inventory data set, is reentered in the Mass Storage Facility, the copy will be recorded as a duplicate volume.)

Problem Determination: Table I, items 2, 3, 4, 13, 29, 35a, and 35c.

IDC3099I LENGTH OF CARTRIDGE SERIAL NUMBER csn INVALID

Explanation: A cartridge serial number cannot be less than eleven characters in length. The message identifies the cartridge serial number (csn) with the invalid length.

System Action: The command terminates with a message unless additional cartridges have been specified for processing.

Programmer Response: Specify an 11- or 12-character cartridge serial number and rerun the command. If a cartridge serial number of 11 characters is specified, the command extends the cartridge serial number to 12 characters by inserting a blank character in the fourth position from the left. If you specify 12 characters, be sure to include the value in quotes because a blank is required as the fourth character.

Problem Determination: Table I, items 2, 3, 4, 13, and 29.

IDC3113I INVALID LEVEL PARAMETER

Explanation: There is an asterisk (*) in the last position of the LEVEL parameter.

System Action: The command terminates.

Programmer Response: Remove the asterisk from the last position of the LEVEL parameter, and rerun the command.

Problem Determination: Table I, items 1, 2, 3, 4, 13, and 29.

IDC3114I VOLUME ser HAS DOWN LEVEL SPACE

Explanation: Either the volume specified by ser, which belongs to a group as a general use volume, is being activated through the use of the ADDV command or the volume specified by ser is being made a general use volume in a group through the use of the MODIFY command. In either case, the base volume record in the Inventory data set indicates the volume has down level space. If the MODIFY command is being used, the following applies:

- An OS/VS JCL DD card was not provided (or was provided but allocated to a volume different than the volume being modified) and the attempt by the MODIFY command to dynamically allocate the volume failed. If the ADDV command is being used, the following applies:
- An OS/VS JCL DD card was not provided specifying deferred mount and the attempt by the ADDV command to dynamically allocate the volume failed.

System Action: The MODIFYV or ADDV command terminates.

Programmer Response: Either provide the appropriate OS/VS JCL DD card or allow the MODIFYV or the ADDV command to dynamically allocate the volume. Rerun the MODIFYV or ADDV command. If dynamic allocation is failing, determine the reason for this failure before rerunning the job.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 29, and 35c.

IDC3170I ICF CATALOG PARAMETER SPECIFIED FOR A VSAM CATALOG

Explanation: During the define of a VSAM user or master catalog, a parameter applicable only to an ICF catalog was encountered. The parameter, one of the following: BUFND, BUFNI, CONTROLINTERVALSIZE, FREESPACE, IMBED, NOREPLICATE, RECORDSIZE, REPLICATE, SHAREOPTIONS, or STRNO has been specified at the catalog, data or index component levels. A VSAM catalog is being defined because the VSAMCATALOG parameter has been specified or defaulted.

System Action: Processing of this command is terminated.

Programmer Response: Determine the catalog format to be defined and remove the invalid parameter(s) from the command or specify ICFCATALOG. Rerun the job.

Problem Determination: Table I, items 1, 3, 4, and 29.

IDC3174I SPECIFIED MAXIMUM RECORD SIZE LESS THAN REQUIRED MINIMUM

Explanation: During the define of an ICF catalog, the value specified for the data component maximum record size was found to be less than the minimum required value, 4086 bytes. The maximum record size value specified for the data component will override any value specified for the catalog component.

System Action: Processing of this command terminates.

Programmer Response: Change the maximum record size specification and rerun the job. If RECORDSIZE has been specified at both the catalog and data component levels, ensure that the value specified for the data component is at least the minimum required value.

Problem Determination: Table I, items 1, 3, 4, and 29.

IDC3175I RESTRICTED VVDS NAME SPECIFIED FOR INVALID OBJECT TYPE

Explanation: During the define of an object, not a NONINDEXED (ESDS) cluster, the specified name was found to have the format of the restricted VSAM Volume Data Set prefix, 'SYS1.VVDS.V'. Define processing will disallow the use of any name having this prefix if the name is not specified at the cluster component level of a DEFINE CLUSTER subcommand with the NONINDEXED parameter specified. This prefix has a special use and should only be specified to define a VSAM Volume Data Set.

System Action: Processing of this command is terminated.

Programmer Response: Change the data set name specified in the NAME parameter if a VVDS is not to be defined. If a VVDS is to be defined, specify the NONINDEXED parameter.

Problem Determination: Table I, items 1, 3, and 29.

IDC3176I VSAM VOLUME DATA SET VOLUME SERIAL NUMBER SPECIFICATION ERROR

Explanation: During the define of a VSAM Volume Data Set, the volume serial number specified by volser of the VSAM Volume Data Set name, 'SYS1.VVDS.Vvolser', did not match the volume serial number specified on the VOLUMES parameter. Only the first volume serial number specified by VOLUME is valid and is compared.

System Action: Processing of this command is terminated.

Programmer Response: Check the NAME and VOLUMES specifications. Change the parameter in error and rerun the job.

Problem Determination: Table I, items 1, 3, 4, and 29.

IDC3190I 'keywd' PARAMETER INVALID WITH ENTRY TYPE

Explanation: The specified key word, 'keywd', is improper for the type of object being altered. This is usually a problem in distinguishing between cluster and data/index component attributes.

System Action: The command is terminated.

Programmer Response: Specify the proper data set name and rerun the command.

Problem Determination: Table I, items 4, 29.

IDC3191I VSAM VOLUME DATA SET NAME OR ITS GENERIC FORM NOT ALLOWED

Explanation: During processing of an Access Method Services command, a name was specified and had the restricted VSAM Volume Data Set prefix or one of its generic forms. The VSAM Volume Data Set prefix, SYS1.VVDS.V, or its generic forms SYS1.VVDS.* or SYS1.*.V, are not allowed for the following:

- ENTRYNAME for the ALTER command.
- NEWNAME for the ALTER command.
- INDATASET for the REPRO command.
- MODEL for the DEFINE command.

The requested operation is not allowed for a VSAM Volume Data Set.

System Action: Processing of this command is terminated.

Programmer Response: Do not use the restricted data set name prefix for your data sets. If a data set has been created with the restricted prefix, an alternate method must be found to complete the desired operation.

Problem Determination: Table I, items 1, 3, 4, and 29.

IDC3200I TOO MANY POSITIONAL PARAMETERS AFTER 'prm'

Explanation: A parameter list has too many positional parameters specified.

System Action: Processing skips to the end of the command; interpretation of commands resumes with the next command.

Programmer Response: Remove the excess parameters and rerun the command.

Problem Determination: Table I, items 4, 29.

IDC3201I CONSTANT 'xxx' EXCEEDS LENGTH LIMIT

Explanation: A constant is longer than the maximum allowed by the parameter definition or by the implementation. An allowable value must be specified.

System Action: Processing skips to the end of the command; interpretation resumes with the next command.

Programmer Response: See the definition of the parameter value in question, specify an allowable value, and rerun the command.

Problem Determination: Table I, items 4, 29.

IDC3202I ABOVE TEXT BYPASSED UNTIL NEXT COMMAND. CONDITION CODE IS 12.

Explanation: Following the occurrence of an error in the current command, the remainder of the command is bypassed. An error message preceding this message in the program listing will pinpoint the error.

System Action: No further syntax or semantic checking is done on the command in question.

Programmer Response: Correct the related error and rerun.

Problem Determination: Table I, items 4, 29.

IDC3203I ITEM 'xxx' DOES NOT ADHERE TO RESTRICTIONS

Explanation: A constant (xxx) does not meet the naming restrictions on its format. This is usually a problem in specifying data set names; see *OS/VS2 Access Method Services* for data naming conventions.

System Action: Processing skips to the end of the command; interpretation resumes with the next command.

Programmer Response: Check the data restrictions for the parameter, correct the item, and rerun the command.

Problem Determination: Table I, items 4, 29.

IDC3205I DELIMITER 'x' IS NOT PROPERLY PRECEDED BY A CONSTANT OR KEY WORD

Explanation: A delimiter has been specified where a subparameter list or data should have appeared. The delimiter is being used improperly. Parentheses are likely to be improper or a positional parameter may be missing.

System Action: Processing skips to the end of the command; interpretation resumes with the next command.

Programmer Response: Correct the usage and rerun the command.

Problem Determination: Table I, items 4, 29.

IDC3207I REMAINDER OF COMMAND INPUT STREAM IGNORED

Explanation: An error has occurred that prohibits further scanning of the input stream. There are preceding error messages to explain the error. The condition code (MAXCC) is always set to 16 when the remainder of the input stream is ignored.

System Action: The remainder of the command input stream has been ignored.

Programmer Response: Correct the related error and rerun the job.

Problem Determination: Table I, items 4, 29.

IDC3208I LEFT PARENTHESIS MISSING FOLLOWING KEY WORD 'keywd'

Explanation: A key word is not properly followed by an opening parenthesis delimiting the subparameter list or constants associated with the key word.

System Action: Processing skips to the end of the command; interpretation resumes with the next command.

Programmer Response: Check the requirements of the parameter, correct the usage, and rerun the command.

Problem Determination: Table I, items 4, 29.

IDC3209I RIGHT PARENTHESIS MISSING AFTER 'xxx'

Explanation: A right parenthesis is missing which should delimit the end of one or more constants. Too many items might be specified.

System Action: Processing skips to the end of the command; interpretation resumes with the next command.

Programmer Response: Correct the usage and rerun the command.

Problem Determination: Table I, items 4, 29.

IDC3210I INVALID PARENTHESES FOR SPECIFYING REPEATED SUBPARAMETER LIST

Explanation: Parentheses for delimiting repetitions of a repeated subparameter list are missing or unmatched.

System Action: Processing skips to the end of the command; interpretation begins with the next command.

Programmer Response: Correct the usage and rerun the command.

Problem Determination: Table I, items 4, 29.

IDC3211I KEY WORD 'keywd' IS IMPROPER

Explanation: A key word has been found which is not recognized in its specified usage. It may be misspelled, not applicable, or specified as a subparameter in the wrong subparameter list.

System Action: Processing skips to the end of the command; interpretation begins with the next command.

Programmer Response: Check the usage of the key word and check parentheses.

Problem Determination: Table I, items 4, 29.

IDC3212I INVALID LEFT PARENTHESIS AFTER 'prm'

Explanation: A left parenthesis appears to delimit a positional parameter. However, the positional parameter is not a constant or list of constants, so no parentheses are allowed.

System Action: Processing skips to the end of the command; interpretation begins with the next command.

Programmer Response: Correct the usage and rerun.

Problem Determination: Table I, items 4, 29.

IDC3213I KEY WORD 'keywd' APPEARS TOO OFTEN

Explanation: A key word has been coded more than once in the same parameter list or subparameter list.

System Action: Processing skips to the end of the command; interpretation begins with the next command.

Programmer Response: Remove the redundant key word and rerun the command.

Problem Determination: Table I, items 4, 29.

IDC3214I HEX OR BINARY CONSTANT SPECIFIED IMPROPERLY

Explanation: A hexadecimal or binary constant is not of the form X'---' or B'---'.

System Action: Processing skips to the end of the command; interpretation begins with the next command.

Programmer Response: Correct the usage and rerun.

Problem Determination: Table I, items 4, 29.

IDC3216I ABOVE TEXT BYPASSED UNTIL NEXT COMMAND

Explanation: Following the occurrence of an error in the current command, the remainder of the command is bypassed. An error message preceding this message will pinpoint the error. The command was being scanned for syntax checking purposes only when the error was found.

System Action: No further syntax or semantic checking is done on the command in question. The system condition code is not affected.

Programmer Response: Correct the related error before rerunning.

Problem Determination: Table I, items 4, 29.

IDC3217I PASSWORD IMPROPER AFTER 'prm'

Explanation: A password is found following a data item that does not allow a password.

System Action: Processing skips to the end of the command; interpretation begins with the next command.

Programmer Response: Remove the improper password and rerun the command.

Problem Determination: Table I, items 4, 29.

IDC3218I TOO MANY REPEATED SUBPARAMETER LISTS APPEAR

Explanation: More repeated subparameter lists are coded than are allowed.

System Action: Processing skips to the end of the command; interpretation begins with the next command.

Programmer Response: Check the parameter description to see how many repetitions are allowed. Correct the usage and rerun.

Problem Determination: Table I, items 4, 29.

IDC3219I VERB NAME 'verb' UNKNOWN

Explanation: The specified verb name is not known to the system.

System Action: Processing skips to the end of the command; interpretation begins with the next command.

Programmer Response: Correct the improper verb name and rerun.

Problem Determination: Table I, items 4, 29.

IDC3220I IMPROPER NUMERIC DIGIT FOUND IN 'prm'

Explanation: An invalid numeric digit has been found. A decimal number may use only 0-9, a hexadecimal number specified as X'---' may use only 0-9 and A-F, and a binary number specified as B'---' may use only digits 0 and 1.

System Action: Processing skips to the end of the command; interpretation begins with the next command.

Programmer Response: Correct the usage and rerun.

Problem Determination: Table I, items 4, 29.

IDC3221I CONSTANT 'xxx' NOT WITHIN VALUE RANGE

Explanation: A constant is of a value not within the range of values allowed for this parameter.

System Action: Processing skips to the end of the command; interpretation begins with the next command.

Programmer Response: Correct the usage and rerun. Otherwise, take no action.

Problem Determination: Table I, items 4, 29.

IDC3223I TOO MANY CONSTANTS IN LIST BEGINNING AT 'xxx'

Explanation: Too many constants have been coded in a list.

System Action: Processing skips to the end of the command; interpretation begins with the next command.

Programmer Response: Check the parameter definition to see how many constants appear in the list. Correct the usage and rerun.

Problem Determination: Table I, items 4, 29.

IDC3225I REQUIRED (SUB)PARAMETER OF 'prm' IS MISSING

Explanation: The system issues this message for one of the following reasons:

- A parameter required by the command is missing.
- For Cache-DASD the specified parameter is required. For example, when **prm** is SUBSYSTEM or DIRECTOR, the message means that a SETCACHE command for 3350 lacks one of these required parameters.

System Action: Processing skips to the end of the command; interpretation begins with the next command.

Programmer Response: Add the missing parameter and rerun.

Problem Determination: Table I, items 4, 29.

IDC3226I INCONSISTENT PARAMETERS INVOLVING 'keywd'

Explanation: The specified key word indicates a parameter that you may not code in conjunction with a second parameter. For example, either of the following AMS Cache-DASD commands would cause the system to issue this message:

- SETCACHE DEVICE unit=3350
- LISTDATA STATUS WTO unit=3350

System Action: Processing skips to the end of the command if you issue the SETCACHE DEVICE command with unit=3350; interpretation begins with the next command. If you specify LISTDATA STATUS WTO and unit=3350, the system provides the list data, issues this message, and continues processing.

Programmer Response: Remove one of the parameters and rerun.

Problem Determination: Table I, items 4, 29.

IDC3240I 'prm' VALUE OF 'nnn' OUT OF RANGE

Explanation: A number is either larger or smaller than is allowed for the specified parameter. nnn represents the first ten digits of the number.

System Action: The user is prompted for a valid number. See message IDC3249I.

Programmer Response: Enter a number within the allowable value range.

Problem Determination: Table I, items 13, 20, 29.

IDC3241I INVALID 'prm' NAME-xxx

Explanation: A DSNAME or DDNAME does not adhere to naming restrictions. xxx represents the first sixty-four characters of the name, if more than sixty-four characters were entered.

System Action: The user is prompted for a valid name. See message IDC3249I.

Programmer Response: Enter a valid name.

Problem Determination: Table I, items 13, 20, 29.

IDC3242I 'prm' VALUE HAS INVALID LENGTH-xxx

Explanation: A constant is either too long or has a null length. xxx is the first sixty-three characters of the constant, if more than sixty-three were entered.

System Action: The user is prompted for a valid constant. See message IDC3249I.

Programmer Response: Enter a valid constant.

Problem Determination: Table I, items 13, 20, 29.

IDC3243I 'prm' LIST TOO LONG BEGINNING AT xxx

Explanation: A list of nonnumeric constants or subparameter lists has too many elements. xxx is the first sixty-three characters, of the constant, if more than sixty-three characters were entered.

System Action: The user is prompted to indicate whether or not the excess list elements may be ignored. See message IDC3250I.

Programmer Response: Enter 'OK' to allow the excess elements to be ignored. Any other response terminates the command.

Problem Determination: Table I, items 13, 20, 29.

IDC3244I 'prm1' (REPLY'1') AND prm2 (REPLY '2') ARE IN CONFLICT

Explanation: Two parameters have been coded that conflict with each other.

System Action: The user is prompted to indicate which of the two parameters should be kept. See message IDC3246I.

Programmer Response: Enter '1' to keep the first parameter, or '2' to keep the second parameter.

Problem Determination: Table I, items 13, 20, 29.

IDC3246I ENTER REPLY NUMBER OF PARAMETER TO BE RETAINED

Explanation: This message follows message IDC3244I and allows the operator to specify which parameter to retain.

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

Programmer Response: Enter '1' to keep the first parameter listed in the preceding message or '2' to keep the second parameter.

IDC3247I ENTER SUBFIELD OF KEY WORD 'keywd'

Explanation: A key word parameter is missing; it is required by the command or by some other parameter that has been coded.

System Action: The system waits for the user to reply. Either a constant or a subparameter set is required.

Programmer Response: Enter the requested subfield data.

Problem Determination: Table I, items 13, 20, 29.

IDC3248I 'prm' LIST TOO LONG BEGINNING AT nnn

Explanation: A list of numbers contains too many elements. nnn is the first ten digits of the number.

System Action: The user is prompted to indicate whether or not the excess elements can be ignored. See message IDC3250I.

Programmer Response: Reply 'OK' to allow the excess elements to be ignored. Any other response terminates the command.

Problem Determination: Table I, items 13, 20, 29.

IDC3249I REENTER

Explanation: This prompting message follows messages that identify invalid constants; IDC3240I, IDC3241I, and IDC3242I.

System Action: The user is requested to enter a valid constant.

Programmer Response: Enter a valid constant.

IDC3250I REPLY 'OK' TO IGNORE EXCESS AND CONTINUE

Explanation: This prompting message follows message IDC3243I or IDC3248I which indicate too many elements have been coded in a list.

System Action: The user is prompted to indicate whether or not the excess elements can be ignored.

Programmer Response: If the response is 'OK' or 'OK', 'OK', 'OK' the excess elements are ignored. Any other response causes command termination.

IDC3251I FOR SUBFIELD REPETITION nnn

Explanation: This message prefaces any other error message when the parameter involved in the error is within a repeated subparameter list. It is used to help identify the problem.

System Action: Processing continues.

Programmer Response: Examine the indicated subparameter list repetition.

IDC3253I MISSING SUBFIELD OF KEY WORD key word

Explanation: A key word subparameter is missing, but the system is not able to prompt the TSO user for it because a PROFILE NOPROMPT command has been issued.

System Action: The command processing is terminated.

Operator Response: The TSO user should reenter the command with the proper key word.

Problem Determination: Table I, items 13, 20, and 29.

IDC3300I ERROR OPENING { dsn / ddn }

Explanation: An error was detected attempting to open data set name (text is ddn if the data set name not available). See associated message for explanation.

System Action: See associated message for explanation.

Programmer Response: Check the associated message.

Problem Determination: Table I, items 1, 3, 4, 29.

IDC3301I ERROR CLOSING dsn

Explanation: An error was detected while attempting to close dsn. See the associated message in the program listing for explanation.

System Action: See associated message for explanation.

Programmer Response: Check the associated message.

Problem Determination: Table I, items 1, 3, 4, 29.

IDC3302I ACTION ERROR ON dsn

Explanation: An error was detected while attempting to access dsn. See the associated message in the program listing for explanation.

System Action: See associated message for explanation.

Programmer Response: Check the associated message.

Problem Determination: Table I, items 1, 3, 4.

IDC3303I ** CANNOT OPEN FOR UPDATE

Explanation: Only VSAM data sets may be opened for update mode.

System Action: The data set is not opened, and the command is terminated.

Programmer Response: Change the DD statement to specify a VSAM data set.

Problem Determination: Table I, items 1, 3, 4, 29.

IDC3304I ** JCL STATEMENT MISSING

Explanation: The DD statement named in a FILE, INFILE, or OUTFILE parameter cannot be found. If the job or TSO session contains a delete request that causes the system to invoke dynamic unallocation, the DD statement for the deleted data set is not accessible for the remainder of the job or session.

System Action: Processing of the command is terminated.

Programmer Response: Check ddnames for incorrect spelling or check for missing DD statements, correct the error, and rerun the job.

Problem Determination: Table I, items 1, 3, 4, 29.

IDC3305I ** CANNOT BE OPENED FOR OUTPUT

Explanation: The processor cannot open this non-VSAM data set for output. Specifically, ISAM data sets may not be output data sets.

System Action: Processing of the command is terminated.

Programmer Response: Change the key word value to specify either a VSAM or SAM data set.

Problem Determination: Table I, items 1, 3, 4, 29.

IDC3306I ** PS PROCESSING INVALID FOR KEYED DATA SET

Explanation: Physical sequential access is not possible for the data set. ISAM data sets may not be processed other than sequentially by key.

System Action: Processing of the command is terminated.

Programmer Response: Change the JCL statement to specify a VSAM data set, or correct the usage of the data set.

Problem Determination: Table I, items 1, 3, 4, 29.

IDC3307I ** DATA SET CANNOT BE OPENED FOR KEYED PROCESSING

Explanation: Only indexed VSAM and ISAM data sets can be opened for keyed processing.

System Action: Processing of the command is terminated.

Programmer Response: Change the JCL statement to specify a keyed data set or correct the usage of the data set in the command and rerun the job.

Problem Determination: Table I, items 1, 3, 4, 29.

IDC3308I ** DUPLICATE RECORD xxx

Explanation: The output data set of a REPRO command already contains a record with the same key or record number. For an indexed data set, xxx is the first five bytes of the duplicate key, in hexadecimal format. For a relative record data set, xxx is the relative record number (in decimal) of the duplicate record.

System Action: Record xxx is not written. Processing continues with the next record, unless this is a copy catalog and a duplicate record is encountered or there has been a total of four errors. Processing terminates in either case. For example, if a duplicate record is encountered while REPRO is copying a catalog, processing terminates.

Programmer Response: None.

Problem Determination: Table I, items 1, 3, 4, 29.

IDC3309I ** RECORD xxx NOT WRITTEN. LENGTH INVALID.

Explanation: Record xxx (where xxx is the first five bytes of the record in hexadecimal format) was not written for one of the following reasons:

- The record length was greater than LRECL of output data set (logical processing).
- The record length was less than LRECL of output data set and output RECFM = FIXED, or output is a relative record data set.
- The control-interval length to be written did not equal the control interval size for the output data set.

System Action: Processing continues until four such errors occur, in which case no more records are written to the data set.

Programmer Response: Redefine the output data set with the correct LRECL or control interval size.

Problem Determination: Table I, items 1, 3, 4, 29.

IDC3310I ** KEY SUPPLIED IS LONGER THAN KEY LENGTH OF DATA SET

Explanation: The key supplied for positioning was longer than the key length of the data set. For example, the key specified by FROMKEY is longer than the key length of the data set.

System Action: Processing of the command is terminated.

Programmer Response: Specify the correct key on the command and rerun the job.

Problem Determination: Table I, items 1, 3, 4, 29.

IDC3311I ** TYPE OF POSITIONING NOT SUPPORTED

Explanation: Positioning is valid only for VSAM and ISAM data sets.

System Action: Processing of the command is terminated.

Programmer Response: Respecify the JCL statement defining a VSAM or ISAM data set or remove the positioning parameter and rerun the job.

Problem Determination: Table I, items 1, 3, 4, 29.

IDC3312I ** SYSTEM UNABLE TO OPEN

Explanation: DCBOFLG was not set after an OPEN request.

System Action: The command is terminated.

Programmer Response: See the *OS/VS2 MVS Data Management Macro Instructions manual*. In the description of the OPEN macro instruction, check for an explanation of failure to set the DCBOFLG field in a non-VSAM DCB after an OPEN request.

Problem Determination: Table I, items 1, 3, 4, 29.

IDC3313I synad message from system

Explanation: An I/O error occurred for a non-VSAM data set. The SYNADAF message is written. (See *OS/VS2 MVS Data Management Services Guide*.)

System Action: The command is terminated.

Programmer Response: Check the explanation in the SYNADAF message, correct the error, and resubmit the job.

Problem Determination: Table I, items 1, 3, 4, 29.

IDC3314I RECORD xxx OUT OF SEQUENCE

Explanation: The key of the record to be written is less than or equal to the key of the last record written. xxx is the first five bytes in hexadecimal format of the key of the record that is out of sequence.

System Action: Rearrange the records to be written so that they are in ascending key sequence. Resubmit the job.

Programmer Response: The record can be written to the data set using skip sequential processing. Rerun the job and the output data set will be opened for skip sequential processing (because data already exists in the data set) and records that were out of sequence will be written.

Problem Determination: Table I, items 1, 3, 4, 29.

IDC3315I ** RECORD SIZE GREATER THAN 32760 NOT SUPPORTED

Explanation: Access Method Services cannot process a non-VSAM data set with a logical record length greater than 32,760 bytes. The DCB LRECL parameter was specified with a value greater than 32,760. This value was obtained either from the DD statement, the format-1 DSCB or the data set label (for a tape data set) for a non-VSAM data set, or it was generated by the EXPORT or EXPORTRA command for a portable data set. The logical record length for the EXPORT or EXPORTRA command is based on the maximum record size of the VSAM data set(s) being exported plus system overhead. The maximum VSAM record size that can be handled by EXPORT is:

- 32,752 for relative record data sets
- 32,756 for all other types of VSAM data sets

The maximum record size that can be handled by EXPORTRA is:

- 32,748 for relative record data sets
- 32,752 for all other types of VSAM data sets

System Action: Processing of the command terminates.

Programmer Response: (1) Change the DD statement to specify a DCB LRECL parameter of less than 32,760 bytes or to refer to a non-VSAM data set whose logical record length (as specified in its format-1 DSCB or data set label) is less than 32,760 bytes, or (2) change the VSAM maximum logical record size to conform to the restrictions given above. In order to use the second alternative, you will have to redefine and reload the VSAM data set.

Problem Determination: Table I, items 1, 2, 3, 4, 29, 34.

IDC3316I ** DATA SET IS NOT VSAM CATALOG

Explanation: A request is for a VSAM catalog to be opened and the data set is not a VSAM catalog.

System Action: The command is terminated.

Programmer Response: Correct the catalog key word to specify a user catalog and rerun the job.

Problem Determination: Table I, items 1, 3, 4, 29.

IDC3317I ** PERMANENT I/O ERROR

Explanation: An I/O error was detected performing an I/O operation on the data set named in the preceding message.

System Action: Processing of the command is terminated.

Programmer Response: Check the job control statement to be sure the data set was correctly defined. If it was correctly defined, a hardware I/O error was encountered and the data set must be created in a new location.

Problem Determination: Table I, items 1, 2, 3, 4, 29 or 30.

IDC3318I ** INVALID DATA SET SPECIFICATION

Explanation: A STOW was issued against the data set, but the specified DCB is not open or is opened incorrectly.

System Action: Processing is terminated.

Programmer Response: Do the problem determination action.

Problem Determination: Table I, items 1, 2, 3, 4, 5a, 16, and 29.

IDC3321I ** OPEN/CLOSE/EOV ABEND EXIT TAKEN

Explanation: The OPEN/CLOSE/EOV SVC routines detected an error, and an ABEND message has been written to the system output data set.

System Action: The command is terminated.

Programmer Response: Check the WTP message written by the OPEN/CLOSE routine, correct the error, and resubmit the job.

Problem Determination: Table I, items 1, 3, 4, 29.

IDC3322I ** DATA SET ORGANIZATION IS NOT VSAM

Explanation: A request for an existing data set indicated the data set was VSAM. The data set was in fact not VSAM.

System Action: The command is terminated.

Programmer Response: Correct the data set name or type and rerun the job.

Problem Determination: Table I, items 1, 3, 4, 25a, 29.

IDC3325I ** INCORRECT BLOCKSIZE SPECIFIED FOR IMPORTRA

Explanation: The data set cannot be opened due to an incorrect block size in the INFILE parameter.

System Action: Processing of the IMPORTRA command is terminated.

Programmer Response: Change the block size in the INFILE parameter to that used in the EXPORTRA command and rerun the job.

IDC3326I ** REPLACE INVALID FOR OUTPUT THROUGH A PATH

Explanation: The user has specified the REPLACE parameter in a REPRO command when the output data set is a path. REPLACE processing is not allowed for an output path.

System Action: Processing of the command is terminated.

Programmer Response: If the input does not contain any records duplicating prime keys (and alternate keys of any upgrade set alternate index having the UNIQUEKEY attribute) in the output, the user may still execute REPRO by simply removing the REPLACE parameter.

Problem Determination: Table I, items 1, 2, 3, 4, 29.

IDC3327I ** DUPLICATE RECORD IN UPGRADE SET - BASE RECORD xxx

Explanation: During a REPRO operation an attempt has been made to add a record to the output base cluster. However, a duplicate record in the upgrade set has been encountered when upgrading an alternate index with the UNIQUEKEY attribute over the output data set. If the base cluster is a key-sequenced data set, xxx is the first five bytes of the prime key expressed in hexadecimal. If the base cluster is an entry-sequenced data set, xxx is the first five bytes of the record expressed in hexadecimal.

System Action: The record is not written into the base cluster. Processing continues until four action errors occur, at which point processing terminates.

Programmer Response: If the UNIQUEKEY attribute was correctly specified, the base cluster record being added is in error and must be corrected. If the UNIQUEKEY attribute was incorrectly specified, it may be changed to NONUNIQUEKEY using the ALTER command. Rerun the job using just those records that were in error as input.

Problem Determination: Table I, items 1, 2, 3, 4, 29.

IDC3330I ** xxx NOT FOUND

Explanation: The entry indicated by xxx does not exist in the directory.

System Action: The command is terminated.

Programmer Response: Correct the entry name and rerun the job.

Problem Determination: Table I, items 1, 2, 4, 29.

IDC3331I ** mem ALREADY EXISTS

Explanation: A member with the new member name already exists in the PDS directory.

System Action: The command is terminated.

Programmer Response: Specify a different new name and rerun the job.

Problem Determination: Table I, items 1, 2, 4, 29.

IDC3332I ** INSUFFICIENT MAIN STORAGE

Explanation: There is not sufficient main storage allocated.

System Action: The job is terminated.

Programmer Response: Specify a larger region size and rerun the job.

Problem Determination: Table I, items 1, 3, 4, 29.

IDC3333I ** CATALOG IS NOT EMPTY

Explanation: The REPRO command to copy a source catalog into a target catalog failed because the target catalog was not empty or was empty but had been used (that is, has entries defined in it, then deleted from it).

System Action: The copy operation isn't carried out, and the command is terminated.

Programmer Response: Make sure that you have specified the correct target catalog. If you have, use the LISTCAT command to determine whether the catalog is empty. If it is empty, delete it and redefine it. If it is not empty, delete whatever is defined in it and then delete it and redefine it. Reissue the REPRO command.

Problem Determination: Table I, items 1, 3, 4, 34a.

IDC3334I ** INVALID CI NUMBER

Explanation: The REPRO command to copy a source catalog into a target catalog failed because there was an invalid control-interval number in an entry in the source catalog.

System Action: The copy operation isn't carried out, and the command is terminated.

Programmer Response: Use the LISTCAT command to list all of the entries in the source catalog. Examine messages from LISTCAT to determine the entry that contains the invalid control-interval number. Use the DELETE command to delete that entry. If the DELETE fails, use the PRINT command to get a dump-format listing of the source catalog to identify the catalog record that contains the invalid control-interval number and to determine what the control-interval number should be. (For a description of the contents and interrelationship of catalog records, see *OS/VS2 Catalog Management Logic.*) Contact IBM for programming support.

Problem Determination: Table I, items 1, 3, 4, 29, 34a.

IDC3335I { **ENCIPHER** / **DECIPHER** } **ERROR**

Explanation: An error was detected while attempting to use a Programmed Cryptographic Facility service to encipher or decipher data. See the accompanying message for an explanation of the error.

System Action: The command is terminated.

Programmer Response: Respond to the problem described by the accompanying message.

Problem Determination: Table I, items, 1, 3, 4, 29.

IDC3336I ** { CIPHER / EMK / GENKEY / RETKEY } RETURN CODE IS rc

Explanation: A non-zero return code *(rc)* was returned by the indicated Programmed Cryptographic Facility service. The meanings of rc are as follows:

For CIPHER/EMK:

rc	Explanation
4	The Programmed Cryptographic Facility was not initialized.
12	Terminating system error was encountered.

For GENKEY/RETKEY:

rc	Explanation
4	The Programmed Cryptographic Facility was not active.
8	The key type was wrong.
12	The key name was not found in the CKDS (cryptographic key data set).
16	An installation exit caused the request to fail.
24	An error occurred in the installation exit routine.
28	The authorization check failed.
32	The key has invalid parity.
36	A terminating system error was encountered.

System Action: The command is terminated.

Programmer Response: Refer to the *Programmed Cryptographic Facility Installation Reference Manual* for a further explanation of the errors and appropriate actions.

Problem Determination: Table I, items 1, 3, 4, 29.

IDC3337I TARGET DATA SET IS NOT EMPTY FOR { ENCIPHER / DECIPHER }

Explanation: The target VSAM ESDS (entry-sequenced data set) for the ENCIPHER or DECIPHER operation was not empty.

System Action: The command is terminated.

Programmer Response: Change the DD statement for the target data set pointed to by the OUTFILE parameter or the data set name specified by the OUTDATASET parameter to specify an empty VSAM ESDS, or, if the VSAM ESDS was defined with the REUSE option, specify REUSE in the command.

Problem Determination: Table I, items 1, 3, 4, 29.

IDC3338I INVALID SOURCE DATA SET FOR DECIPHER

Explanation: The source data set was not enciphered by a REPRO ENCIPHER command, and therefore cannot be deciphered.

System Action: The command is terminated.

Programmer Response: Change the DD statement pointed to by the INFILE parameter or the data set name specified by the INDATASET parameter to specify a data set that was produced by a REPRO ENCIPHER operation.

Problem Determination: Table I, items 1, 3, 4, 29.

IDC3340I SYSTEMKEYNAME { ENCIPHERED SYSTEMDATAKEY / NOT FOUND IN SOURCE DATA SET }

Explanation: The user did not specify the key name or enciphered data encrypting key to be used to decipher the data. REPRO command processing tried to obtain the needed information from the header of the source data set, but the information was not stored in the header when the data set was enciphered by the REPRO ENCIPHER command.

System Action: The command is terminated.

Programmer Response: Supply the needed key name or enciphered data encrypting key in the command using the SYSTEMKEYNAME or SYSTEMDATAKEY parameter.

Problem Determination: Table I, items 1, 3, 4, 29.

IDC3341I DECIPHER KEY IS INVALID

Explanation: One of the keys supplied by the user to decipher the data is not the same as the key that was used to encipher the data. If the SYSTEMKEY parameter was specified, then one of the following is incorrect:

- The secondary file key name specified by the SYSTEMKEYNAME parameter
- The secondary file key name contained in the header
- The enciphered data encrypting key specified by the SYSTEMDATAKEY parameter
- The enciphered data encrypting key contained in the header

If the DATAKEYVALUE parameter was specified, then the specified value (plain text data encrypting key) is incorrect. If the DATAKEYFILE parameter was specified, then the first record in the data encrypting key data set is invalid or incorrect.

System Action: The command is terminated.

Programmer Response: Supply the correct key and rerun the job.

Problem Determination: Table I, items 1, 3, 4, 29.

IDC3350I SYNAD message from VSAM

Explanation: An I/O error occurred for a VSAM data set. The format and explanations of VSAM I/O errors are provided in *OS/VS Virtual Storage Access Method (VSAM) Programmer's Guide*.

System Action: Processing continues if possible.

Programmer Response: Check the explanation of the error, correct, and resubmit the job.

Problem Determination: Table I, items 1, 3, 4, 29.

IDC3351I ** VSAM { OPEN / CLOSE / I/O } RETURN CODE IS rc

Explanation: An error was encountered during VSAM open, close, or action request execution, as indicated in the text of the message. In the message, rc is the error code returned by VSAM. The VSAM return codes are as follows:

For a CLOSE Error

Return Code	Meaning
4	The data set indicated by the access-method control block is already closed.
132	An uncorrectable I/O error occurred while VSAM was reading the job file control block (JFCB).
136	Not enough virtual storage was available in the program's address space for a work area for CLOSE.
144	An uncorrectable I/O error occurred while VSAM was reading or writing a catalog record.
148	An unidentified error occurred while VSAM was searching the catalog.
180	A VSAM catalog specified in the JCL either does not exist or is not open, and no record for the data set to be closed was found in any other catalog.
184	An uncorrectable I/O error occurred while VSAM was completing outstanding I/O requests.
236	A permanent destaging error occurred in the Mass Storage System (RELINQUISH). With temporary CLOSE, destaging error or a staging error (ACQUIRE) occurred.

For an OPEN Error

0 When register 15 contains 0, no error. When register 15 contains 8, one of the following conditions exists:

1. VSAM is processing the access-method control block for some other request.
2. The access-method control block is already open.
3. DDNAME was not specified correctly in the access-method control block.
4. The access-method control block address is invalid.

4 The data set indicated by the access-method control block is already open.

76 OPEN detected an interrupt recognition while opening a data set for input processing.

92 OPEN found conflicting CBUF attributes for the data and index components of the data set being opened.

96 Warning message: an unusable data set was opened for input.

100 Warning message: OPEN encountered an empty alternate index that is part of an upgrade set.

104 Warning message: the time stamp of the volume on which a data set is stored doesn't match the system time stamp in the volume record in the catalog; this indicates that extent information in the catalog record may not agree with the extents indicated in the volume's VTOC.

108 Warning message: the time stamps of a data component and an index component do not match; this indicates that either the data or the index has been updated separately from the other.

116 Warning message: the data set was not properly closed. Data may be lost if processing continues; the Access Method Services VERIFY command may be used to attempt to close the data set properly. See *OS/VS2 Access Method Services*, for a description of the VERIFY command. In a cross-system shared DASD environment, a return code of 116 can have two meanings: (1) the data set was not properly closed or (2) the data set is opened for output on another processor.

Note: If you use the VERIFY command, this message can appear again when VERIFY processing opens the data set. If VERIFY processing then successfully closes the data set, VERIFY processing issues condition code 0 at the end of its processing.

118 Verify has been run successfully by the OPEN routine to correct a previous abnormal error condition.

132 An uncorrectable I/O error occurred while VSAM was reading the job file control block (JFCB).

136 Not enough virtual-storage space is available in the program's address space for work areas, control blocks, or buffers.

140 The catalog indicates that the data set being opened has an invalid physical record size. The supported physical record sizes are 512, 1024, 2048, and 4096.

144 An uncorrectable I/O error occurred while VSAM was reading or writing a catalog record.

145 An unexpected error return code was received by the VVDS manager.

148 No record for the data set to be opened was found in the available catalog(s), or an unidentified error occurred while VSAM was searching the catalog.

152 Security verification failed; the password specified in the access-method control block for a specified level of access doesn't match the password in the catalog for that level of access; user is not authorized to access this file.

160 The operands specified in the ACB or GENCB macro are inconsistent with each other or with the information in the catalog record.

164 An uncorrectable I/O error occurred while VSAM was reading the volume label.

168 The data set is not available for the type of processing you specified, or an attempt was made to open a reusable data set with the reset option while another user had the data set open.

176 An error occurred while VSAM was attempting to fix a page of virtual storage in real storage.

180 A VSAM catalog specified in JCL either does not exist or is not open, and no record for the data set to be opened was found in any other catalog.

184 An uncorrectable I/O error occurred while VSAM was completing an I/O request.

188 The data set indicated by the access-method control block is not of the type that may be specified by an access-method control block.

192 An unusable data set was opened for output.

193 OPEN detected an interrupt recognition condition while opening a data set for output processing.

196 Access to data was requested via an empty path.

200 Volume is unusable.

204 The ACB MACRF specification is GSR and caller is not operating in supervisor protect key 0 to 7, or the ACB MACRF specification is CBIC (control blocks in common) and caller is not operating in supervisor state with protect key 0 to 7.

205 The ACBCATX option or VVDS processing was requested, and the invoking program was not authorized.

208 The ACB MACRF specification is GSR and caller is using a VS1 system.

212 The ACB MACRF specification is GSR or LSR and the data set requires create processing.

216 The ACB MACRF specification is GSR or LSR and the key length of the data set exceeds the maximum key length specified in BLDVRP.

220 The ACB MACRF specification is GSR or LSR and the data set's control interval size exceeds the size of the largest buffer specified in BLDVRP.

224 Improved control interval processing is specified and the data set requires create mode processing.

228 The ACB MACRF specification is GSR or LSR and the VSAM shared resource table (VSRT) does not exist (no buffer pool is available).

232 Reset (ACB MACRF = RST) was specified for a nonreusable data set and the data set is not empty.

236 Indicates a stage or destage error.

240 Format-4 DSCB and catalog time stamp verification failed during volume mount processing for output processing.

244 The volume containing the catalog recovery area was not mounted and verified for output processing.

For a Logical I/O Error

4 End of data set encountered (during sequential retrieval), or the search argument is greater than the high key of the data set. Either no EODAD routine is provided, or one is provided and it returned to VSAM and the processing program issued another GET.

8 You attempted to store a record with a duplicate key, or there is a duplicate record for an alternate index with the unique key option.

12 You attempted to store a record out of ascending key sequence in skip-sequential mode; record had a duplicate key; for skip-sequential processing, your GET, PUT, and POINT requests are not referencing records in ascending sequence; or, for skip-sequential retrieval, the key requested is lower than the previous key requested. For shared resources, buffer pool is full.

16 Record not found.

20 Record already held in exclusive control by another requester.

24 Record resides on a volume that can't be mounted.

28 Data set cannot be extended because VSAM can't allocate additional direct-access storage space. Either there is not enough space left to make the secondary allocation request or you attempted to increase the size of a data set while processing with SHROPT = 4 and DISP = SHR.

32 An RBA specified that doesn't give the address of any data record in the data set.

36 Key ranges were specified for the data set when it was defined, but no range was specified that includes the record to be inserted.

40 Insufficient virtual storage in the user's address space to complete the request.

44 Work area not large enough for the data record (GET with OPTCD = MVE).

64 As many requests are active as the number specified in the STRNO parameter of the ACB macro; therefore, another request cannot be activated.

68 An attempt was made to use a type of processing (output or control-interval) that was not specified when the data set was opened.

72 You made a keyed request for access to an entry-sequenced data set, or you issued a GETIX or PUTIX to an entry-sequenced or relative record data set.

76 You issued an addressed or control-interval PUT to add to a key-sequenced data set, or you issued a control-interval PUT to a relative record data set.

80 You issued an ERASE request for access to an entry-sequenced data set, or you issued an ERASE request for access to an entry-sequenced data set via a path.

84 OPTCD = LOC specified for a PUT request or in a request parameter list in a chain of request parameter lists.

88 You issued a sequential GET request without having caused VSAM to be positioned for it, or you changed from addressed access to keyed access without causing VSAM to be positioned for keyed-sequential retrieval; there was no positioning established for sequential PUT insert for a relative record data set, or you attempted an invalid switch between forward and backward processing.

92 You issued a PUT for update or an ERASE without a previous GET for update or a PUTIX without a previous GETIX.

96 An attempt was made to change the prime key or key of reference while making an update.

100 An attempt was made to change the length of a record while making an addressed update.

104 The RPL options are either invalid or conflicting in one of the following ways:

1. SKP was specified and either KEY was not specified or BWD was specified.
2. BWD was specified for CNV processing.
3. FWD and LRD were specified.
4. Neither ADR, CNV, nor KEY was specified in the RPL.
5. WRTBFR, MRKBFR, or SCHBER was issued was issued, but either TRANSID was greater than 31 or the shared resource option was not specified.
6. ICI processing was specified, but a request other than a GET or a PUT was issued.
7. MRKBFR MARK = OUT or MARK = RLS was issued, but the RPL did not have a data buffer associated with it.
8. The RPL specified WAITX, but the ACB did not specify LSR or GSR.

108 The RECLEN specified was larger than the maximum allowed, equal to 0, or smaller than the sum of the length and the displacement of the key field of the base cluster or related alternate index (AIX). The RECLEN was not equal to the slot size specified for a relative record data set.

112 KEYLEN specified was too large or equal to 0.

116 During initial data set loading (that is, when records are being stored in the data set the first time it's opened), GET, POINT, ERASE, direct PUT, and skip-sequential PUT with OPTCD = UPD are not allowed. During initial data set loading, VERIFY is not allowed except for an entry-sequenced data set (ESDS) defined with the RECOVERY option. For initial loading of a relative record data set, the request was other than a PUT insert.

120 The request was operating under an incorrect TCB. For example, an end-of-volume call or a GETMAIN would have been necessary to complete the request, but the request was issued from a job step other than the one that opened the data set. The request can be resubmitted from the correct task if the new request reestablishes positioning.

132 An attempt was made in locate mode to retrieve a spanned record.

136 You attempted an addressed GET of a spanned record in a key-sequenced data set.

140 Inconsistent spanned record.

144 Invalid pointer (no associated base record) in an alternate index.

148 The maximum number of pointers in the alternate index has been exceeded.

152 Not enough buffers are available to process your request (shared resources only).

156 An addressed GET UPD request failed because the control interval flag was on, or an invalid control interval was detected during keyed processing. In the latter case, the control interval is invalid for one of the following reasons:

1. A key is not greater than the previous key
2. A key is not in the current control interval
3. A spanned record RDF is present
4. A free space pointer is invalid
5. The number of records does not match a group RDF record count

192 Invalid relative record number.

196 You issued an addressed request to a relative record data set.

200 You attempted addressed or control-interval access through a path.

204 PUT insert requests are not allowed in backward mode.

208 The user has issued an ENDREQ macro instruction against an RPL that has an outstanding WAIT against the ECB associated with the RPL. This can occur when an ENDREQ is issued from a STAE or ESTAE routine against an RPL that was started before the ABEND. No ENDREQ processing has been done.

Note: Refer to *OS/VS Virtual Storage Access Method (VSAM) Programmer's Guide* for additional information on the return codes.

System Action: The action depends on the function being executed. See the message in the program listing following this message.

Programmer Response: Correct the cause of the error.

Problem Determination: Table I, items 1, 3, 4, 29.

IDC3380I FILE ddname MUST SPECIFY A DEMOUNTABLE UNIT

Explanation: The unit for the file defined by the DD statement with the name ddname was not assigned for exclusive control. Volumes cannot be mounted or demounted on this unit. Either the volume allocated by the DD statement was already mounted when the statement was processed, or the correct parameters were not specified on the DD statement.

System Action: The job is terminated.

Programmer Response: Rerun the job after demounting the volume. This causes the device to be assigned for exclusive control while the job or step is running. See the discussion of the FILE parameter on the LISTDSET or SCRDSET command in *OS/VS Mass Storage System (MSS) Services for Space Management* for further details.

Problem Determination: Table I, items 1, 2, 3, 4, 13, and 29.

IDC3383I FILE ddname MUST SPECIFY A VIRTUAL UNIT

Explanation: The DD statement (ddname) specified through the FILE parameter does not specify a virtual unit but a virtual unit is required.

System Action: The command terminates normally.

Programmer Response: Correct the UNIT parameter and rerun the command.

Problem Determination: Table I, items 1, 2, 3, 4, 13, and 29.

IDC3384I FILE ddname SPECIFIED AN INVALID UNIT FOR FUNCTION REQUESTED

Explanation: The direct access storage unit, specified on the DD statement (ddname) through the FILE parameter, is not supported by this function. The unit is not a direct access device or, if DASD, is not a 3330 or 3330V.

System Action: The command terminates normally.

Programmer Response: Correct the UNIT parameter and rerun the command.

Problem Determination: Table I, items 1, 2, 3, 4, 13, and 29.

IDC3385I VOLUME ser IS PERMANENTLY RESIDENT OR RESERVED

Explanation: Volume ser is marked permanently resident or reserved in the UCB (unit control block). Therefore, the volume cannot be demounted. The volume needs to be demounted either to perform an MSC (Mass Storage Control) function or so that the proper volume can be mounted on that unit.

System Action: Processing terminates.

Programmer Response: Make sure that the DD statement named in the FILE parameter specifies the correct volume serial. You might have mistakenly specified the volume serial of a permanently resident or reserved volume. If the DD statement does have the correct volume serial, then you cannot run the command while that volume is permanently resident or reserved.

Problem Determination: Table I, items 1, 2, 3, 4, 13, and 29.

IDC3392I NO UNIT AVAILABLE FOR VOLUME volser

Explanation: The TEST enqueue indicates that the volume is allocated to a job step, but no unit is available for mounting the volume. All units that have open VSAM catalogs are non-shareable and cannot be used.

System Action: The job terminates.

Programmer Response: Either change the disposition of your data set to share (if possible) or rerun the job when a non-shareable unit is available.

IDC3435I CARTRIDGE NOT EJECTED, EXIT STATION FULL

Explanation: A request was made to eject a cartridge from the cartridge access station, but the cartridge access station was already full.

System Action: The MODIFYC command is terminated and the cartridge remains in its original location in the cartridge store. The return code is 12.

Programmer Response: Have the operator empty the cartridge access station and rerun the command.

IDC3436I CARTRIDGE TO BE MODIFIED COULD NOT BE LOCATED

Explanation: The request to modify a cartridge failed because the cartridge could not be found.

System Action: The MODIFYC command is terminated. The return code is 12.

Programmer Response: Check the input parameters of the MODIFYC command for errors. If any errors are found, correct the input and rerun the command. If errors cannot be found, one of the following commands can be run to help determine where the cartridge is and what the cartridge status is. The command is:

- LISTMSF command if the cartridge is a scratch cartridge.
- LISTMSVI command if the cartridge is part of a mass storage volume.
- AUDITMSS command if the cartridge to be modified was requested by using the CELL parameter.

If the cartridge still cannot be located, see Problem Determination.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 18b, and 30.

IDC3437I ACCESSED CELL IS EMPTY OR THE DESTINATION CELL IS FULL

Explanation: The attempt to modify a cartridge failed because the home cell where the cartridge was supposed to be was empty, or an attempt to reassign a cartridge to a new location failed because the new location is already occupied.

System Action: The MODIFYC command terminates. The return code is 12.

Programmer Response: Check the input parameters of the MODIFYC command for errors. If errors are found, correct them and resubmit the command. If errors cannot be found, do the following:

1. Rerun the MODIFYC command unchanged because the cartridge that was requested might have been at a data recording device when the initial request was processed. If the same error occurs, one of the following commands can be run to help determine the nature of the error. If the home cell location is not known, the commands LISTMSF for scratch cartridges or LISTMSVI for cartridges that are part of volumes, can be run to determine the home cell location. The AUDITMSS command can then be run against the found cell location and the new location specified in the TO parameter to determine the status of the cells.
2. Correct any errors that were found in Step 1 and rerun the MODIFYC command.
3. If the above actions do not correct the problem, see the Problem Determination.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 18b, and 30.

IDC3438I ACCESSED OR DESTINATION CELL ADDRESS IS INVALID FOR THIS MSF

Explanation: The accessed or destination cell address is specified incorrectly. Either the Mass Storage Facility is incorrectly identified or the cell address parameter did not follow the rules of specification for each model of a Mass Storage Facility.

System Action: The MODIFYC commands terminates. The return code is 12.

Programmer Response: Examine the input parameters of the MODIFYC command. Ensure that the parameters are consistent with the Mass Storage System requirements for each model of a Mass Storage Facility. Correct any errors in the input parameters and rerun the command.

IDC3500I A VALID VSAM DEFINE STRUCTURE WAS NOT PROVIDED

Explanation: The object parameter list was not specified properly. The Access Method Services reader/interpreter should have detected this error.

System Action: The command is terminated.

Programmer Response: Probable system error. See *OS/VS2 Access Method Services* for the valid specification.

Problem Determination: Table I, items 3, 4, 29.

IDC3501I MODEL ENTYPE IS NOT CONSISTENT WITH THE OBJECT BEING DEFINED

Explanation: The object being used to model a VSAM data set or user catalog differs from that being defined.

System Action: The command is terminated.

Programmer Response: Probable user error. Ensure that the model object type is identical to that being defined.

Problem Determination: Table I, items 3, 4, 29.

IDC3503I FILE SEQUENCE LIST IS INCONSISTENT WITH VOLUME LIST

Explanation: The number of elements in the FILESEQUENCENUMBERS parameter list is not equal to the volumes in the VOLUMES parameter list.

System Action: The command is terminated.

Programmer Response: Probable user error. Check the elements in both lists, and make corrections where needed.

Problem Determination: Table I, items 3, 4, 29.

IDC3504I THE RANGE LIST CANNOT BE CONSTRUCTED

Explanation: In the construction of the RANGE LIST, the allotted area was not sufficient.

System Action: The command is terminated.

Programmer Response: Possible system error. Rerun the job with the PARM option--PARM TEST (FULL((DEFN.1.1))); contact your system programmer.

Problem Determination: Table I, items 3, 4, 16, 29.

IDC3505I INCORRECT SPECIFICATION OF SPACE ALLOCATION

Explanation: The space parameters TRACKS, CYLINDER, or RECORDS do not appear on the appropriate object parameter list.

System Action: The command is terminated.

Programmer Response: Probable user error. See the DEFINE command and space specifications in *OS/VS2 Access Method Services*.

Problem Determination: Table I, items 3, 4, 29.

IDC3506I A REQUIRED VOLUME LIST HAS BEEN OMITTED

Explanation: The VOLUMES parameter does not appear in the command when required.

System Action: The command is terminated.

Programmer Response: Probable user error. A volume list must be available to DATA and INDEX objects (the INDEX object appears only if the data set is KSDS). The availability may be through explicit specification of volumes, via propagation of volumes from the Cluster parameter list or from the model object.

Problem Determination: Table I, items 3, 4, 29.

IDC3507I THE RECORDSIZE PARAMETER IS REQUIRED BUT NOT SPECIFIED

Explanation: The RECORDSIZE parameter must be specified when defining VSAM space and the allocation unit is records.

System Action: The command is terminated.

Programmer Response: Probable user error. Specify RECORDSIZE and resubmit the job.

Problem Determination: Table I, items 3, 4, 29.

IDC3513I DYNAMIC ALLOCATION FAILED OR FILE NOT CODED WHEN REQUIRED

Explanation: This message is issued when the access method services DEFINE command or a Cache-DASD command attempts to dynamically allocate a volume, and the attempt fails. The preceding messages (prefixed by IKJ) should indicate why dynamic allocation failed.

System Action: The command is terminated.

Programmer Response: See the explanations for the preceding IKJ messages or specify the FILE parameter, which references a DD statement for the volume.

Problem Determination: Table I, items 3, 4, 29.

IDC3514I KEYRANGES ARE INVALID

Explanation: The KEYRANGES parameter (DEFINE or IMPORT command) specified invalid key values for the low or high key values:

a) The high key value is lower than the low key value in a low-key high-key pair.

b) Two or more low-key high-key pairs overlap, or are identical.

System Action: The command is terminated.

Programmer Response: Correct the KEYRANGES specifications.

IDC3515I AVERAGE RECORD SIZE EXCEEDS MAXIMUM RECORD SIZE

Explanation: The first size value of the RECORDSIZE parameter is greater than the second.

System Action: Processing for the command is terminated.

Programmer Response: Correct either the average or the maximum size value.

IDC3516I KEYS PARAMETER REQUIRED FOR KEY SEQUENCED DATA SET

Explanation: The definition of a KSDS requires the specification of the key position and length, via the KEYS parameter.

System Action: Processing for the command is terminated.

Programmer Response: Correct the DEFINE command.

IDC3517I AVG AND MAX RECORDSIZE NOT EQUAL FOR RELATIVE RECORD DATA SET

Explanation: The RECORDSIZE parameter specified average and maximum record sizes that were not equal. Relative record data sets must have fixed-length records.

System Action: The command is terminated.

Programmer Response: Correct either the average or the maximum size value.

IDC3518I REUSE PARAMETER INVALID WITH UNIQUE OR KEYRANGES

Explanation: The REUSE attribute may not be specified for a cluster or an alternate index together with the UNIQUE or KEYRANGES parameter, either explicitly or implicitly thru use of the MODEL parameter.

System Action: The command is terminated.

Programmer Response: Correct the command by deleting either the REUSE or the UNIQUE and/or KEYRANGES parameter; then rerun the job.

IDC3519I REUSE ATTRIBUTE CONFLICT BETWEEN DATA AND INDEX

Explanation: The REUSE attribute was not the same for the data and index objects. Examples:

1. NOREUSE is specified at the cluster level and REUSE is specified at the data level with nothing specified at index level resulting in index defaulting to NOREUSE.

2. Modeling at the cluster level and explicitly overriding model attributes at data or index level but not both.

System Action: The command is terminated.

Programmer Response: Redefine the object ensuring that data and index REUSE attributes are in harmony.

IDC3521I SPANNED ATTRIBUTE INVALID FOR A RELATIVE RECORD DATA SET

Explanation: SPANNED and NUMBERED were specified together, either explicitly or through use of the MODEL parameter. Records of an RRDS may not span control intervals.

System Action: The command is terminated.

Programmer Response: Correct the SPANNED parameter or the data set type specification.

IDC3522I SPANNED ATTRIBUTE REQUIRED FOR RECORDSIZE GREATER THAN 32,761

Explanation: The RECORDSIZE parameter specifies a maximum size greater than 32,761, but SPANNED is not specified.

System Action: The command is terminated.

Programmer Response: Correct the RECORDSIZE parameter, or specify the SPANNED parameter.

IDC3523I GENERATION DATA GROUP NAME EXCEEDS 35 CHARACTERS

Explanation: The name specified for a generation data group cannot exceed 35 characters.

System Action: The command is terminated.

Programmer Response: Shorten the generation data group name and rerun the job.

IDC3524I KEYRANGE VALUES EXCEED KEYLENGTH OR ARE NOT IN ASCENDING ORDER

Explanation: This message is issued by DEFINE when the key values of the KEYRANGE parameter are specified incorrectly. Either a key range key value was longer than the user specified/defaulted key length or the key range pairs were in nonascending order.

System Action: The command is terminated.

Programmer Response: Examine the key range values on the DEFINE command. Determine what the key length will be for the data set and insure that all key values specified in the KEYRANGE parameter are no longer than this length. Also, insure that key range pairs are ordered in ascending sequence. Then resubmit the job.

IDC3525I INSUFFICIENT SECURITY AUTHORIZATION TO ALTER KEYS

Explanation: The level of password supplied was not high enough or the RACF authorization was insufficient to permit the ALTER to occur. To modify KEY values, the master password of the cluster, alternate index, or path is needed or, alternatively, the catalog master password could be supplied. Since both the data and index components will be altered, if one component is password-protected and the other is not, the master password of the protected component is sufficient.

System Action: Processing of the command is terminated.

Programmer Response: Supply the proper level password or have your RACF profile altered to the required level of access. Rerun the job.

IDC3527I ALTER WAS UNABLE TO LOCATE ATTRIBUTES OF OBJECT TO BE MODIFIED

Explanation: The entry to be modified could not be found in the catalog.

System Action: The command is terminated.

Programmer Response: Verify that the catalog entry exists and the catalog being used is proper.

Problem Determination: Table I, items 1, 3, 4, 29.

IDC3528I THE OBJECT TO BE MODIFIED IS PASSWORD SUPPRESSED

Explanation: The MASTERPW password of the entry or the UPDATEPW or higher level catalog password must be supplied for modifications to be allowed to the entry.

System Action: The command is terminated.

Programmer Response: Verify which password is required and provide the password.

IDC3529I NAME CREATED FROM GENERIC NEWNAME IS LONGER THAN 44 CHARACTERS

Explanation: The Access Method Services ALTER command issues this message when it is asked to rename data sets using a generic name, and one of the resulting new data set names is longer than 44 characters.

System Action: The command is terminated.

Programmer Response: Correct the error and rerun the job.

IDC3530I ENTRY AND NEWNAME PDS NAMES MUST BE THE SAME

Explanation: An attempt was made to rename PDS member but the entry name and the new name referenced different partitioned data set names.

System Action: Processing continues.

Programmer Response: Make sure that the same PDS name is given in both the entry name and new name parameters.

IDC3536I INVALID USE OF * WITH THE NEWNAME PARAMETER

Explanation: If either the ENTRYNAME or NEWNAME parameter specifies a generic name (*), then both must.

System Action: The command is terminated.

Programmer Response: Ensure that both the ENTRYNAME and NEWNAME parameters specify a generic name if either do.

Problem Determination: Table I, items 1, 3, 4, 29.

IDC3537I INVALID ALTERNATE INDEX PARAMETERS SPECIFIED

Explanation: Either UPGRADE is specified but the object being altered is not an alternate index, or UNIQUEKEY is specified but the data object being altered is not the data object of an alternate index.

System Action: The command is terminated.

Programmer Response: Correctly specify the name of an alternate index, or the data object name of an alternate index.

Problem Determination: Table I, items 2, 3, 4, 29.

IDC3538I UNIQUEKEY/UPGRADE INVALID FOR NON-EMPTY ALTERNATE INDEX

Explanation: The UNIQUEKEY or UPGRADE parameter is specified, but the alternate index is non-empty. These parameters may only be specified if the alternate index contains no records.

System Action: The command is terminated.

Programmer Response: If UNIQUEKEY/UPGRADE alternate index is truly desired, the alternate index must be deleted and redefined with proper attributes, then rebuilt with BLDINDEX.

Problem Determination: Table I, items 2, 3, 4, 29.

IDC3539I KEYS AND/OR RECORDSIZE PARAMETER SPECIFIED FOR NON-EMPTY OBJECT

Explanation: The ALTER command specified the KEYS or RECORDSIZE parameter, but the cluster or alternate index contains data records.

System Action: The object's catalog entry is not altered.

Programmer Response: If you want to change key position and/or record size, you must delete, redefine, and reload the object.

IDC3540I KEYS/RECORDSIZE VALUES CONFLICT WITH CONTROL INTERVAL SIZE

Explanation: The new key length, key position, or maximum record size is such as to require a larger control interval.

System Action: The object's catalog entry is not altered.

Programmer Response: Delete and redefine the object with the proper KEYS and RECORDSIZE parameters.

Problem Determination: None.

IDC3541I NEW ALTERNATE INDEX KEY VALUES CONFLICT WITH BASE CLUSTER RECORDSIZE

Explanation: The ALTER command for an alternate index specifies a KEYS parameter for a key whose ending position is outside the base cluster's maximum record size. If the base cluster is spanned, the ending key position must be in the base cluster's first control interval.

System Action: The object's catalog entry is not altered.

Programmer Response: Correct the ALTER command or correct the base cluster's maximum record size or control interval size.

Problem Determination: Table I, items 3, 4, 34b.

IDC3542I AVG AND MAX RECORDSIZE NOT EQUAL FOR RELATIVE RECORD DATA SET

Explanation: The RECORDSIZE parameter specified average and maximum record sizes that were not equal. Relative record data sets must have fixed-length records.

System Action: Processing of the command is terminated.

Programmer Response: Correct either the average or the maximum size value.

IDC3545I KEYS AND/OR RECORDSIZE VALUES CANNOT BE ALTERED

Explanation: The ALTER command specified new KEYS or maximum RECORDSIZE values for an object whose corresponding values were specified when the object was defined, or which have been altered to non-default values.

System Action: The object's catalog entry is not altered.

Programmer Response: Delete and correctly redefine the object.

Problem Determination: Table I, items 3, 4, 34b.

IDC3546I NEW KEY VALUES CONFLICT WITH RECORDSIZE

Explanation: The ALTER command specifies a KEYS parameter that defines a key whose ending position is outside the maximum recordsize.

System Action: Processing of the command is terminated.

Programmer Response: Specify key length and position such that the key is entirely contained in the base cluster record.

Problem Determination: Table I, item 34b.

IDC3547I ENTRY TYPE INVALID WITH KEYS/RECORDSIZE PARAMETER

Explanation: The entry name specified is not the data component of a cluster or alternate index, nor is it a cluster or alternate index, nor is it a path over a cluster or alternate index.

System Action: The entry's catalog data is not altered. Processing of the command is terminated.

Programmer Response: Correct the entry name and rerun the job.

Problem Determination: Table I, items 3, 4, 34b.

IDC3558I FORCE OPTION IS INVALID FOR ENTRY TYPE

Explanation: The FORCE option on the DELETE command can be used to delete only data spaces, generation data groups, and VSAM user catalogs, but the FORCE option was specified on a DELETE command for some other type of entry.

System Action: The DELETE command is not executed. Processing continues.

Operator Response: None.

IDC3568I (xxx) INVALID USE OF *

Explanation: The level name indicated by xxx starts or ends with an * which is not allowed.

System Action: The command is terminated.

Programmer Response: Correct the level name and rerun the job.

Problem Determination: Table I, items 4, and 29.

IDC3570I DELIMITERS MUST NOT BE SPECIFIED WHEN RELOADING A CATALOG

Explanation: REPRO command delimiters (FROMKEY, TOKEY, etc.) cannot be specified for reloading a catalog.

System Action: The command is terminated.

Programmer Response: Remove delimiters from the REPRO command.

Problem Determination: Table I, items 1, 2, 3, 4, and 34b.

IDC3572I TARGET CATALOG IS TOO SMALL TO CONTAIN THE BACKUP CATALOG

Explanation: The size of the target catalog is inadequate.

System Action: The command is terminated.

Programmer Response: Determine size of the backup catalog from LISTCAT output obtained at the time of the unload. Redefine the target catalog with adequate space to contain the low key range of the catalog.

Problem Determination: Table I, items 1, 2, 3, 4, 26b, and 34a.

IDC3573I { NAME / VOLSER / DEVTYP } OF BACKUP AND TARGET CATALOG DO NOT AGREE

Explanation: The target catalog name, its volume serial number, and/or the device type do not agree with the backup.

System Action: The command is terminated.

Programmer Response: Check whether you are reloading from the proper backup into the intended catalog.

Problem Determination: Table I, items 1, 2, 3, 4, 26b, 34a.

IDC3576I ALTER CATALOG NAME FOR dsn FAILED

Explanation: During REPRO copy of a catalog entry record, from one ICF catalog to another, an attempt was made to update the catalog pointer in the corresponding VVR record. This update processing for dsn failed.

System Action: Processing is terminated.

Programmer Response: Resolve problem described by preceding message(s), restore volumes and rerun the job.

Problem Determination: Table I, items 1, 3, 4 and 29.

IDC3577I TARGET CATALOG IS NOT EMPTY

Explanation: During a REPRO copy of an ICF catalog, a non-empty target catalog has been found. An empty catalog should contain only the following:

- Catalog Sphere Record
- Catalog Data Component Truename Record
- Catalog Index Component Truename Record
- VVDS Sphere Record (maybe)

An additional record has been found.

System Action: Processing is terminated.

Programmer Response: Use the PRINT command to display the contents of the target catalog. If it contains more than the expected records redefine the catalog and rerun the job.

Problem Determination: Table I, items 1, 3, 4, and 29.

IDC3578I SOURCE AND TARGET CATALOG ARE SAME

Explanation: During an ICF catalog REPRO copy request, it has been determined that the ICF catalog names, identified by the INFILE/INDATASET and OUTFILE/OUTDATASET parameters, specify the same name. This implies a copy to itself and is not allowed.

System Action: Processing is terminated.

Programmer Response: Correct the source or target catalog specification and rerun the job.

Problem Determination: Table I, items 1, 3, 4, and 29.

IDC3579I SOURCE CATALOG LRECL IS LARGER THAN TARGET CATALOG LRECL

Explanation: Before an ICF catalog copy operation, the LRCEL of the source catalog has been compared to that of the target catalog. It has been determined that the source catalog LRECL value is larger than the target LRECL value and thus records in the source catalog may not fit in the target catalog.

System Action: Processing is terminated.

Programmer Response: Review the attributes of the target catalog and redefine it with an LRECL value equal to or greater than that of the source catalog. Rerun the job.

Problem Determination: Table I, items 1, 3, 4, and 29.

IDC3580I dsn DOES NOT SPECIFY A BASE OBJECT

Explanation: During a REPRO ICF catalog merge operation the catalog entry, dsn, was found to identify:

- An entry for an object other than
  - a cluster
  - a non-VSAM
  - a GDG
  - a user catalog
- A VVDS name
- The source catalog name

System Action: Processing is terminated.

Programmer Response: Correct the ENTRIES specification and rerun the job.

Problem Determination: Table I, items 1, 3, 4, and 29.

IDC3581I REPRO OF CATALOGS CANNOT SPECIFY DELIMITERS

Explanation: The REPRO command does not process beginning and ending delimiters when you are copying catalogs.

System Action: The command is terminated.

Programmer Response: Remove the invalid parameters from the command and rerun job.

Problem Determination: Table I, items 1, 3, 4, and 29.

IDC3582I INPUT DATA SET ORGANIZATION INCOMPATIBLE WITH OUTPUT DATA SET

Explanation: This error condition arises if you try to copy from a non-relative record data set to a non-empty relative record output data set that is not specified for reuse.

System Action: The command is terminated.

Programmer Response: Check the status of the input and output data sets. REPRO is unable to satisfy your request. Set up data sets correctly and rerun the job.

Problem Determination: Table I, items 2, 3, 4, and 29.

IDC3583I 'prm' INCOMPATIBLE WITH INFILE DATA SET TYPE

Explanation: The specified parameter is not correctly used with this type data set. A conflict results between delimiters and the data set type. An example is specifying the TOKEY parameter with an relative-record data sets.

System Action: The command is terminated.

Programmer Response: Correct the parameters or data set specified and rerun.

Problem Determination: Table I, items 2, 3, 4, and 29.

IDC3584I RECOVERABLE CATALOGS CANNOT BE COPIED

Explanation: A REPRO command specified a VSAM catalog copy operation where either the input catalog or the output catalog or both was defined with the RECOVERABLE attribute. Neither the source or target catalog can be recoverable in a catalog copy operation.

System Action: The command is terminated.

Programmer Response: To convert a nonrecoverable catalog into a recoverable catalog, you must export each VSAM data set from the nonrecoverable catalog, then import it into the newly defined recoverable catalog. To convert a recoverable catalog into a nonrecoverable catalog or to copy a recoverable catalog into a recoverable catalog, you can either export each VSAM data set from the source catalog and then import it into the target catalog or use the EXPORTRA/IMPORTRA commands to accomplish the same thing on a volume basis.

Problem Determination: Table I, items 2, 3, 4, and 34b.

IDC3585I dsn IS INVALID FOR { ENCIPHER / DECIPHER }

Explanation: The data set identified by *dsn* is not a valid source or target for an ENCIPHER or DECIPHER operation. The data is invalid for one of the following reasons:

- ENCIPHER was specified and the source is a VSAM catalog.
- ENCIPHER was specified and the target is not a SAM or VSAM ESDS (entry-sequenced data set) data set.
- DECIPHER was specified and the target is a VSAM catalog.
- DECIPHER was specified and source is not a SAM or VSAM ESDS data set.

System Action: The command is terminated.

Programmer Response: Change the DD statement pointed to by the INFILE or OUTFILE parameter or the data set name specified by the INDATASET or OUTDATASET parameter to specify a data set of the correct type for the operation.

Problem Determination: Table I, items 1, 3, 4, and 29.

IDC3586I CANNOT ENCIPHER RRDS TO TARGET DATA SET

Explanation: The source data set for an encipher operation is a VSAM RRDS (relative record data set), but the record size (VSAM) or the logical record length (SAM) of the target data set is not at least 4 bytes greater than the record size of the source RRDS.

System Action: The command is terminated.

Programmer Response: Change the DD statement pointed to by the OUTFILE parameter or the data set name specified by the OUTDATASET parameter to specify a target data set with the appropriate record length.

Problem Determination: Table I, items 1, 3, 4, 29.

IDC3587I UNLOAD/RELOAD NOT ALLOWED FOR CATALOG

Explanation: An ICF catalog was identified as the source or target catalog during a REPRO request and the other object identified was a non-VSAM data set. This implies an ICF catalog unload or reload operation and it is not allowed.

System Action: Processing is terminated.

Programmer Response: Correct the source and/or target specifications and rerun the job.

Problem Determination: Table I, items 1, 3, 4, and 29.

IDC3588I WRONG CATALOG TYPE FOR MERGECAT PARAMETER

Explanation: The MERGECAT parameter has been coded but the source and target catalogs, identified by the INFILE/INDATASET and OUTFILE/OUTDATASET parameters, are not both ICF catalogs.

System Action: Processing is terminated.

Programmer Response: Remove the MERGECAT parameter or correct the source and target catalog specifications and rerun the job.

Problem Determination: Table I, items 1, 3, 4, and 29.

IDC3589I VVDS NOT ALLOWED FOR REPRO

Explanation: A VVDS has been identified as the source or target object of a REPRO command. The data set identified by the INFILE/INDATASET or OUTFILE/OUTDATASET parameters has the VVDS prefix 'SYS1.VVDS.V'.

System Action: Processing is terminated.

Programmer Response: Correct the source or target specifications and rerun the job.

Problem Determination: Table I, items 1, 3, 4, and 29.

IDC3592I THE ENTRY NAME IS NOT A CLUSTER, ALTERNATE INDEX OR ICF CATALOG

Explanation: The object identified by the entry parameter in the EXPORT command is not a cluster, alternate index or ICF catalog. Only cluster, alternate index or ICF catalog objects can be exported.

System Action: The command is terminated. No export action takes place.

Programmer Response: If a catalog is to be disconnected, DISCONNECT must be specified in the command. Check to be sure your entry name is a cluster, alternate index or ICF catalog object name.

Problem Determination: Table I, items 3, 4, and 29.

IDC3593I A REQUIRED CATALOG FIELD WAS NOT LOCATED

Explanation: One of the following required catalog fields could not be located by catalog management: ENTYPE, ENTNAME, or NAMEDS.

System Action: The command is terminated. No export action takes place.

Programmer Response: Something is wrong with the catalog entry for this cluster. If this happens, consult your system programmer.

Problem Determination: Table I, items 3, 4, and 29.

IDC3596I THE DATA SET SPECIFIED IN THE EXPORT PARAMETER IS NOT USABLE

Explanation: The data set specified in the EXPORT command has been marked as not usable by a DELETE FORCE operation or by a RESETCAT operation because of space occupancy conflicts.

System Action: Processing of the command is terminated.

Programmer Response: This data set cannot be exported under current catalog conditions. If you wish to recover the data, use the REPRO command.

Problem Determination: Table I, items 1, 2, 3, 4, and 34b.

IDC3598I OBJECT IS A VSAM VOLUME DATA SET WHICH CANNOT BE EXPORTED

Explanation: The object identified by the entry parameter in the EXPORT command is a VSAM volume Data Set which cannot be exported.

System Action: The command is terminated. No export action takes place.

Programmer Response: Do not attempt to export a VSAM Volume Data Set.

Problem Determination: Table I, items 3, 4, and 29.

IDC3599I UNABLE TO SERIALIZE ON CATALOG catalogname

Explanation: An attempt was made and has failed to serialize the catalog, CNVTCAT or REPRO catalogname. The catalog is to be serialized to prevent its update during processing.

System Action: The CNVTCAT or REPRO command is terminated.

Programmer Response: You should restrict access to the catalog during this process and rerun the job.

Problem Determination: Table I, items 1, 3, 4, 13, and 29.

IDC3602I IMPORT OF DATA SET FAILED AFTER DEFINE – DELETE ATTEMPTED

Explanation: The cluster or alternate index being imported was defined successfully, but an error occurred before all the data was copied into the newly-defined cluster or alternate index. An attempt is being made to delete the cluster. There is a message preceding this message in the program listing that explains why the import failed (invalid DD statement, I/O error on portability data set, for instance).

For IMPORTRA, message IDC2621I follows this message and gives the name of the failing cluster or alternate index.

System Action: For IMPORT, the command is terminated. For IMPORTRA, processing continues with the next object on the portable data set unless an I/O error occurred on the portable data set, in which case the command is terminated.

Programmer Response: Consult the message preceding this message in the program listing.

Problem Determination: Table I, items 1, 3, 4, and 29.

IDC3605I INVALID OBJECTS SUBPARAMETER FOR ICF CATALOG

Explanation: The NEWNAME or KEYRANGES parameters, has been specified as a subparameter(s) of the OBJECTS parameter, on an IMPORT command. The portable data set contains an ICF catalog for which these subparameters are invalid.

System Action: IMPORT terminates processing.

Programmer Response: Remove these subparameters in OBJECTS parameter and rerun the job.

Problem Determination: Table I, items 3, 4, and 26b.

IDC3606I PORTABILITY DATA SET IN ERROR

Explanation: The data on the portable data set is not as was expected; specifically, the record preceding the data records for the cluster or alternate index is invalid. Probable user error.

System Action: The command is terminated.

Programmer Response: Ensure that the portable data set to be processed by IMPORT was created by EXPORT, or that a portable data set to processed by IMPORTRA was created by EXPORTRA. If the problem reoccurs, do the problem determination action.

Problem Determination: Table I, items 1, 3, 4, 26c, 29.

IDC3607I DELETE UNSUCCESSFUL - NOT A TEMPORARY DATA SET

Explanation: The deletion that was to be attempted was not performed. A duplicate name was found in the catalog, and the temporary export flag was not on for the duplicate data set or, in systems with enhanced VSAM, the data set was not empty.

System Action: The command is terminated.

Programmer Response: Change the name, or delete the duplicate cluster if you mean to replace it.

Problem Determination: Table I, items 3, 4, and 29.

IDC3608I CONNECT FOR dsn FAILED

Explanation: This message merely identifies the name of the user catalog which could not be connected. A message will follow to explain the catalog return code received when attempting to connect the user catalog.

System Action: The command is terminated.

Programmer Response: See the message following this message in the program listing.

Problem Determination: Table I, items 3, 4, and 29.

IDC3609I VOLUME SPECIFICATION NEEDED FOR dsn

Explanation: Volume information could not be found on the portable data set or in the IMPORT command. You are probably trying to import a portable data set from a system using the first release of Access Method Services (OS/VS2 Release 2, OS/VS2 Release 1.6, OS/VS1 Release 2, or DOS/VS Release 29).

System Action: The command is terminated.

Programmer Response: If the portable data set was created with the EXPORT PERMANENT option on a system using the first release of Access Method Services (as listed above), you must specify volume information by using the OBJECTS parameter of the IMPORT command. If you specify the cluster name in the **entryname** subparameter of the OBJECTS parameter, the volume information will be propagated to the data component and, for a key-sequenced cluster, it will be propagated to the index component. Volume information may be specified separately for the data and index components by repeating the OBJECTS parameter list, which will override any cluster specification.

Problem Determination: Table I, items 3, 4, and 29.

IDC3610I SPECIFICATION OF DEVICE TYPES, VOLUMES REQUIRED FOR CONNECT

Explanation: When connecting a user catalog, the DEVICETYPES and VOLUMES parameters, as well as the catalog name, are required.

System Action: The command is terminated.

Programmer Response: Specify device types and volumes in the command to connect a user catalog.

Problem Determination: Table I, items 3, 4, and 29.

IDC3612I DELETE UNSUCCESSFUL - NOT A CLUSTER OR AIX

Explanation: An attempt was made to delete the duplicate entry because catalog define of the cluster or alternate index being imported failed due to the existence of a duplicate name in the catalog. A locate performed on the name revealed that the entry was not a cluster or alternate index.

System Action: The command is terminated.

Programmer Response: Use the NEWNAME parameter to change the name of the cluster or alternate index you are attempting to import. Do a LISTCAT to see what you really have; what you are trying to import has a conflicting name in the catalog.

Problem Determination: Table I, items 3, 4, and 29.

IDC3613I ERROR ENCOUNTERED OPENING PORTABILITY DATA SET

Explanation: The portability data set could not be opened.

System Action: The command is terminated.

Programmer Response: None. The preceding message in the listing explains why the entry data set was not opened.

Problem Determination: Table I, items 1, 3, 4, 26b, and 29.

IDC3614I INVALID NAME IN OBJECTS PARAMETER: obj

Explanation: The name specified in the OBJECT parameter in the IMPORT command does not match any of the object names for the VSAM data set being imported.

System Action: The command is terminated.

Programmer Response: Correct the object name.

Problem Determination: Table I, items 3, 4, and 29.

IDC3615I DSNAME ON THE OUTFILE JCL STATEMENT INCORRECT

Explanation: The cluster or alternate index name of the imported data set does not match the data set name specified in the JCL statement identified by the OUTFILE parameter. The data set name in the JCL statement must be the same as the object being imported or a path over it.

System Action: Processing for the command is terminated.

Programmer Response: Correct the data set name specification in the JCL. Note that if the NEWNAME parameter is specified, the specified data set name must be that name specified in this parameter.

IDC3617I ATTRIBUTES OF PREDEFINED ENTRY INCOMPATIBLE WITH THOSE EXPORTED

Explanation: The data set being imported into is not consistent with that one which previously exported and now being imported. One of the following things is wrong:

(a) The relative key positions are not equal.

(b) The data sets are not of the same type (KSDS, RRDS, ESDS).

(c) The key lengths are not the same.

(d) The maximum record size of the data set being imported into is less than that of the data set exported.

System Action: IMPORT processing is terminated.

Programmer Response: Delete and redefine the predefined data set with proper attributes. Then rerun the job.

Problem Determination: Table I, items 3, 4, 26b, and 34b.

IDC3619I ALTER RENAME FOR IMPORTRA FAILED

Explanation: During processing of an IMPORTRA command that specified the OUTFILE parameter, the ALTER operation failed in an attempt to rename the object being imported. Normally, this command alters the name of each VSAM object it defines so it can be opened for loading. The name is changed to the name specified in the JCL, the data set is loaded, and then the name is changed back to the original name.

The reason for the failure in ALTER processing is given in a preceding message. Message IDC2621I follows this message. It gives the real name of the failing object.

System Action: Processing of the IMPORTRA command is terminated.

Programmer Response: Determine the reason for the failure of the ALTER, correct the problem, and rerun the job.

Problem Determination: Table I, items 2, 3, 4, and 29.

IDC3624I UNABLE TO OBTAIN OUTPUT DATA SET NAME

Explanation: IMPORTRA was unable to obtain the data set name from the OUTFILE JCL statement. This is probably due to an error in the JCL statement.

System Action: Processing is terminated.

Programmer Response: Correct the JCL statement. Ensure that it contains a data set name, volume, unit, DISP=OLD, and the AMP='AMORG' parameter.

Problem Determination: Table I, items 2, 3, 4, and 29.

IDC3625I 'INTOEMPTY' KEY WORD NEEDED TO IMPORT INTO AN EMPTY DATA SET

Explanation: A duplicately named empty data set was encountered while attempting to perform the import. The loading of this data set with the data of the portable data set was not allowed to occur because the user did not specify the INTOEMPTY key word. As a security precaution, the system does not allow imports into an empty data set unless the INTOEMPTY key word has been specified.

System Action: The command is terminated.

Programmer Response: If you own an empty data set into which you have planned to import, rerun the job and specify the INTOEMPTY key word. If not, determine who owns the existing empty data set and resolve the conflict in usage of this data set name to insure proper protection for your data.

Problem Determination: Table I, items 3, 4, and 29.

IDC3628I DUMMY NAME REMAINS IN CATALOG

Explanation: IMPORTRA has renamed a cluster or alternate index to the dummy name specified by the DSN parameter on the OUTFILE DD statement. The dummy name cannot be renamed to the real name and the cluster or alternate index remains in the catalog with the dummy name. The reason for the failure is given in a preceding message. Message IDC2621I also precedes this message. It gives the real name of the failing cluster or alternate index.

System Action: The command terminates.

Programmer Response: Delete the cluster or alternate index using the dummy name in the DELETE command. Correct any other error conditions as indicated by previous messages and rerun the job.

Problem Determination: Table I, items 2, 3, 4, and 29.

IDC3629I THE PORTABILITY DATA SET FORMAT IS INVALID – CI MODE NOT SUPPORTED

Explanation: The portability data set format is control interval (CI) mode which is not supported on this operating system.

System Action: The IMPORT command is terminated.

Programmer Response: The portability data set must be created with record mode for it to be supported on this system.

Problem Determination: Table I, items 1, 3, and 4.

IDC3633I SCANNING ERROR ON OS CATALOG WHILE PROCESSING 'xxx' INDEX

Explanation: An error occurred while scanning the OS catalog. Processing was at the indicated index.

System Action: Conversion is terminated.

Programmer Response: Verify that the OS catalog being converted is valid by listing the OS catalog using IEHLIST. If the catalog appears valid, rerun the job with a PARM command as follows:

(PARM TEST (FULL((CCVE,1,1), (CCIE,1,1), (CCSE,1,1))))

This will produce a SNAP dump at the error point.

Problem Determination: Table I, items 1, 3, 4, 25, and 29.

IDC3641I dsn NOT A BASE CLUSTER

Explanation: The data set identified by dsn is not a base cluster or a path over a base cluster. The entry name was specified in job control identified via (1) the INFILE dname subparameter or (2) the INDATASET dsname subparameter. The INFILE or INDATASET data set must be a defined, non-empty base cluster or a path over a base cluster.

System Action: Processing is terminated for the entire BLDINDEX command.

Programmer Response: The data set name in the job control identified via the INFILE subparameter or the data set name in the INDATASET subparameter must be corrected to be that of a defined, non-empty base cluster or a path over a base cluster. Then resubmit the job.

Problem Determination: Table I, items 2, 3, 4, 29, and 31.

IDC3643I dsn IS EMPTY

Explanation: The base cluster identified by dsn contains no records. In order to build an alternate index, the base cluster must contain at least one record.

System Action: BLDINDEX processing is terminated.

Programmer Response: The base cluster must be loaded via a user program (alternatively, the Access Method Services REPRO command may be used) with at least one record. Then resubmit the job.

Problem Determination: Table I, items 2, 3, 4, 29, and 34b.

IDC3682I FINAL CHARACTER(S) IN volser NOT NUMERIC

Explanation: A character in the volume serial number (volser) is not a numeric value and cannot be incremented to created new volume serial numbers.

System Action: Function terminates normally.

Programmer Response: Specify a beginning volume serial number with adequate number of numeric characters and rerun the command.

IDC3683I volser PLUS COUNT EXCEEDS MAXIMUM VOLUME SERIAL NUMBER

Explanation: The number of volumes to be created, added to the specified volume serial number (volser), exceeds the maximum value of 999999.

System Action: Command terminates normally.

Programmer Response: Specify a volume serial number with a lower number or request less volumes to be created and rerun the command.

IDC3691I VOLUME ser LABEL NOT REBUILT

Explanation: The rewriting of the new volume label failed. Either the volume is specified as READONLY or an I/O error occurred when writing the label.

System Action: The command terminates. The return code is 12.

Programmer Response: Rerun the command or take the Problem Determination actions.

Problem Determination: Table I, items 2, 13, 18b, 30, 41b, and 41g. (Dump the transient volume table and the volume inventory table.)

IDC3692I VTOC HEAD ADDRESS CANNOT EXCEED X'0012'

Explanation: The VTOC head address specified is too large; it cannot exceed X'0012'.

System Action: The command terminates. The return code is 12.

Programmer Response: Specify a VTOC head address not exceeding X'0012' and rerun the command.

IDC3700I ** LATEST COPY RECORD CANNOT BE RETRIEVED FROM INVENTORY

Explanation: An attempt to access the record for the latest copy recorded in the Inventory data set failed. The command checks if the latest copy is incomplete due to a previous copy failure; the cartridges will be reused if an incomplete copy exists. See the preceding message for the error condition.

System Action: The command terminates with an error message.

Programmer Response: Correct the problem as indicated in the preceding message and rerun the command.

Problem Determination: Table I, items 2, 3, 4, 13, 29, 35a, and 35c.

IDC3701I ** OLDEST BACKUP COPY RECORD CANNOT BE RETRIEVED FROM INVENTORY

Explanation: An attempt to access the record for the oldest backup copy volume recorded in the Inventory data set failed. The cartridges of the oldest backup copy are to be either reused or scratched. See the preceding message for the error condition.

System Action: This command terminates with an error message.

Programmer Response: Correct the problem as indicated in the preceding message and rerun the command.

Problem Determination: Table I, items 2, 3, 4, 13, 29, 30, 35a, and 35c.

IDC3702I TARGET COPY yyddd CANNOT BE USED

Explanation: The command selected the cartridges of an existing copy volume created on the date indicated by yyddd for reuse but the cartridges cannot be used. The following message explains why the designated copy volume cannot be used.

System Action: The command terminates with an error message.

Programmer Response: Before rerunning the COPYV command, either:

- Run the SCRATCHV command to scratch the remaining cartridge of this unusable copy and delete the record from the Inventory data set.
- Run the REMOVEVR command to delete the copy volume record from the Inventory data set if both cartridges are lost.
- Reenter the missing cartridges in the Mass Storage Facility (MSF) while the Mass Storage Volume Control (MSVC) is enabled.

IDC3706I ** COPY TO CARTRIDGES csn1 csn2 IS INCOMPLETE

Explanation: The copy operation to the copy volume failed. The copy volume is marked incomplete in the Inventory data set and will be reused by the COPYV command when the command is run again. The cartridges of the copy volume are indicated by the cartridge serial numbers (csn1 and csn2) and were selected either by the user, by the Mass Storage Control (MSC) at random, or by the command using an existing copy volume. See the preceding message for further explanation of the error.

Programmer Response: Before rerunning the COPYV command correct the problem as indicated in the preceding message.

Rerun COPYV to complete the copy operation to the incomplete copy volume (COPYV will reuse the cartridges of the incomplete copy volume for the new copy) or run SCRATCHV to scratch the incomplete copy volume before rerunning the COPYV command.

If COPYV terminates without indicating the status of the copy operations, LISTMSVI can be run the determine whether the volume is flagged for recovery purposes. If the incomplete copy flag is set in the copy volume record, LISTMSVI not only lists the standard information for the volume but also highlights the volume report with a note that a copy operation failed for the preceding copy volume.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 29, 30, 35a, and 35c.

IDC3708I ** COPY VOLUME COULD NOT BE CREATED

Explanation: No existing copy volumes were eligible for reuse for this copy request. An attempt to create a new target volume from scratch cartridges failed. A new copy volume was not created. See the preceding message for further explanation of the problem.

System Action: The command terminates with an error message.

Programmer Response: Correct the error condition as indicated in the preceding message and rerun the command.

Problem Determination: Table I, items 2, 3, 4, 13, 29, 35a and 35c.

IDC3709I ** COPY TO CARTRIDGES csn1 csn2 NOT PERFORMED

Explanation: The Mass Storage Controller (MSC) could not perform the copy operation to the copy volume. The cartridges of the copy volume are specified by (csn1 and csn2). The copy volume remains usable because the original data on the volume was not destaged. See the preceding message for further explanation of the error.

System Action: The command terminates with an error message.

Programmer Response: Correct the error as indicated in the preceding message and rerun the command.

Problem Determination: Table I, items 2, 3, 4, 13, 29, 30, 35a, and 35c.

IDC3710I ** NO BACKUP COPY VOLUMES EXIST FOR VOLUME volser

Explanation: The designated volume (volser) has no backup copy. The option to restore from the latest backup cannot be satisfied. See the preceding message for further explanation of the problem.

System Action: The command terminates with an error message.

Programmer Response: Rerun the command requesting a specific nonbackup copy volume if any exist.

Problem Determination: Table I, items 2, 3, 4, 13, 29, 35a, and 35c.

IDC3712I ** LATEST BACKUP COPY RECORD CANNOT BE RETRIEVED FROM INVENTORY

Explanation: The recovery operation requires the latest backup copy, but the record for that copy volume could not be retrieved from the Inventory data set. See the preceding message for further explanation of the error.

System Action: The command terminates with an error message.

Programmer Response: Before rerunning the command correct the error as indicated in the preceding message or specify another copy to be used in the recovery operation.

Problem Determination: Table I, items 2, 3, 4, 13, 29, 35a, and 35c.

IDC3720I NEW SERIAL NO. REQUIRED TO ACTIVATE A COPY OR DUPLICATE VOLUME

Explanation: A copy or duplicate volume cannot be activated unless the volume is relabeled with a unique volume serial number.

System Action: The command terminates with a message.

Programmer Response: Rerun the command specifying the NEWSERIAL parameter and a unique volume serial number that can be used to relabel the copy or duplicate volume in order to activate it.

Problem Determination: Table I, items 2, 3, 4, 13, 29, 35a, and 35c.

IDC3721I VOLUME volser IS ALREADY ACTIVE

Explanation: The designated volume "volser" is already active.

System Action: The command terminates with a message.

Programmer Response: None.

IDC3726I UNABLE TO REPLACE THE BASE VOLUMES

Explanation: The REPLACEVOLUME key word parameter is specified, but the base volume cartridges are not reassigned or are in the Mass Storage Facility.

System Action: The request is bypassed, but an attempt is made to fulfill the remaining requests.

Programmer Response: The request can be modified and rerun. A new serial number (NEWSERIAL) must be supplied without the REPLACEVOLUME key word parameter. The same request can be rerun if the base volume is first ejected or nullified.

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

IDC3730I VOLUME volser CANNOT BE RELABELED; COPIES EXIST

Explanation: The volume serial number of the volume (volser) cannot be changed because copies of the volume exist.

System Action: The command terminates with an error message.

Programmer Response: Rerun the command to store the volume, but do not request the volume serial number be changed. If the volume must be renamed, run the SCRATCHV command to scratch all copies before requesting STOREV to rename and store the volume.

Problem Determination: Table I, items 2, 3, 4, 13, 29, 35a, and 35c.

IDC3732I ** VOLUME volser COULD NOT BE MADE INACTIVE

Explanation: The status of the volume (volser) could not be changed from active to inactive. See the preceding message for further explanation of the error.

System Action: Processing continues.

Programmer Response: Correct the error as identified in the preceding message.

Rerun STOREV or run MODIFYV to either backout or retry the rename operation.

If the STOREV or MODIFYV commands are run to recover from a rename failure, the DD statement for the volume is required and must specify deferred mounting.

The values specified for the VOLUME and NEWSERIAL parameters depend upon how the volume record is recorded in the Inventory data set. If the cartridge labels have been updated, the volume record will be identified by the new volume serial number. For the VOLUME parameter, specify the volume serial number as recorded in the cartridge labels and the volume record. For the NEWSERIAL parameter, specify the desired volume serial number. Note that the security check for

non-VSAM status and password protected data sets is bypassed only if the NEWSERIAL parameter specifies the same volume serial number as recorded in the Inventory data set for the volume label. This allows the original volume serial number of a VSAM volume to be restored if the volume is left partially renamed.

If STOREV terminates without indicating the status of the rename operation, LISTMSVI can be run to determine whether the volume is flagged for recovery purposes. If the mismatch flag is set in the volume record, LISTMSVI not only lists the standard information for the volume but also highlights the volume report with a note that a rename operation failed for the preceding volume and that serial number 'nnnnnn' is recorded in the volume label of the volume.

IDC3734I ** VOLUME LABEL COULD NOT BE RESTORED TO ORIGINAL STATUS

Explanation: Following a failure to deactivate the volume and change the volume serial number in the cartridge labels, an attempt to restore the volume label to its original status also failed. A volume serial-mismatch exists between the volume label and the cartridge labels of the cartridges assigned to the Mass Storage Volume. A flag indicating the mismatch is set in the Inventory data set for the volume. See the preceding message for further explanation of the problem.

System Action: The command terminates with an error message.

Programmer Response: Correct the error as identified in the preceding message.

- If a Rename Operation Failed for ADDV

  Run ADDV to backout or retry the rename operation if the volume is inactive. If the volume is active, run MODIFYV or STOREV to either backout or retry the rename operation.

  If the ADDV, MODIFYV, or STOREV commands are run to recover from a rename failure, a DD statement for the volume is required and must specify deferred mounting.

  The values specified for the VOLUME and NEWSERIAL parameters depend upon how the volume record is recorded in the Inventory data set. If the cartridge labels have been updated, the volume record will be identified by the new volume serial number. For the VOLUME parameter, specify the volume serial number as recorded in the cartridge labels and the volume record. For the NEWSERIAL parameter, specify the desired volume serial number. Note that the security check for non-VSAM status and password protected data sets is bypassed only if the NEWSERIAL parameter specifies the same volume serial number as recorded in the Inventory data set for the volume label. This allows the original volume serial number of a VSAM volume to be restored if the volume is left partially renamed.

  If ADDV, MODIFYV, or STOREV terminates without indicating the status of the rename operation, LISTMSVI can be run to determine whether the volume is flagged for recovery purposes. If the mismatch flag is set in the volume record, LISTMSVI not only lists the standard information for the volume but also highlights the volume report with a note that a rename operation failed for the preceding volume and that serial number 'nnnnnn' is recorded in the volume label of the volume.

- If a Rename Operation Failed for MODIFYV

  To recover from a MODIFYV rename failure 1) run ADDV to activate the volume if the volume is merely inactive and has no volume serial mismatch condition, or 2) run ADDV to both activate the volume and complete the rename operation if the volume is both inactive and has a volume serial mismatch condition, or 3) rerun MODIFYV to complete or retry the rename operation if the volume is active but has a mismatch condition, or 4) run STOREV to complete or retry the rename operation if the volume is active and if a duplicate volume serial number is desired as result of the rename.

  For the DD statement requirements, the proper VOLUME and NEWSERIAL parameter values, and use of LISTMSVI, refer to the description above for an ADDV rename failure.

- If a Rename Operation Failed for STOREV

  Rerun STOREV or run MODIFYV to either backout or retry the rename operation.

  For the DD statement requirements, the proper VOLUME and NEWSERIAL parameter values, and use of LISTMSVI, refer to the description above for an ADDV rename failure.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 29, 35a, and 35c.

IDC3736I ddname MUST NOT BE ALLOCATED TO SHARED OR SHARED U.P. UNITS

Explanation: CONVERTV can only use nonshareable spindles, and cannot be a uniprocessor unit.

System Action: The command is terminated.

Programmer Response: See your system programmer to determine if a shared spindle was used or if the system was sysgened for uniprocessor operations.

IDC3738I ** DATA SETS NOT RECATALOGED IN VSAM CATALOG

Explanation: An error occurred which prevented all the data sets in the VSAM owning catalog from being recataloged. A preceding message explains the error.

System Action: The command terminates normally. If the target volume is a 3336 Model 1 Disk Pack, use IEHDASDR to reformat the volume to meet the empty VTOC requirement of the CONVERTV command.

Programmer Response: Correct the error and rerun the command.

Problem Determination: Table I, items 3, 4, 13, 26b, 29, and 34.

IDC3739I FROM AND TO UNITS ARE THE SAME DEVICE TYPE

Explanation: The device type specified in the UNIT parameter of the FROMFILE DD statement is the same as the device type specified in the UNIT parameter of the TOFILE DD statement.

System Action: The command terminates normally with an error message.

Programmer Response: Either correct the UNIT parameter and rerun the command or if you want to move data between two volumes of the same type, use the IEHMOVE utility program.

Problem Determination: Table I, items 1, 3, 4, 13, and 29.

IDC3740I MULTIPLE VOLUME SERIAL NUMBERS ASSOCIATED WITH FILE ddname

Explanation: CONVERTV will only convert a single volume at a time. The "ddname" has more than one volume associated with it.

System Action: The command terminates normally.

Programmer Response: Specify only one volume serial on the DD statement or supply a FROMVOLUME statement for the volume to be converted. Rerun the command.

Problem Determination: Table I, items 1, 3, 4, 13, and 29.

IDC3741I RECATALOG OPTION INVALID FOR VSAM VOLUME

Explanation: The source volume is owned by a VSAM catalog and the volume and any VSAM data sets on the volume must be recataloged. Therefore, NONE is an invalid option.

System Action: The command terminates normally.

Programmer Response: Specify the VSAMCATALOG option on the RECATALOG parameter or omit the control statement. Rerun the command.

Problem Determination: Table I, items 3, 4, 13, 25b, and 29.

IDC3744I JOBCAT/STEPCAT MUST NOT BE SPECIFIED FOR VSAM CATALOG ON VOLUME

Explanation: A JOBCAT or STEPCAT DD statement was used to allocate the VSAM user catalog on the volume to be processed. If the VSAM user catalog is on the volume being processed, the user catalog must not be open as a result of the use of a JOBCAT or STEPCAT DD statement.

System Action: The command terminates normally.

Programmer Response: Use a standard DD statement ddname rather than JOBCAT or STEPCAT to allocate the VSAM user catalog, and supply that ddname in the CATALOG parameter. Rerun the command. In VS2 you can omit the DD statement and only specify the name of the catalog on the CATALOG parameter.

Problem Determination: Table I, items 1, 3, 4, 13, 25b, and 29.

IDC3745I DD NAME MUST BE SPECIFIED FOR VSAM USER CATALOG ON VOLUME

Explanation: No ddname was specified for the VSAM CATALOG residing on the volume being processed preventing the catalog from being opened.

System Action: Command terminates normally.

Programmer Response: Supply a DD statement for the catalog that owns the volume. The DD statement name cannot be JOBCAT or STEPCAT. Specify the name of the DD statement which allocates the catalog in the CATALOG parameter. Rerun the command.

Problem Determination: Table I, items 3, 4, 13, 25b, and 29.

IDC3770I VOLUME volser ACTIVE

Explanation: The volume specified by "volser" is active and cannot be ejected.

System Action: The command terminates with an error message.

Programmer Response: Run the STOREV command to both deactivate and eject the volume.

Problem Determination: Table I, items 2, 3, 4, 13, 29, 35a, and 35c.

IDC3802I INVALID SIS PARAMETER

Explanation: Either an invalid combination of parameters was specified for the system-initiated scratch function, or invalid subparameters were specified with the SIS parameter in the CREATEG or MODIFYG command.

System Action: The request is terminated and the group is not created or modified. Control is returned to the user with a condition code of 12.

Operator Response: None.

Programmer Response: Specify the correct combination of parameters and rerun the job.

Problem Determination: Table I, items 13, 20, 35c.

IDC3820I ** TABLES COULD NOT BE COPIED TO WORK DATA SET

Explanation: An error code was returned from the request to copy the MSC tables to the work data set. A preceding message explains the reason.

System Action: The command preceding terminates normally.

Programmer Response: Check the preceding message to determine the exact error. Correct the error and rerun the command.

Problem Determination: Table I, items 3, 4, 13, and 29.

IDC3822I MSF NOT AVAILABLE

Explanation: The Mass Storage Facility (MSF) does not have a staging adapter assigned to it in the Mass Storage Control (MSC) tables and cannot be considered to exist for system use.

System Action: The command terminates normally.

Programmer Response: Specify a valid MSF on the command and rerun the command.

Problem Determination: Table I, items 3, 4, 13, and 29.

IDC3835I AN MSVI ERROR WAS DETECTED WHILE PROCESSING CART (csn)

Explanation: A Mass Storage Volume Inventory (MSVI) error occurred because either one or both cartridge serial numbers of the volume record that was being read were not properly initialized.

System Action: The command terminates.

Programmer Response: The problem was probably caused by a system failure during the CREATEV command. Issue the SCRATCHV command to scratch the incomplete mass storage volume. Rerun the command.

Problem Determination: Table I, items 3, 4, 13, 15, 29, and 35c.

IDC3842I ORDER OF TRACE AREAS COULD NOT BE DETERMINED - NO DATA DUMPED

Explanation: An attempt was made to dump both trace areas, but the first trace area could not be determined. Therefore, no trace data was dumped. The programmer will have to submit individual X and/or Y trace dump requests.

System Action: The command terminates normally.

Programmer Response: Rerun the TRACE command specifying either trace area X or trace area Y.

Problem Determination: Table I, items 2, 3, 4, 13, 29, and 30.

IDC3844I BLOCKSIZE OF OUT DATA SET IS NOT A MULTIPLE OF 264.

Explanation: Because trace records are 264 bytes long, they must be blocked in multiplies of 264. That is, the blocksize specified for the Output Data set must be a multiple of 264.

System Action: The Trace Utility is terminated.

Programmer Response: Correct the blocksize specification in the JCL and rerun the job.

Problem Determination: Table I, items 3, 4, and 29.

IDC3850I THE NUMBER OF SECONDS IN THE LRU CLOCK IS INVALID

Explanation: The number of seconds in the LRU clock (LRUCLOCK parameter) is invalid. The only valid numbers are 128, 256, 512, 1024, 2048, 4096, 8192, and 16384.

System Action: The command terminates normally. No tuning parameters have been changed.

Programmer Response: Correct the LRUCLOCK parameter and rerun the command.

IDC3851I LOWER VALUE MUST BE LESS THAN HIGHER VALUE FOR ACTIVEPAGES

Explanation: On the ACTIVEPAGES parameter, the lower number of pages is a number greater than or equal to the higher number of pages. The lower number must be less than the higher number.

System Action: The command terminates normally. No tuning parameters have been changed.

Programmer Response: Correct the ACTIVEPAGES parameter and rerun the command.

IDC3852I TOTAL OF UNITS IN LRUGROUPS MUST BE LESS THAN OR EQUAL TO 16

Explanation: When the LRU clock units for all groups are added together they exceed the maximum (16).

System Action: The command terminates normally. No tuning parameters have been changed.

Programmer Response: Correct the LRUGROUPS parameter (which specifies the number of LRU clock units) and rerun the command.

IDC3860I GROUP PARAMETERS CANNOT BE SPECIFIED FOR NONGROUPED VOLUMES

Explanation: A request to set group level attributes for a volume that does not belong to a group is invalid.

System Action: The command terminates with an error message.

Programmer Response: Rerun the command after removing the conflicting parameters that specify group attributes.

Problem Determination: Table I, items 2, 3, 4, 13, 29, 35a, and 35c.

IDC3861I VOLUME ser LABEL NOT REBUILT

Explanation: The rewriting of the new volume label failed. Either the volume is specified as READONLY or an I/O error occurred when writing the label.

System Action: The command terminates. The return code is 12.

Programmer Response: Rerun the command or take the Problem Determination actions.

Problem Determination: Table I, items 2, 13, and 30.

IDC3862I VTOC HEAD ADDRESS CANNOT EXCEED X'0012'

Explanation: The VTOC head address specified is too large; it may not exceed X'0012'.

System Action: The command terminates. The return code is 12.

Programmer Response: Specify a VTOC head address not exceeding X'0012' and rerun the command.

IDC3883I ** ERROR COUNT EXCEEDED UPPER LIMIT, FUNCTION TERMINATED

Explanation: A LISTCRA command encountered more than 50 I/O errors.

System Action: Processing of the LISTCRA command is terminated.

Programmer Response: See previous messages to determine the cause of the I/O errors. Correct the problem, and rerun the job.

IDC3885I VOLUME ser PERMANENTLY RESIDENT OR RESERVED

Explanation: Volume ser is marked permanently resident or reserved in the unit control block (UCB). Therefore, this volume cannot be demounted. The volume described by the volume serial (ser) needs to be demounted so that a MSC function can be performed or to enable the proper volume to be mounted on the unit.

System Action: Processing of the command is terminated.

Programmer Response: Ensure that the correct volume serial number was specified on the DD statement for the FILE parameter. If the correct volume serial was specified, you cannot run the command while that volume is permanently resident or reserved.

Problem Determination: Table I, items 1, 2, 3, 4, 13, and 29.

IDC3900I PUTGET ERROR CODE IS rc

Explanation: The PUTGET macro instruction failed. The reason for the error is indicated by rc.

Return Code	Meaning
8	The PUTGET service routine did not complete. An attention interrupt occurred during the execution of PUTGET, and the attention handler turned on the completion bit in the communications ECB.
12	No prompting was allowed on a PROMPT request. Either the user at the terminal requested no prompting with the PROFILE command, or the current source of input is an in-storage list.
12	A line could not be obtained after a MODE request. A chain of second level informational messages exists, and the current stack element is non-terminal, but the terminal user did not request PAUSE processing with the PROFILE command. The messages are therefore not available to him.
16	The NOWAIT option was specified for TPUT and no line was put out or received.
20	The NOWAIT option was specified for TGET and no line was received.
24	Invalid parameters were supplied to the PUTGET service routine.
28	A conditional GETMAIN was issued by PUTGET for output buffers and there was not sufficient space to satisfy the request.
32	The terminal has been disconnected.

System Action: The command is terminated.

Programmer Response: Correct the error based on the return code information and rerun the job.

Problem Determination: Table I, items 1, 2, 3, 4, 29.

IDC3901I ERROR QUALIFYING dsn

Explanation: The TSO default service routine failed to qualify the data set indicated.

System Action: The request is terminated.

Programmer Response: An associated message, IDC3902I directs the user in how to correct this error.

Problem Determination: Table I, items 1, 2, 3, 4, 29.

IDC3902I ** DEFAULT SERVICE ROUTINE ERROR CODE rc, LOCATE ERROR CODE cde

Explanation: This message contains the return code information required to correct the error indicated in associated message IDC3901I. The LOCATE error code, cde, is part of VSAM Catalog Management. Refer to message IDC3009I for the return codes as well as the possible system and programmer responses. The possible system and programmer responses for the default service routine error conditions along with the return code, rc, are as follows:

Return Code (rc)	Explanation
4	Return code from PUTLINE or PUTGET was not zero.
8	Data set name was longer than 44 bytes.
12	An I/O error occurred while searching the catalog, the catalog data set was not available or the data set name was not specified correctly.
16	The index structure of the catalog was not consistent with the data set name. For example, the name specified was "A.B.C," but there is a data set called "A.B," so there cannot be one called "A.B.C."
20	The data set name could not be found in the catalog.
24	An attention interruption occurred during processing of this request.
28	Invalid parameters were specified.
32	It was necessary to prompt the user, but the caller specified that the user should not be interrupted.
36	Not enough qualifiers were specified for the data set name. For example, the name specified was "A.B," but the catalog contains an entry for "A.B.C."

System Action: Processing continues.

Programmer Response: The response depends on the return codes, rc and cde. Possible responses for return code rc follow:

Return Code (rc)	Response
4	Make sure the user is still logged on to the system.
8	Correct the data set name.
12	Examine the data set name for syntax errors, for example, embedded punctuation marks. Check the CVOL index structures to be sure CVOLs are properly linked. If an I/O error occurred, it may be necessary to rebuild the catalog.
16	Respecify the data set name or recatalog the data set.
20	Respecify the data set name or recatalog the data set.
24	None.
28	Check to be sure the parameter list for IKJEHDEF was not improperly modified.
32	None.
36	Respecify the data set name.

Problem Determination: Table I, items 1, 2, 3, 4, 29.

IDC4227I AN 'ELSE' COMMAND APPEARS IMPROPERLY

Explanation: An ELSE modal command appears without a matching IF-THEN modal command. Modal command continuation may be incorrect.

System Action: The remainder of the command input stream is ignored.

Programmer Response: Correct the usage and rerun.

Problem Determination: Table I, items 4, 29.

IDC4228I AN 'END' COMMAND IS INVALID

Explanation: An END modal command occurs without a matching DO modal command.

System Action: The remainder of the command input stream is ignored.

Programmer Response: Correct the DO-END usage and rerun.

Problem Determination: Table I, items 4, and 29.

IDC4229I 'IF' COMMAND HAS INVALID RELATIONAL EXPRESSION

Explanation: An IF modal command has an invalid relational expression.

System Action: The remainder of the command input stream is ignored.

Programmer Response: Check the syntax and semantic requirements of the IF command. Correct the usage and rerun.

Problem Determination: Table I, items 4, and 29.

IDC4230I 'SET' COMMAND HAS INVALID ASSIGNMENT EXPRESSION

Explanation: A SET modal command has an invalid assignment expression.

System Action: The remainder of the command input stream is ignored.

Programmer Response: Check the syntax and semantic restrictions on the SET command. Correct the usage and rerun.

Problem Determination: Table I, items 4, and 29.

IDC4232I IMPROPER OR MISSING 'THEN' KEY WORD

Explanation: The THEN portion of the IF modal command is misspelled or missing. Modal command continuation may be incorrect.

System Action: The remainder of the input stream is ignored.

Programmer Response: Correct the usage and rerun.

Problem Determination: Table I, items 4, and 29.

IDC4236I INPUT STREAM END-OF-FILE FOUND BEFORE END-OF-COMMAND

Explanation: Command input stream end-of-file has been found while scanning a command. There may be input records missing.

System Action: The current command is not processed.

Programmer Response: Add the missing data and rerun.

Problem Determination: Table I, items 4, and 29.

IDC4237I TOO MANY LEVELS OF 'IF' COMMAND NESTING

Explanation: IF modal commands have been nested to a level that cannot be handled.

System Action: The remainder of the command input stream is ignored.

Programmer Response: Restructure the modal commands to conform to the restriction of ten levels of nesting.

Problem Determination: Table I, items 4, and 29.

IDC4999I UABORT CODE rc

Explanation: This message indicates a termination error, which caused the processor to abort. The code number (rc) indicates the nature of the error. Since the error is usually such that no further processor code may be executed with confidence, this message appears in the output listing by a write-to-programmer action.

Return Code	Meaning
24	Text processor's print control table address not set in GDT.
28	No virtual storage available for one of the following: ● Text processor's translate table. ● Initialization of the I/O adapter. ● Automatic (dynamic) storage of a module. ● Text processor dynamic storage. See the in-virtual storage trace tables to determine which is the correct condition.
32	There was a request to access an unopened data set.
36	The processor was unable to open SYSPRINT (or whichever DD name is employed to denote the processor's standard listing output data set).
40	Invalid U-macro argument list found.
44	The processor is unable to produce a dump.
56	The BLDL macro failed to find a required AMS (access method services) module.
72	An internal RESETCAT error occurred (probable system error).

Problem Determination: Table I, items 1, 3, 4, and 29.

IDC01551I unit CACHING STATUS: status FOR SD X'id' DEV ID X'dd'

Explanation: This message displays Cache-DASD subsystem status in response to a LISTDATA STATUS WTO command. The variables in the message text are:

unit The address of a device in the subsystem.

status The current status of the device;

- ACTIVE
- HOST TERMINATION
- SUBSYSTEM ERROR
- INACTIVE

SD X'id' Storage-director ID

DEV ID X'dd'file
Device address

System Action: Processing continues.

Programmer Response: None.

IDC01600I CACHING SET x FOR (SUBSYSTEM CONTAINING) volser

Explanation: This message reflects the successful processing of a SETCACHE command. **x** may be ON or OFF. **volser** is the serial number of a volume mounted on a device in the subsystem to which the SETCACHE command was addressed.

System Action: Processing continues.

Programmer Response: None.

IDC01603I EQUIPMENT CHECK ON FIRST UNIT ADDRESS, SECOND ADDRESS ACCESSED

Explanation: The first I/O (input/output) operation received an equipment check on the first unit address because the first cache storage director could not access the second cache storage director in the subsystem.

System Action: The system starts a second I/O operation using the second unit address. The second unit address makes the second cache storage director accessible.

Problem Determination: Table I, item 30.

IDC01605I STORAGE DIRECTOR X 'id. SET status PREVIOUSLY prevstat

Explanation: This message reflects the completion of a SETCACHE DIRECTOR command, and includes the change in status of the specified storage director. **id** is the identification of the storage director as set at installation time. It is returned by the control unit in response to a SENSE SUBSYSTEM command issued as part of SETCACHE processing. **status** and **prevstat** (previous status) may be either ON or OFF.

Note: If the storage director ID cannot be found, the id field will contain ??.

System Action: Processing continues.

Programmer Response: None.

IDC11003I CONTROL INTERVAL nnnnnn BYPASSED IN CRA volser

Explanation: IGNORE was specified and an I/O error was encountered. The record is ignored. This message is preceded by IDC3351I which indicates the nature of the error. nnnnnn is the control interval number of the record in the catalog.

System Action: Processing continues.

Programmer Response: This may cause errors to be detected in objects on the volume specified, or objects on the volume may be totally lost without notification. Perform a LISTCAT operation of the catalog to determine which objects still exist after the reset operation.

Problem Determination: Table I, items 3, 4, 13, 14, and 34.

IDC11015I CONTROL INTERVAL nnnnnn BYPASSED IN CATALOG

Explanation: IGNORE was specified and an I/O error was encountered. The record is ignored. Message IDC3351I precedes this message indicating the specific error.

System Action: Processing continues.

Programmer Response: The record noted in the catalog is inaccessible. If it contained a corresponding reset CRA entry, the entry will be recovered. If it contained a non-reset CRA entry, the entry remains inaccessible. A LISTCAT may reveal whether the error is of any consequence. nnnnnn is the control interval number of the record in the catalog.

Problem Determination: Table I, items 3, 4, 13, 14, and 34.

IDC11022I entry name, type CONTAINS A CONNECTOR TO INVALID RECORD nnnnnn, type

Explanation: An object contains a dependency on a record that does not exist. The base record is noted by name and type. The dependent record which is invalid is noted by its expected control interval number and record type. The reference to the invalid record is deleted. See either message IDC21024I, IDC21025I or IDC21026I which follows. The message will note the other action taken as a result of this error. nnnnn is the control interval number of the record in the catalog; type is the entry type of the record. The values of type are defined under message IDC21045I.

System Action: Processing continues.

Programmer Response: See the following message (noted in the explanation) to determine what action was taken.

IDC11023I entry name, type ERROR FOR ASSOCIATION [nnnnnn,] type

Explanation: An entry is chained to a record of a type different than anticipated, or the object noted consists of incomplete set of records. If the control interval number of the expected association is not given, then no association for that object exists in the base record; an association for that type is required for the entry name noted. Message IDC21026I follows, noting that the entry has been deleted. nnnnnn is the control interval number of the record in the catalog; type is the entry type of the record. The values of type are defined under message IDC21045I.

System Action: Processing continues.

Programmer Response: See message IDC21026I.

IDC11029I SPACE MAP FOR VOLUME volser CORRECTED

Explanation: The suballocated VSAM data space has been corrected to reflect what is on the volume. This correction occurs if entries are deleted by RESETCAT, or space stated as suballocated is not suballocated (that is, the space map is incorrect on entry to RESETCAT).

System Action: Processing continues.

Programmer Response: This message is given for information only. It is a correction of some state of error. The error may be specifically noted in a preceding error message or not at all. In the latter case, the situation is due to space being suballocated from available suballocatable space; however, no entry can be found which claims this space. No corrective action by the programmer is required.

IDC11031I UNIQUE DATA SET entry name HAS FEWER EXTENTS THAN THE DATA SPACE

Explanation: The unique data or index component has less space described than the data space. No problem exists for this data set; this message is given to inform you that space exists which is not in use. If the data set is extended, this space will be used. No corrective action is taken.

System Action: Processing continues.

Programmer Response: None.

IDC11033I dsname, volser NOT DELETED

Explanation: A unique data set, on a volume not being reset, has no corresponding DATA or INDEX component. The component was defined on one of the volumes being reset, but not longer exists on that volume.

System Action: Processing continues.

Programmer Response: If the data set is no longer valid, then SCRATCH it.

IDC11036I entry name, type OUT-OF-SYNC ON volser

Explanation: The data set named may have invalid space information. The extents occupied by the named data set are not in conflict with any other VSAM data set or with the system; however, a self-checking field failed to check. The data set itself may be all right. The values of type are defined under message IDC21045I.

System Action: Processing continues.

Programmer Response: List the data set and ensure that it is correct and accessible.

IDC11040I dsname UNKNOWN

Explanation: The VSAM Format 1 DSCB did not have a corresponding space header in the volume record. Hence, the catalog does not account for the space allocated to the data set. The data set noted above was scratched.

System Action: Processing continues.

Programmer Response: If an I/O error occurred when reading from the CRA for this volume, this condition may arise. It may also be caused by some previous system error. This message is given for informational purposes. A later message may indicate whether objects were marked unusable, perhaps as a result of this condition. Watch for message IDC21027I or IDC21030I.

IDC11041I dsname SPACE CORRECTED

Explanation: The extents in the space header for the data space noted were not identical to the extents in the corresponding Format 1 DSCB. The extents in the space header were corrected using the extents in the Format 1 DSCB and the Format 3 DSCB if one exists.

System Action: Processing continues.

Programmer Response: This may be caused by some previous system error. This message is given for information purposes. A later message may indicate whether objects were marked unusable, perhaps as a result of this condition if fewer extents existed in the data set than the data space. Watch for message IDC21027I or IDC21030I.

IDC11042I dsname SPACE DELETED

Explanation: The space header for the data space referred to a nonexistent Format 1 DSCB. The space header for the data space was deleted.

System Action: Processing continues.

Programmer Response: This may be caused by some previous system error. This message is given for information purposes. A later message may indicate whether objects were marked unusable, perhaps as a result of this condition. Watch for message IDC21037I or IDC21020I.

IDC11043I TIME STAMP FOR VOLUME RECORD ON VOL volser WAS CORRECTED

Explanation: The time stamp for the volume record did not match the time stamp in the VTOC. This may have resulted from a failure in Catalog Management after updating one and not the other. The time stamps are synchronized.

System Action: Processing continues.

Programmer Response: None.

IDC11044I dsname NOT SCRATCHED

Explanation: The attempt to scratch the data set for the reason stated in preceding message IDC11040I failed.

System Action: Processing continues.

Programmer Response: See IDC11040I.

IDC11216I INVALID R'0/R'1 STAGE ERROR RECORD PAIR: R'0 NOT FOUND (volser cchh) IN REPAIR WORK FILE dsname

Explanation: During deblocking, the record indicated by volser cchh in the message, was not found in the file indicated by dsname.

Note: If your installation has D/T3350 support, ignore R0 (record 0). It is no longer flagged with stage error information.

System Action: REPAIRV DEBLOCK continues processing at the next valid state error record pair. The return code is 4.

Programmer Response: Display the repair work file records. If necessary rebuild the repair work file using REPAIRV COPY.

Problem Determination: Table I, items 2, 3, 4, 29, and 35d.

IDC11217I INVALID R'0/R'1 STAGE ERROR RECORD PAIR: R'1 NOT FOUND (volser cchh) IN REPAIR WORK FILE dsname

Explanation: The record following the specified R'0 stage error record indicated by volser cchh in dsname is not an R'1 stage error record.

Note: If your installation had D/T3350 support, ignore R0 (record 0). It is no longer flagged with stage error information.

System Action: REPAIRV DEBLOCK continues processing at the next valid stage error record pair. The return code is 4.

Programmer Response: Display the repair work file records. If necessary rebuild the repair work file using REPAIRV COPY.

Problem Determination: Table I, items 2, 3, 4, 29, and 35d.

IDC11218I THE R'0/R'1 (volser cchh) PAIR ARE NOT UNMODIFIED STAGE ERROR RECORDS IN REPAIR WORK FILE dsn

Explanation: The specified records at volser cchh in the repair work file (dsn) are not a R'0/R'1 pair created by a stage error.

Note: If your installation had D/T3350 support, ignore R0 (record 0). It is no longer flagged with stage error information.

System Action: REPAIRV DEBLOCK continues with the next valid stage error record pair. The return code is 4.

Programmer Response: Necessary, display the repair work file records.

Problem Determination: Table I, items 2, 3, 4, 29, and 35d.

IDC11219I DEBLOCK FAILED FOR R'0/R'1 (volser cchh) IN REPAIR WORK FILE dsname

Explanation: Two consecutive errors were found while trying to deblock the stage error record pair at volser cchh in dsname. An error occurs when the length specified in the count field of a record is wrong. This is determined by inspecting the bytes following the specified length and not finding a valid count field. REPAIRV DEBLOCK cannot continue processing this record pair.

Note: If your installation had D/T3350 support, ignore R0 (record 0). It is no longer flagged with stage error information.

System Action: REPAIRV DEBLOCK continues with the next valid stage error record pair. The return code is 4.

Programmer Response: Display the repair work file to verify contents of record pair in error, then return REPAIRV DEBLOCK using the LENGTH parameter to specify the key length and data length of every original record in the track.

Problem Determination: Table I, items 2, 3, 4, 29, and 35d.

IDC11250I WARNING: NO VOLUME ATTRIBUTES MODIFIED.

Explanation: While executing a MODIFYC command, a cartridge label was changed to reflect it as csn1|csn2 of a volume. However, no changes to the volume attributes were requested in the command. If the cartridge being modified was a scratch cartridge, the scratch cartridge bit in the label remains on, to the exclusion of all volume attributes. If the cartridge being modified was not a scratch cartridge, then the volume attributes remain unchanged and might not agree with the mass storage control tables and the inventory data set.

Modification of one or more volume attributes turns off the scratch cartridge bit in the label.

System Action: The command continues normally.

Programmer Response: Correct the error, if necessary, and rerun the command.

IDC11361I THE FOLLOWING { INCLUDE / EXCLUDE } ELEMENTS WERE NOT ENCOUNTERED

Explanation: The names which follow the messages were expected to be in the catalog or VVDS as they were specified in the INCLUDE or EXCLUDE list. These names were not encountered during processing.

System Action: DIAGNOSE considered this a warning condition and continued to process the catalog or VVDS.

Programmer Response: An analysis of this condition is recommended to determine if there is a serious problem. First, check for spelling errors. The entries may no longer be in the catalog or VVDS. Run LISTCAT to verify the presence or absence of the entry in the catalog.

If the entry is in the catalog but DIAGNOSE cannot locate it, consult your IBM Field Engineering service representative.

Problem Determination: Table I, items 1, 3, 4, 8, 13, 25a; consult *Data Facility Extended Function: Access Method Services Administration and Services* for information on how to use this output for ICF catalog or VVDS recovery.

IDC11362I THE FOLLOWING CATALOG REFERENCED VOLUMES WERE NOT ENCOUNTERED

Explanation: The list of volume serial numbers which follow are referenced by the catalog as VVDS entries but these VOLSERs were not found in volume cells of any entries for the scanned catalog.

System Action: DIAGNOSE considers this a warning condition and processing continues.

Programmer Response: If DIAGNOSE encountered any errors which precluded looking at any volume cells, this message may occur. If DIAGNOSE was run with any entry qualification, such as INCLUDE or EXCLUDE, this message may occur. This message is a warning and may signal entries which are missing volume cells.

Problem Determination: Table I, items 1, 3, 4, 8, 13, 25a; consult *Data Facility Extended Function: Access Method Services Administration and Services* for information on how to use this output for ICF catalog or VVDS recovery.

IDC11367I THE FOLLOWING VVDS REFERENCED CATALOGS WERE NOT ENCOUNTERED

Explanation: The list of ICF catalog names which follow are referenced by the VVDS as catalog entries but these names were not found in any entries for scanned VVDS's.

System Action: DIAGNOSE considers this a warning condition, processing continues.

Programmer Response: If DIAGNOSE was run with any entry qualification, such as INCLUDE or EXCLUDE, this message may occur. This message is a warning and may signal entries which are missing or damaged.

Problem Determination: Table I, items 1, 3, 4, 8, 13, 25a; consult *Data Facility Extended Function: Access Method Services Administration and Services* for information on how to use this output for ICF catalog or VVDS recovery.

IDC11373I THE FOLLOWING COMPARE ELEMENTS WERE NOT ENCOUNTERED

Explanation: The names that follow this message were given in the COMPARE list but were not encountered during processing.

System Action: DIAGNOSE considered this a warning condition and continues processing the catalog or VVDS.

Programmer Response: Check for spelling errors. The entries may no longer be in the catalog or VVDS. Run LISTCAT to verify the presence of the volume in the catalog. If the entry is in the catalog but DIAGNOSE cannot locate it, contact your IBM service representative.

Problem Determination: Table I, items 1, 3, 4, 8, 13, 25a; consult *Data Facility Extended Function: Access Method Services Administration and Services* for information on how to use this output for ICF catalog or VVDS recovery.

IDC11374I THESE ADDITIONAL CATALOG REFERENCED VOLUMES WERE ENCOUNTERED

Explanation: The list of VOLUME names which follow are referenced by catalog entries but these names were not found as VVDS entries (SYS1.VVDS.Vvolser). This may indicate entries are referencing volumes for which the catalog has no record. There should be an entry of the form 'SYS1.VVDS.Vvolser' for each volume referenced by VSAM entries in the catalog ('volser' is the volser of the volume).

System Action: DIAGNOSE considers this a warning condition, processing continued.

Programmer Response: This message is a warning and may signal entries which are missing or damaged.

Problem Determination: Table I, items 1, 3, 4, 8, 13, 25d; consult *Data Facility Extended Function: Access Method Services Administration and Services* for information on how to use this output for ICF catalog or VVDS recovery.

IDC11375I THESE ADDITIONAL VVDS REFERENCED CATALOGS WERE ENCOUNTERED

Explanation: The ICF catalog names listed are referenced by VVDS entries but these names were not found as catalog entries in the VVDS. The VVDS contains the names of all referenced catalogs in the VVDS Control Record (VVCR). Each entry in the VVDS contains a catalog name in addition to the component entry name. There were catalog names in VVDS entries which were not also in the VVCR.

System Action: Consider this a warning condition, processing is continued.

Programmer Response: This message is a warning and may signal entries which are missing or damaged.

Problem Determination: Table I, items 1, 3, 4, 8, 13, 25d; consult *Data Facility Extended Function: Access Method Services Administration and Services* for information on how to use this output for ICF catalog or VVDS recovery.

IDC11441I ENTRY WAS INTERRUPTED DURING A PREVIOUS PROCESS

Explanation: This ICF catalog entry was previously interrupted before completion of a delete or update-extend function.

System Action: LISTCAT processing continues listing the entry's remaining information normally.

Programmer Response: It may be desirable to run the Access Methods Services DIAGNOSE command. See *Data Facility Extended Function: Access Method Services Administration and Services* for details on DIAGNOSE.

Problem Determination: Table I, items 1, 3, 4, and 29.

IDC11462I REQUESTED RANGE END BEYOND END OF DATA SET

Explanation: A PRINT or REPRO command was issued. The TO value or COUNT value specified was beyond the end of the data set. Processing continues, defaulting to the end of the data set.

System Action: The command continues processing with a condition code of 4.

Programmer Response: None if the default is correct. Otherwise, correct the range value and rerun the command.

IDC21009I entry name, type DOES NOT EXIST ON VOLUME volser

Explanation: A multivolume data set existed on a volume prior to reset. The data set is not on the volume and will be marked unusable.

The values of types are defined under message IDC21045I.

System Action: Processing continues.

Programmer Response: The data set on valid volumes may be removed via REPRO prior to deleting the data set. The data set is unopenable for output.

IDC21020I UNABLE TO ALLOCATE volser

Explanation: An attempt to allocate a volume for RESETCAT failed. See message IDC3905I.

System Action: Processing continues.

Programmer Response: Make the volume indicated available to RESETCAT via CRAFILES and reissue the command.

IDC21024I entry name,type CONTAINS AN INVALID ALIAS CHAIN

Explanation: The alias chain for a user catalog or non-VSAM entry is invalid. The values of type are defined under message IDC21045I.

System Action: Processing continues.

Programmer Response: The alias chain will be corrected. A LISTCAT should be run to determine which aliases may be lost.

Problem Determination: Table I, items 3, 4, 13, 14, and 34.

IDC21025I entry name,type HAS AN INVALID GDG DATA SET ASSOCIATION

Explanation: The records associating the GDG data set with the GDG base are in error. The GDG base has been recovered; however, the generation data set string associated with this base has been altered to reflect only those data set descriptions which can be located. The values of type are defined under message IDC21045I.

System Action: Processing continues.

Programmer Response: Perform a LISTCAT for the GDG base and determine which entries no longer exist. Though entries do not exist, RESETCAT has not altered/scratched the data sets. If the resulting GDG data set string is in error, delete the GDG and redefine it; then catalog the correct generations by name.

IDC21026I entry name,type DELETED

Explanation: A previous message indicates an error which resulted in this entry being deleted from the catalog. The values of type are defined under message IDC21045I.

System Action: Processing continues.

Programmer Response: The entry noted was deleted. Any space that it occupied has been returned for suballocation if it was a VSAM object. If the entry is desired, it must be redefined and loaded. Note that any objects dependent on this object are also deleted, but no message is given for them. For instance, if a cluster is deleted, all paths, alternate indexes, and the upgrade set are also deleted.

IDC21027I { CRA / CATALOG } SPACE NOT VOLUME volser NOT OWNED BY CATALOG

Explanation: The CRA extents or catalog extents have no matching extents in any data space.

System Action: Processing continues.

Programmer Response: The resultant catalog is vulnerable because there are conflicting space ownership requests between the VTOC and the catalog. After the RESETCAT, use EXPORT to transfer all data sets on the volume noted and remove VSAM ownership to the volume. Check the data sets to ensure that they contain reasonable data. Then add ownership to the volume, and then use import to reestablish the data sets.

IDC21030I entry name,type
HAS INVALID SPACE DESCRIPTION FOR volser

Explanation: The entry noted claims space on volume. That space is not allocated to that entry. The values of type are defined under message IDC21045I.

System Action: Processing continues.

Programmer Response: The data set is marked unusable and the volume description invalidated. LISTCAT may be run to determine the invalid extents. Delete the data set. Redefine it and reload it.

Problem Determination: Table I, items 3, 4, 13, 14, and 34.

IDC21032I type DELETED FROM
entryname,type

Explanation: An object of the type specified was defined over the entry named as **entryname**. However, the records describing the object could not be found. Therefore, an object of the type specified was deleted from the given **entryname**'s description. No name for the deleted object is given because the record with its name cannot be found. The values of type are defined under message IDC21045I.

System Action: Processing continues.

Programmer Response: Perform a LISTCAT for the **entryname** noted, and try to determine which entity was deleted and redefine it.

IDC21034I SPACE MAP ERROR FOR volser

Explanation: The space map, which indicates which space is available for suballocation on a volume, is not the correct length in the catalog. This may be due to a damaged catalog or CRA. This situation is not correctable by RESETCAT.

System Action: Processing continues.

Programmer Response: All data sets on the volume noted may be EXPORTed, the volume and all VSAM space should be deleted. Redefine the volume in the catalog and IMPORT the data sets. The error noted may create a conflict in space allocated between the VSAM catalog and DADSM allocate.

IDC21045I entryname,type
avol RENAMED entryname

Explanation: An attempt was made to reset an object that bears the same name as some other object in the catalog. One of the objects was chosen to be renamed as noted in the message.

The types of entries are as follows:

A non-VSAM
B GDG base
C cluster
D data
G alternate index
I index
R path
U user catalog
X alias

System Action: Processing continues.

Programmer Response: If the renamed entry was a non-VSAM entry, the associated format-1 DSCB has not been renamed. The entry may be deleted (NOSCRATCH), the conflict resolved and the entry redefined.

If a GDG base or GDG set has been renamed, the base and its associated data sets should be deleted (NOSCRATCH) and redefined after resolving the conflict.

If a catalog connector was renamed, that catalog may be EXPORTed (using the DISCONNECT option), the conflict resolved, and the catalog connector entry IMPORTed.

If an ALIAS was renamed the conflict may be resolved, and ALTER issued to rename the entry back.

Note that the non-VSAM and GDG data sets will be inaccessible via this new name, because the Format 1 DSCB name does not correspond to the catalog name. The catalog entry is accessible.

IDC21046I entryname,type
ON cravol RENAMED entryname

Explanation: An attempt was made to reset a unique object into a catalog which contains an object of the same name. The unique object was renamed along with its corresponding format-1 DSCB on all volumes. The values of type are defined under message IDC21045I.

System Action: Processing continues.

Programmer Response: The object noted is accessible. If desired, the conflicting named object in the catalog may be moved or renamed, and this object renamed via ALTER back to its former name.

IDC21047I entryname,type
ON cravol MAY NOT BE ACCESSED BY NAME

Explanation: An attempt was made to reset a unique object into a catalog which contained an object of the same name. RESETCAT attempted to rename the unique object, but failed either because all volumes were not available (see message IDC3906I) or the RENAME failed. The values of type are defined under message IDC21045I.

System Action: Processing continues.

Programmer Response: The object noted may be accessed via the cluster name, but not the data or index name noted. The data set may be EXPORTed, and then IMPORTed after resolving the name conflict in order to gain accessibility via the date or index component name.

IDC21100I UNABLE TO DUMP MSC MAIN STORAGE

Explanation: An error occurred while the Mass Storage Control main storage was being read. The Mass Storage Control main storage cannot be dumped. There is a preceding message that indicates the MSSC reason code associated with the error.

System Action: This dump request is bypassed. Remaining dump requests are processed.

Programmer Response: Take the action associated with the MSSC reason code in the preceding message.

Problem Determination: Table I, items 2, 13, and 30.

IDC21101I LOWSECTOR X'll' is GREATER THAN HIGHSECTOR X'hh'

Explanation: A sector range was specified incorrectly. The low sector value X'll' was greater than the high sector value X'hh'.

System Action: This dump request is bypassed. Remaining dump requests are processed.

Programmer Response: Correct the sector range, specifying a low sector value that is lower than the high sector value. Resubmit the command.

IDC21102I UNABLE TO DUMP MSC EXTENDED STORAGE

Explanation: An error occurred while the Mass Storage Control extended storage was being read. The Mass Storage Control extended storage cannot be dumped. There is a preceding message that indicates the MSSC reason code associated with the error.

System Action: This dump request is bypassed. Remaining dump requests are processed.

Programmer Response: Take the action associated with the MSSC reason code in the preceding message.

Problem Determination: Table I, items 2, 13, and 30.

IDC21103I INVALID SSID X'nnnn'

Explanation: The SSID value X'nnnn' was incorrectly specified for a Staging Adapter. SSIDs for Staging Adapters must be of the form X'08x0', where x is in the range 0 through F.

System Action: Requests for this SSID are bypassed. Remaining dump requests are processed.

Programmer Response: Correct the SSID and rerun the command.

IDC21104I UNABLE TO DUMP SA X'nnnn' MAIN STORAGE

Explanation: An error occurred while the main storage of the Staging Adapter with the SSID of X'nnnn' was being read. The main storage for that Staging Adapter cannot be dumped. There is a preceding message that indicates the MSSC reason code associated with the error.

System Action: This dump request is bypassed. Remaining dump requests are processed.

Programmer Response: Take the action associated with the MSSC reason code in the preceding message.

Problem Determination: Table I, items 2, 13, and 30.

IDC21105I UNABLE TO DUMP SA X'nnnn' EXTENDED STORAGE

Explanation: An error occurred while the extended storage of the Staging Adapter with the SSID of X'nnnn' was being read. The extended storage for that Staging Adapter cannot be dumped. There is a preceding message that indicates the MSSC reason code associated with the error.

System Action: This dump request is bypassed. Remaining dump requests are processed.

Programmer Response: Take the action associated with the MSSC reason code in the preceding message.

Problem Determination: Table I, items 2, 13, and 30.

IDC21106I INVALID MSC TABLES RECORD ADDRESS X'cchhrr'

Explanation: A record address for a Mass Storage Control tables record (cchhrr) was incorrectly specified. Either it is outside the range of addresses for the Mass Storage Control tables, or it does not conform to the following rules:

- cc (cylinder) must be in the range X'07' through X'27'.
- hh (head) must be in the range X'00' through X'12'.
- rr (record) must be in the range X'01' through X'20'.

The only exception to the rules is that if cc is X'07', then hh must be X'01'.

System Action: This dump request is bypassed. Remaining dump requests are processed.

Programmer Response: Correct the address value and rerun the command.

IDC21107I UNABLE TO COMPLETE MSC TABLES DUMP FROM RECORD X'cchhrr'

Explanation: An error occurred while the Mass Storage Control tables record indicated by cchhrr was being read. This record and the remaining requested records from the Mass Storage Control tables are not dumped. If cc is X'07', then hh must be X'01'. There is a preceding message that indicates the MSSC reason code associated with the error.

System Action: This dump request is bypassed. Remaining dump requests are processed.

Programmer Response: If you have specified X'07' for cc, then correctly specify hh as X'01', and rerun the command. Otherwise, take the action associated with the MSSC reason code in the preceding message.

Problem Determination: Table I, items 2, 13, and 30.

IDC21108I MSC TABLES LOWCHR X'cchhrr' IS GREATER THAN HIGHCHR X'cchhrr'

Explanation: The beginning cchhrr was greater than the ending cchhrr in a request to dump portions of the Mass Storage Control tables.

System Action: This dump request is bypassed. Remaining dump requests are processed.

Programmer Response: Correct the cchhrr values and rerun the command.

IDC21109I ONE OR MORE REQUESTED EXTENDED SECTORS ARE NOT AVAILABLE

Explanation: One or more of the sectors requested for a Staging Adapter extended storage dump are invalid in this configuration.

System Action: The invalid sectors are bypassed, but all valid requested sectors are dumped.

Programmer Response: Correct the values for future dumps.

Problem Determination: Table I, items 2, 13, and 30.

IDC21125I SA 8x0 TABLES CANNOT BE READ: SA IS OFFLINE OR SUU.

Explanation: While interrogating the MSC (Mass Storage Control) main sectors 7C-7F, the staging adapter UCB for staging adapter 8x0 showed that either the staging adapter was invalid or, if valid, that the staging adapter was not online, not ready, or both. The common definition for SUU (subsystem unit unusable) is valid and online but not ready.

System Action: The request is bypassed. All processing regarding this staging adapter is bypassed, and the remaining requests are attempted.

Programmer Response: If the staging adapter is offline, vary it online. If it is SUU, see Problem Determination. Resolve the equipment problem and then rerun the job.

Problem Determination: Table I, items 2, 3, 13, and 30.

IDC21127I UNABLE TO READ STAGING ADAPTER STORAGE

Explanation: An error occurred while the system was reading staging adapter main storage. Staging adapter main storage cannot be dumped. A message indicating the MSSC (Mass Storage System Communicator) reason code for the error appears prior to this message.

System Action: The request is bypassed, and the remaining requests are attempted.

Programmer Response: Perform the response indicated in the description of the message that identified the MSSC reason code.

Problem Determination: Table I, items 2, 13, and 30.

IDC21141I { CELL xyz / XRANGE (lowx highx) } IS NOT VALID FOR MSF n AND NOT PROCESSED

Explanation: Either the CELL xyz or the XRANGE (lowx highx) indicated is invalid for Mass Storage Facility n. xyz is the invalid cell location, and (lowx highx) is the invalid range of X coordinates. The valid values for coordinates depend upon the model of Mass Storage Facility:

- For models A01 and B01, x ranges from 234 through 247, y ranges from 0 through 27, and z is 0 or 1.
- For models A02, A11, B02, and B11, x ranges from 206 through 247, y ranges from 0 through 27, and z is 0 or 1.
- For models A03, A12, A21, B03, B12, and B21, x ranges from 178 through 247, y ranges from 0 through 27, and z is 0 or 1.
- For models A04, A13, A22, A31, B04, B13, B22, and B31, x ranges from 150 through 247, y ranges from 0 through 27, and z is 0 or 1.

System Action: The indicated CELL or XRANGE value in error is ignored. Processing continues.

Programmer Response: Correct the value in error and rerun the command.

Problem Determination: Table I, items 1, 13, 30, and 41g. (Dump the cell map table.)

IDC21143I ** INCOMPLETE READ REPORT PRODUCED, ERROR AT X LOCATION xxx

Explanation: The AUDITMSS command is unable to read the labels of all the requested cartridges. The X coordinate of the cell where the error occurred is indicated by xxx.

System Action: The command terminates.

Programmer Response: Rerun the command for the values not processed (all the cells with X coordinate equal to or greater xxx), after corrective action was taken as indicated in the primary message.

Problem Determination: Table I, items 1, 13, 18b, and 30.

IDC21144I LOW XRANGE lowx IS GREATER THAN HIGH XRANGE highx

Explanation: The low value lowx in the XRANGES parameter is greater than the high value highx. The values must be in the range 150 through 247, and the low value must not be greater than the high value.

System Action: The invalid XRANGE is ignored, and processing continues.

Programmer Response: Correctly specify the invalid range and rerun the command.

Problem Determination: Table I, items 1, 13, 30, 41b, and 41g. (Dump the cell map table.)

IDC21147I ** INCOMPLETE AUDIT REPORT PRODUCED, ERROR WITHIN X RANGE

Explanation: The AUDITMSS command is unable to check the status of all the requested cells. The X coordinates of the range of cells that could not be checked are indicated by n1 n2.

System Action: The command terminates.

Programmer Response: Rerun the command for the values not processed (all the cells within the range n1 through n2), after corrective action was taken as indicated in the primary message.

Problem Determination: Table I, items 1, 13, 30, 41b, and 41g. (Dump the cell map table.)

IDC21276I QCB FOR VOLUME (volser) HAS BEEN MARKED IN ERROR

Explanation: The QCB (queue control block) for the active, general-use volume volser has been marked in error. The volume being marked in error is valid only if the MSC (mass storage controller) is at EC level 737573 or later.

System Action: The system terminates with a message that indicates the severity of the error.

Operator Response: None.

Programmer Response: Use the NULLITYC command with the NULLIFYQCBINERROR parameter to clear the error flag in the base volume record. You must also specify the ACTIVE and VOLUME parameters.

Problem Determination: Table I, items 2, 3, 4, 13, 54.

IDC21363I THE FOLLOWING ENTRIES HAD ERRORS

Explanation: This message provides a summary of the errors found by the DIAGNOSE FSR. Each entry name is followed by a reason code indicating the specific error for that entry. For example:

SYS1.VVDS.VCATALG (D) - REASON CODE: 17

Here 'SYS1.VVDS.VCATALG' is the entry name and '17' the reason code. The '(D)' is the entry type.

When the error was initially encountered, a specific message was printed and a record dump may have been done. The IDC21363I message provides a summary of the entries which had errors. For VSAM data sets, the entry name may be a cluster, component (data or index), path or true name entry. For non-VSAM entries, the entry name may be an entry or an alias.

System Action: DIAGNOSE terminated processing of that particular entry and moved along to another entry.

Programmer Response: Decide on the seriousness of the error and correct the error if need be. The reason codes set by DIAGNOSE are detailed below under message IDC21364I.

Problem Determination: Table I, items 1, 3, 4, 8, 13, 25a; consult *Data Facility Extended Function: Access Method Services Administration and Services* for information on how to use this output for ICF Catalog or VVDS recovery.

IDC21364I ERR R DETECTED BY DIAGN SE:
{VVDS / ICFCAT ENTRY: aaaa}
RECORD: kkkk
OFFSET: dddd
REASON: tttt

Explanation: The entry 'aaaa' has an error; 'tttt' is the specific type of error. The error occurred in the record 'kkkk', where 'kkkk' is either the key of the record for an ICFCTLG or an RBA for a VVDS. The offset into the record where the error occurred is given by 'dddd'. This message will in most cases be followed by an IDC11365I message which will display the record in error. An IDC21363I message summarizes all entries with errors at the conclusion of the DIAGNOSE run.

'tttt' consists of text describing the cause of the error.

Reason Codes	Explanation
1	CELL LENGTH IS ZERO
2	CELL TYPE NOT RECOGNIZED
3	RECORD TYPE NOT RECOGNIZED
4	UNEXPECTED RECORD ID ENCOUNTERED
5	COMPONENT LENGTH IS ZERO
6	CELL LENGTH IS TOO LARGE
7	CELL LENGTHS SUM AND COMPONENT LENGTH DISAGREE
8	REPEATING XX CELL NOT VALID
9	RECORD LENGTH INCORRECT
10	UNCOMPLETED EXTEND DETECTED
11	UNCOMPLETED DELETE DETECTED
12	CATLG AND VVDS NAMES UNEQUAL
13	CATLG AND VVDS EXTENT SEQ. NO. UNEQUAL
14	CATLG AND VVDS VOLFLG UNEQUAL
15	CATLG AND VVDS KEYS UNEQUAL
16	VVDS AND VTOC STARTING CCHH UNEQUAL
17	VVDS ENTRY NOT FOUND
18	VVDS ENTRY NOT FOUND
19	CATLG ENTRY NOT FOUND
20	ASSOCIATION NOT FOUND

21 ASSOCIATION LOOP FAILURE

22 TRUENAME NOT FOUND

23 TRUENAME LOOP FAILURE

24 REQUIRED XX CELL MISSING

27 ENTRY MISSING FROM GAT CELL

28 GAT CELL ENTRY NOT FOUND

29 ENTRY MISSING FROM REL. CELL

30 REL. CELL ENTRY NOT FOUND

31 VVDS ENTRY NOT PRIMARY VVR

32 VVDS ENTRY NOT SECONDARY VVR

33 UNCOMPLETED UPDATE DETECTED

34 VVDS AND VTOC ENDING CCHH UNEQUAL

35 VVDS AND VTOC EXTENT COUNTS UNEQUAL

System Action: Processing continues with another record.

Programmer Response: Decide on the seriousness of the error and correct the error if need be.

IDC21365I

{ICFCATALOG / VVDS / VTOC} RECORD DISPLAY: RECORD: kkkk

Explanation: The record which follows was involved in an error detected by DIAGNOSE. A previous error message indicates which error; 'kkkk' is the key or RBA of the record involved in the error. Note: The first X'44' bytes of the Format 1 DSCB are not displayed.

System Action: The record is displayed and DIAGNOSE continues.

Programmer Response: Use this record display to analyze the error and determine correction techniques.

Problem Determination: Table I items 1, 3, 4, 8, 13, 25a, 54.

IDC21372I xxxxxxxxxxxxxx IS NOT { AN ICFCATALOG / A VVDS }

Explanation: The DDNAME or DSN given was not the type indicated in the DIAGNOSE command syntax. If the data set to be scanned is an ICFCATALOG, the compare parameter should indicate a VVDS. If input data set is a VVDS, the compare parameter should indicate an ICFCATALOG.

Programmer Response: Check for spelling error. Check for message IDC11373I to see if compare elements were not used during the DIAGNOSE run. Correct the statement and resubmit the job.

Problem Determination: Table I, items 1, 3, 4, 13, 25a.

IDC21404I dsn IS AN INVALID ASSOCIATION FOR SPHERE TYPE

Explanation: The data set dsn is not a valid association for its base object.

System Action: The base object and any of its associations already defined will be deleted from the target catalog and the processing will continue with the next base object.

Programmer Response: Correct the problem and rerun the job.

Problem Determination: Table I, items 1, 3, 4, 13, 29 and 34.

IDC21409I CONVERSION FAILED FOR SPHERE dsn

Explanation: The specified sphere base could not be converted to the target catalog.

System Action: Processing is continued with the next base object.

Programmer Response: Correct the problem indicated in a preceding message and rerun the job.

Problem Determination: Table I, items 1, 3, 4 and 13.

IDC21410I DELETE OF SPHERE dsn FROM { TARGET / SOURCE } CATALOG FAILED

Explanation: CNVTCAT has attempted to delete sphere dsn from the source or target catalog and has failed. When the sphere is not deleted from the source catalog, the sphere exists in both source and target catalogs. When the sphere is not deleted from the target catalog, only a partial sphere may exist in the target catalog and the sphere exists in the source catalog as it did before the processing began.

System Action: Processing of the sphere is terminated and processing continues with the conversion of the next sphere's base.

Programmer Response: If the delete failed for the source catalog, restore the volumes, correct the problem in the source catalog and issue an Access Method Services DELETE NOSCRATCH to remove the catalog entries for sphere dsn. If the delete failed for the target catalog, restore the volumes, correct the problem and rerun the job.

Problem Determination: Table I, items 1, 3, 4, 13, and 34.

IDC21411I DATA SET dsn IS MARKED NOT USABLE

Explanation: The specified data set has been marked as not usable by a DELETE FORCE operation or by a RESETCAT operation because of space occupancy conflict.

System Action: If the sphere base and any of its associations have been defined in the target catalog they will be deleted from the target catalog. Then processing is continued with the next base object.

Programmer Response: The data set can be recovered by using the REPRO command. Then reissue the CNVTCAT command.

Problem Determination: Table I, items 1, 2, 3, 4, and 34.

IDC21412I DEFINE FAILED FOR dsn

Explanation: The define failed for the specified data set.

System Action: If dsn is a base object and any of its associations have been defined in the target catalog, dsn and its associations will be deleted from the target catalog. The processing is continued with the next base object. If dsn is a VSAM Volume Data Set (VVDS), CNVTCAT processing is terminated.

Programmer Response: Restore the catalog volume and all volumes owned by the catalog; correct the problem and reissue the CNVTCAT command.

Problem Determination: Table I, items 1, 3, 4, and 13.

IDC31000I CATALOG NOT A RECOVERABLE CATALOG

Explanation: The catalog specified for reset is not a recoverable catalog.

System Action: The RESETCAT command is terminated. No change has been made to the catalog or a Catalog Recovery Area (CRA).

Programmer Response: Respecify the catalog to be reset.

IDC31001I SYSTEM MASTER CATALOG SPECIFIED FOR RESET

Explanation: The master catalog was specified for reset. The master catalog cannot be reset while it is in use as a master catalog.

System Action: The RESETCAT command is terminated. No change has been made to the catalog or a Catalog Recovery Area (CRA).

Programmer Response: Ensure that the catalog to be reset is not in use as a master catalog before issuing RESETCAT.

IDC31004I DEFINE OF WORK FILE FAILED

Explanation: DEFINE failed for the work file. Message IDC3009I precedes this message identifying the Catalog Management return code which will indicate the reason for failure.

System Action: The RESETCAT command is terminated. No change has been made to the catalog or a Catalog Recovery Area (CRA).

Programmer Response: Take corrective action as noted in the IDC3009I message.

IDC31005I WORK FILE DEFINED IN THE CATALOG TO BE RESET

Explanation: The work file was defined in the catalog to be reset.

System Action: The RESETCAT command is terminated. No change has been made to be catalog or a Catalog Recovery Area (CRA).

Programmer Response: Specify a catalog other than the one being reset via the WORKCAT parameter, or specify another catalog as the first concatenated entry in the JOBCAT or STEPCAT statement.

IDC31006I PHYSICAL I/O error - VSAM ACTION CODE rrrr

Explanation: A physical I/O error on the catalog was encountered while extending the catalog.

System Action: The RESETCAT command is terminated.

Programmer Response: Correct the physical error and reissue RESETCAT. The VSAM action code can be found in *the OS/VS Virtual Storage Access Method (VSAM) Programmer's Guide.* The catalog and CRA entries have not been altered and hence are recoverable in their current state - barring the I/O error.

IDC31007I LOGICAL I/O ERROR - VSAM ACTION CODE rrrr

Explanation: A logical I/O error was encountered while extending the catalog during RESETCAT. There were not enough free records in the catalog being reset, consequently RESETCAT attempted to get more.

System Action: The operation is terminated.

Programmer Response: Correct the logical error. The VSAM action code can be found in the *OS/VS Virtual Storage Access Method (VSAM) Programmer's Guide.* If the catalog has reached 16 extents and cannot be extended further, a larger catalog may be defined in which to perform the RESETCAT. The catalog and CRA entries have not been altered.

IDC31008I ERROR ACCESSING THE CATALOG

Explanation: RESETCAT encountered an error trying to access the data set specified by the CATALOG parameter. Message IDC3009I precedes this message identifying the specific error.

System Action: The operation is terminated.

Programmer Response: Correct the error specified in the IDC3009I message and reissue the command. If the error is not correctable, a new catalog of the same name may be defined into which all of the volumes owned by the failing catalog may be reset using RESETCAT. The entries in the catalog have not been altered.

IDC31010I CRA DOES NOT BELONG TO CATALOG - VOL volser

Explanation: The CRA was specified for reset, but it belongs to a catalog other than the catalog to be reset.

System Action: The operation is terminated.

Programmer Response: Respecify the correct volume to be reset and reissue the command.

IDC31012I MAXIMUM RELATIVE RECORD NUMBER EXCEEDED IN WORK FILE

Explanation: The work file relative record number (rrn) limit has been exceeded. No more records can can be written to the work file. The resultant catalog is too large.

System Action: The operation is terminated.

Programmer Response: Respecify subsets of the CRA volumes specified for reset and issue multiple RESETCAT commands. The catalog entries have not been altered.

IDC31013I COULD NOT MERGE ONE OR MORE CRAS

Explanation: See preceding message which indicates that:

- Open failed for CRA (IDC3300I)
- Close failed for CRA (IDC3301I)
- CRA does not belong to catalog to be reset (IDC31010I)

System Action: The operation is terminated.

Programmer Response: Correct the error in the referenced message and reissue the command. The catalog entries have not been altered.

IDC31014I DELETE OF WORK FILE FAILED

Explanation: DELETE failed for the work file. Message IDC3009I precedes this identifying the specific error.

System Action: The operation is terminated.

Programmer Response: Unless some previous message indicates a terminating error, the RESETCAT operation has been completely performed. The work file may be deleted using the DELETE command after correcting the error indicated in message IDC3009I.

IDC31016I NO CRA SPECIFIED FOR RESET

Explanation: The CRAFILES parameter specified no CRA with the ALL option; hence, no volume was specified for reset.

System Action: The operation is terminated.

Programmer Response: Specify the correct volumes for reset and issue the command.

IDC31017I UNABLE TO GET EXCLUSIVE USE OF THE CATALOG

Explanation: Some other task is open to the catalog requested to be reset. The RESET operation is unable to reset a catalog without exclusive use.

System Action: The operation is terminated.

Programmer Response: For the catalog being reset, specify DISP=(OLD,KEEP) on the DD statement, or get exclusive use. Reissue the command.

IDC31018I CRA UNAVAILABLE

Explanation: RESETCAT required a volume that could not be allocated.

System Action: The operation is terminated.

Programmer Response: A secondary CRA volume was required during the reset of a catalog and it was not available. If enough units are not available, specify the volume via a DD statement and include that DD statement in the CRAFILES parameter on the command indicating NONE. See message IDC21020I.

IDC31019I CRA volser SPECIFIED FOR RESET MORE THAN ONCE

Explanation: The CRAVOLS parameter specified the same volser more than once, or the CRAFILES parameter specified the same volser more than once via ddnames.

System Action: The operation is terminated.

Programmer Response: Specify the correct volumes for reset and reissue the command.

IDC31035I BAD VOLUME RECORDS FOR volser

Explanation: In a CRA, either the volume record for the volser indicated does not exist or one of its secondary records does not exist (IEC110022I). If IGNORE was specified, the reset will occur. This may mean that all data sets allocated on this volume will be marked unusable. If NOIGNORE was specified, the RESETCAT operation terminates before updating the catalog or CRA(s).

System Action: The command may terminate (see Explanation).

Programmer Response: If IGNORE was specified, no error exists in the catalog; accompanying messages will indicate any action taken on individual data sets as a result of this. If NOIGNORE was specified, use EXPORTRA to export all VSAM data sets on this volume, FORCE DELETE the volume, and use IMPORTRA to recover all data sets.

IDC

IDC31038I COULD NOT UPDATE ONE OR MORE CRAS

Explanation: See preceding message which indicates that:

- Open failed for CRA (IDC3300I)
- Close failed for CRA (IDC3301I)

System Action: The operation is terminated.

Programmer Response: Correct the error in the referenced message and reissue the command. The catalog entries have been updated but the CRA entries have not.

IDC31126I UNABLE TO READ MSC MAIN STORAGE

Explanation: An error occurred while the system was reading MSC (Mass Storage Control) main storage. MSC main storage cannot be dumped. A message indicating the MSSC (Mass Storage System Communicator) reason code for the error appears prior to this message.

System Action: The operation is terminated.

Programmer Response: Perform the response indicated in the description of the message that identified the MSSC reason code.

Problem Determination: Table I, items 2, 13, and 30.

IDC31140I ** UNABLE TO OBTAIN THE { **MSF CELL MAPS** / **MSC CONFIGURATION TABLE** }

Explanation: Either the Mass Storage Facility cell map table or the mass storage control configuration table could not be read. Therefore, the status of the Mass Storage Facility cells could not be obtained, or the availability of the Mass Storage Facility could not be verified.

System Action: processing of this command terminates.

Programmer Response: Take the corrective action described in the previous message, and rerun the command.

Problem Determination: Table I, items 1, 13, 30, and 41b.

IDC31142I AUDITMSS TERMINATED. NO VALID { CELL(S) / XRANGE(S) } SPECIFIED

Explanation: The values specified with the CELLS or XRANGES parameters were not valid for the model of Mass Storage Facility. No AUDITMSS report is produced.

The valid values for coordinates of cells depend upon the model of Mass Storage Facility:

- For models A01 and B01, the X coordinate ranges from 234 through 247, the y coordinate ranges from 0 through 27, and the z coordinate is 0 or 1.
- For models A02, A11, B02, and B11, the X coordinate ranges from 206 through 247, the y coordinate ranges from 0 through 27, and the z coordinate is 0 or 1.
- For models A03, A12, A21, B03, B12, and B21, the X coordinate ranges from 178 through 247, the y coordinate ranges from 0 through 27, and the z coordinate is 0 or 1.
- For models A04, A13, A22, A31, B04, B13, B22, and B31, the X coordinate ranges from 150 through 247, the y coordinate ranges from 0 through 27, and the z coordinate is 0 or 1.

System Action: The command terminates.

Programmer Response: Correct the values specified with CELLS or XRANGES, and rerun the command.

Problem Determination: Table I, items 1, 13, 30, 41b, and 41g. (Dump the cell map table.)

IDC31143I ** INCOMPLETE { CHECK / READ } REPORT PRODUCED, ERROR AT X LOCATION xxx

Explanation: The AUDITMSS command is unable to check the status of all the requested cells, or to read the labels of all the requested cartridges. The X coordinate of the cell where the error occurred is indicated by xxx.

System Action: The command terminates.

Programmer Response: Reissue the command for the values not processed (all the cells with X coordinate equal to or greater than xxx), after corrective action was taken as indicated in the primary message.

Problem Determination: Table I, items 2, 13, and 30.

IDC31145I ** NO READ REPORT PRODUCED, ERROR AT X LOCATION xxx

Explanation: The AUDITMSS command is unable to read the labels of any of the requested cartridges. The X coordinate of the cell where the error occurred is indicated by xxx.

System Action: The command terminates.

Programmer Response: Reissue the command for the values not processed (all the cells with X coordinate equal to or greater than xxx), after corrective action was taken as indicated in the primary message.

Problem Determination: Table I, items 1, 13, 18b, and 30.

IDC31148I ** NOT AUDIT REPORT PRODUCED, ERROR WITHIN X RANGE n1 n2

Explanation: The AUDITMSS command is unable to check the status of any of the requested cells. The X coordinates of the range of cells that could not be checked are indicated by n1 n2.

Programmer Response: Reissue the command for the values not processed for all the cells within the range n1 through n2, after corrective action was taken as indicated in the primary message.

Problem Determination: Table I, items 1, 13, 18b, and 30.

IDC31160I TOSTAGINGDRIVE SSID SPECIFIED IS NOT A VALID MSC TABLES SSID

Explanation: The SSID specified as a target for the table copy is not a valid mass storage control table SSID. The SSID must be X'000', X'002', X'004', or X'006'.

System Action: Processing of this command terminates.

Programmer Response: Correctly specify the SSID used with the TOSTAGINGDRIVE parameter, and rerun the command.

Problem Determination: Table I, items, 3, 13, 30, and 41b.

IDC31170I UNABLE TO DETERMINE PRIMARY MSC TABLES LOCATION

Explanation: The attempt to read the Mass Storage Control main storage to determine the primary mass storage control tables location failed. The information necessary to build the SSID for the primary tables is not available.

System Action: Processing of this command terminates.

Programmer Response: Reissue the command after the problem with the Mass Storage Control has been corrected.

Problem Determination: Table I, items 3, 13, and 30.

IDC31180I PRIMARY TABLES CANNOT BE COPIED TO WORK DATA SET

Explanation: The primary mass storage control tables cannot be copied to the work data set.

System Action: Processing of this command terminates.

Programmer Response: Ensure that the work data set is allocated properly, and rerun the command.

Problem Determination: Table I, items 3, 13, 18b, and 30.

IDC31181I SECONDARY TABLES CANNOT BE COPIED TO WORK DATA SET

Explanation: The secondary mass storage control tables cannot be copied to the work data set.

System Action: Processing of this command terminates.

Programmer Response: Ensure that the work data set is allocated properly, and rerun the command.

Problem Determination: Table I, items 3, 13, 18b, and 30.

IDC31201I REPAIRRANGE PARAMETER cchhr GT cchhr FOR dsname

Explanation: The named repair work file (repair work file) keys in the REPAIRRANGE parameter of REPAIRV DISPLAY were incorrectly specified. The first key (cchhr) is greater than the second key. The five hexadecimal characters cchhr identify a record address.

System Action: REPAIRV DISPLAY terminates. Control returns to Access Method Services. The return code is 12.

Programmer Response: Correct REPAIRRANGE so that the second key is greater than or equal to the first key and resubmit.

Problem Determination: Table I, items 3, 4, 29.

IDC31202I BEGINNING KEY volsercchhr DOES NOT EXIST FOR dsname

Explanation: The first key (volsercchhr) specified in REPAIRRANGE of REPAIRV DISPLAY was not found in the specified repair work file (dsname). Either the volume serial number is incorrect, the address is incorrect, or the repair work file is not the one containing the specified record.

The six characters volser identifies the volume serial number and the five hexadecimal characters cchhr identifies the address of a record.

System Action: REPAIRV DISPLAY terminates. Control returns to Access Method Services. The return code is 12.

Programmer Response: Correct REPAIRRANGE to specify a valid key for the first record to be displayed. Ensure that the repair work file dsname is correct and that the key specified is in that work file. Resubmit.

Problem Determination: Table I, items 2, 3, 4, 29, 36.

IDC31203I UNIT INDICATES A VIRTUAL DEVICE

Explanation: The unit address specified in the DD statement referred to by INFILE indicates a virtual device; if the STAGINGRANGE parameter was specified, the unit specified must be real. Either the STAGINGRANGE parameter is incorrect or you have specified the wrong unit parameter in the JCL.

System Action: REPAIRV DISPLAY/COPY terminates. Control returns to Access Method Services. The return code is 12.

Programmer Response: Either change the unit parameter in the JCL to a real unit or change STAGINGRANGE to DATASETRANGE, as appropriate, and resubmit.

Problem Determination: Table I, items 2, 3, 4, 29.

IDC31204I STAGING PACK VOL=SER=volser NOT FOUND IN STAGINGRANGE

Explanation: The volume serial number (volser) of the staging pack specified in STAGINGRANGE of REPAIRV DISPLAY/COPY does not match the volume serial number specified in the VOL=SER= parameter (as shown in the message) of the DD statement referred to by INFILE. The JCL and REPAIRV syntax must correspond.

System Action: REPAIRV DISPLAY/COPY terminates control returns to Access Method Services. The return code is 12.

Programmer Response: Determine the correct volume serial number and correct either the job control language or STAGINGRANGE, as appropriate, and resubmit.

Problem Determination: Table I, items 3, 4, 29.

IDC31205I INVALID STAGINGRANGE cchhr FOR DEVICE TYPE

Explanation: The address (cchhr) in the STAGINGRANGE parameter of REPAIRV DISPLAY/COPY is not valid for the device type specified in the UNIT parameter of the DD statement specified by the ddname parameter of INFILE. Either the "cchh" portion of STAGINGRANGE is incorrect or the UNIT parameter is incorrect. The five hexadecimal characters cchhr identify a record address.

System Action: REPAIRV DISPLAY/COPY terminates. Control returns to Access Method Services. The return code is 12.

Programmer Response: Determine the correct device type of the staging pack and correct either STAGINGRANGE or the UNIT parameter in the job control language, as appropriate, and resubmit. Ensure that the cc is a valid cylinder address and hh is a valid head (track) address for the device.

Problem Determination: Table I, items 2, 3, 4, 29.

IDC31206I AUTHORIZATION TO ACCESS TO STAGINGPACK VOL=SER=volser DENIED BY SYSTEM OPERATOR

Explanation: The system operator has responded "N" to REPAIRV's request (IDC499D) for access to the specified (volser) volume.

System Action: REPAIRV DISPLAY/COPY/MODIFY terminates. Control returns to Access Method Services. The return code is 12.

Programmer Response: Check with the appropriate system operations personnel for the reason for access denial.

Problem Determination: Table I, items 2, 3, 4, 29.

IDC31207I INCORRECT STAGINGRANGE cchhr

Explanation: A count of characters specified in the STAGINGRANGE parameter of the REPAIRV DISPLAY or the REPAIRV COPY command showed the length of cchhr to be other than 5, hhr (DISPLAY) to be other then 3, or r (COPY) to be other than 1 in volsercchhr. Anything other than 5, 3, or 1 is invalid. The five hexadecimal characters cchhr identify a record in a track.

System Action: REPAIRV DISPLAY/COPY terminates. Control returns to Access Method Services. The return code is 12.

Programmer Response: Correct STAGINGRANGE and resubmit.

Problem Determination: Table I, items 3, 4, 29.

IDC31208I STAGINGRANGE cchhr GT cchhr FOR STAGING PACK VOL=SER=volser

Explanation: The cchhr parameters in the STAGINGRANGE parameter of the REPAIRV DISPLAY or the REPAIRV COPY command were incorrectly specified for volser. The first key (cchhr) is greater then the second key (cchhr) specified in this parameter. The five hexadecimal characters cchhr identify a record address.

System Action: The REPAIRV DISPLAY or the REPAIRV COPY command terminates. Control returns to Access Method Services. The return code is 12.

Programmer Response: Correct STAGINGRANGE so that the second key (cchhr) is greater then or equal to the first key (cchhr) and resubmit.

Problem Determination: Table I, items 3, 4, 29.

IDC31209I INCORRECT INDATASET PARAMETER FORMAT4.DSCB

Explanation: The dsname in INDATASET refers to a volume's VTOC, which is an invalid specification for this parameter.

System Action: REPAIRV DISPLAY/COPY terminates. Control returns to Access Method Services. The return code is 12.

Programmer Response: Verify the name of the volume or data set containing the records you want processed. If the data set name is a volume's VTOC, use the INFILE parameter and specify FORMAT4.DSCB as the data set name on the DD statement of INFILE. Otherwise, specify a valid data set name in INDATASET; that is, one referring to a data set cataloged in the system master catalog, a catalog specified in a STEPCAT or JOBCAT DD statement, or a catalog having the data set's highest level qualifier as an alias.

Problem Determination: Table I, items 3, 4, 29.

IDC31210I VOL=SER=volser IN parameter DOES NOT MATCH THE VOLSER IN DD STATEMENT ddname

Explanation: The volume serial number (volser) in DATASETRANGE, INDATASETADDRESS, OUTDATASETADDRESS, VTOCHEADERADDRESS, or VTOCHEADER (parameter), does not match the volume serial number specified in VOL=SER parameter of the DD statement (ddname) referred to by INFILE (ddname). The JCL and REPAIRV syntax must correspond.

System Action: REPAIRV DISPLAY/COPY/MODIFY terminates. Control returns to Access Method Services. The return code is 12.

Programmer Response: Determine the correct volume serial number of the volume containing the data set whose records are to be processed and correct either the JCL or parameter as appropriate, and resubmit.

Problem Determination: Table I, items 2, 3, 4, 29.

IDC31211I UNIT INDICATES A REAL DEVICE FOR dsname

Explanation: The unit parameter specified in the DD statement referred to by INFILE indicates a real device; it must indicate a Mass Storage volume. Either the data set name (dsname) is incorrect or you have specified the wrong unit parameter in the JCL.

System Action: REPAIRV terminates. Control returns to Access Method Services. The return code is 12.

Programmer Response: Either change the unit in the job control language to a virtual unit or change the parameters as appropriate, and resubmit.

Problem Determination: Table I, items 2, 3, 4, 29.

IDC31212I DATASETRANGE cchhr TO cchhr NOT WITHIN EXTENTS OF dsname

Explanation: The address range cchhr to cchhr specified in DATASETRANGE is outside the extents of the specified data set (dsname). The Five hexadecimal characters cchhr identify a record address.

System Action: REPAIRV DISPLAY/COPY terminates. Control returns to Access Method Services. The return code is 12.

Programmer Response: Determine the actual extents of the data set. Correct the DATASETRANGE parameters of the named data set and resubmit.

Problem Determination: Table I, items 2, 3, 4, 13, 25a, 29, 34b, 37a.

IDC31213I (hh) GREATER THAN hh FOR dsname

Explanation: The stage error record keys in the RANGE parameter of REPAIRV DEBLOCK were incorrectly specified for repair work file. The first key (hh) is greater than or equal to the second key (hh).

System Action: REPAIRV DEBLOCK/MODIFY terminates. Control returns to Access Method Services. The return code is 12.

Programmer Response: Correct RANGE or INREPAIRRANGE so that the second key (hh) is greater then or equal to the first key (hh) and resubmit.

Problem Determination: Table I, items 3, 4, 29.

IDC31214I FIRST KEY (volsercchh) IN THE RANGE NOT FOUND FOR dsname

Explanation: The first key (volsercchh) specified in RANGE was not found in the repair work file. Either the volume serial number is incorrect, the address (cchh) is in correct, or the repair work file (dsname) is not the one desired.

The six characters volser identifies the volume serial number and the four hexadecimal characters cchh identifies the address of a record.

System Action: REPAIRV DEBLOCK terminates. Control returns to Access Method Services. The return code is 12.

Programmer Response: Correct RANGE to specify a valid key for the first record to be deblocked. Ensure that the repair work file is the one desired and that the key specified is in that work file. Resubmit.

Problem Determination: Table I, items 2, 3, 4, 29, 35d.

IDC31220I HEADER RECORD EITHER NOT FOUND OR INVALID FOR dsname

Explanation: Either no header record was found at the beginning of the specified file (repair work) or the record found was not a valid header record, indicating that this file is not a repair work file.

System Action: REPAIRV DEBLOCK terminates. Control returns to Access Method Services. The return code is 12.

Programmer Response: Correct the job control language to indicate the appropriate repair work file or recreate the repair work file using REPAIRV COPY and resubmit.

Problem Determination: Table I, items 2, 3, 4, 29, 36.

IDC31221I RECORD IN INDATASETADDRESS volsercchhr NOT FOUND FOR dsname

Explanation: The specified record volsercchhr is not in the referenced input data set (dsname); that is, the address specified is not within the extents of the specified data set or within the first track of the VTOC (VTOCHEADER). Either the address is incorrect or the wrong data set was specified.

The six characters volser identifies the volume serial number and the four hexadecimal characters cchh identifies the address of a record.

System Action: REPAIRV MODIFY terminates. Control returns to Access Method Services. The return code is 12.

Programmer Response: Determine the actual extents of the data set, then correct the INDATASETADDRESS parameter and resubmit.

Problem Determination: Table I, items 2, 3, 4, 13, 25a, 29, 34b, 37(a).

IDC31222I RECORD IN INREPAIRKEY volsercchhr NOT FOUND FOR dsname

Explanation: The record (volsercchhr) specified in INREPAIRKEY is not in the referenced repair work file.

The six characters volser identifies the volume serial number and the four hexadecimal characters cchh identifies the address of a record.

System Action: REPAIRV MODIFY terminates. Control returns to Access Method Services. The return code is 12.

Programmer Response: Display the repair work file records. If necessary, recreate the repair work file using REPAIRV COPY, or correct the INREPAIRKEY parameter, and rerun.

Problem Determination: Table I, items 2, 3, 4, 29, 36.

IDC31223I RECORD volsercchhr IN parameter NOT FOUND FOR dsname VTOCHEADER

Explanation: The record (volsercchhr) specified in OUTDATASETADDRESS or VTOCHEADERADDRESS (parameter), is not in the specified user data set; that is, the address specified is not within the extents of the specified output data set (dsname) or within the first track of the VTOC (VTOCHEADER).

The six characters volser identifies the volume serial number and the four hexadecimal characters cchh identifies the address of a record.

System Action: REPAIRV MODIFY terminates. Control returns to Access Method Services. The return code is 12.

Programmer Response: Determine the actual address of the record. Correct the OUTDATASETADDRESS or VTOCHEADER parameter and resubmit.

Problem Determination: Table I, items 2, 3, 4, 13, 25a, 29, 36a, 37a.

IDC31224I RECORD IN OUTREPAIRKEY volsercchhr NOT FOUND FOR dsname

Explanation: The record volsercchhr specified in OUTREPAIRKEY is not in the referenced repair work file.

The six characters volser identifies the volume serial number and the four hexadecimal characters cchh identifies the address of a record.

System Action: REPAIRV MODIFY terminates. Control returns to Access Method Services. The return code is 12.

Programmer Response: Display the repair work file records. If necessary, recreate the repair work file using REPAIRV COPY, or correct the OUTREPAIRKEY parameter, and resubmit.

Problem Determination: Table I, items 2, 3, 4, 29, 36.

IDC31225I RECORD volsercchhr IN parameter DOES NOT MATCH THE FIRST INREPAIRRANGE ADDRESS

Explanation: Both OUTDATASETADDRESS or VTOCHEADERADDRESS and INREPAIRRANGE were specified, in (parameter) indicating a full track replacement is to be performed. In this case, the "r" of the VTOCHEADERADDRESS or OUTDATASETADDRESS "volsercchhr" must be 0 to indicate the beginning of the track or did not match the first INREPAIRRANGE address.

The six characters volser identifies the volume serial number and the four hexadecimal characters cchh identifies the address of a record.

System Action: REPAIRV MODIFY terminates. Control returns to Access Method Services. The return code is 12.

Programmer Response: Correct the address in OUTDATASETADDRESS or VTOCHEADERADDRESS to ensure a 0 in the record field, and a match to the INREPAIRRANGE first address.

Problem Determination: Table I, items 2, 3, 4, 29.

IDC31226I NOT ALL TRACKS SPECIFIED IN INREPAIRRANGE ARE ALLOCATED TO OUTPUT

{ dsname | VTOCHEADER }

Explanation: Some or all of the tracks specified in INREPAIRRANGE do not exist within the extents allocated for the specified data set (dsname) or (VTOCHEADER). No modification is done.

System Action: REPAIRV MODIFY terminates. Control returns to Access Method Services. The return code is 12.

Programmer Response: Determine the actual extents of the data set. Correct the INREPAIRRANGE parameter to specify only allocated tracks and resubmit.

Problem Determination: Table I, items 2, 3, 4, 13, 25a, 29, 34b, 36, 37a.

IDC31227I RECORD ZERO FOR volsercchh WAS NOT FOUND IN dsname

Explanation: Record zero in the stage error deblocked track (volsercchh) specified in the message could not be found in the specified (repair work file). Either the volume serial number or the range in INREPAIRRANGE is incorrect.

The six characters volser identifies the volume serial number and the four hexadecimal characters cchh identifies the address of a record.

System Action: REPAIRV MODIFY terminates after the entire range. Control returns to Access Method Services. The return code is 12.

Programmer Response: Display the repair work file records. If necessary, recreate the repair work file using REPAIRV COPY. Correct INREPAIRRANGE and resubmit.

Problem Determination: Table I, items 2, 3, 4, 29, 36.

IDC31228I RECORD volsercchhr IS NOT A DEBLOCKED STAGE ERROR RECORD IN dsname

Explanation: The indicated record (volsercchhr) in the input "repair work file" specified in INREPAIRRANGE is not a stage error deblocked record. The input record range contains records other than ones having stage errors which have been corrected by DEBLOCK.

The six characters volser identifies the volume serial number and the four hexadecimal characters cchh identifies the address of a record.

System Action: REPAIRV MODIFY terminates after checking the entire range. Control returns to Access METHOD Services. The return code is 12.

Programmer Response: Correct INREPAIRRANGE and resubmit.

Problem Determination: Table I, items 2, 3, 4, 29, 36.

IDC31229I DEBLOCKED TRACK cchh TOO LARGE FOR dsname

Explanation: The modified records (cchh) from the specified repair work file will not fit within the specified data set's (dsname) track. Either one or more records have been lengthened or added to the original track, or you are moving from a device with longer tracks to one with shorter tracks.

The four hexadecimal characters cchh identify a track address.

System Action: REPAIRV MODIFY terminates. Control returns to Access Method Services. The return code is 12.

Programmer Response: Verify that your input is correct and will fit within the specified track.

Problem Determination: Table I, items 2, 3, 4, 25a, 29, 36.

IDC31230I OFFSET n OUTSIDE KEY OR DATA FIELD

Explanation: The offset (n) specified for the key or data field is longer than the actual key or data field length.

System Action: REPAIRV MODIFY terminates. Control returns to Access Method Services. The return code is 12.

Programmer Response: Correct the OFFSET parameter and resubmit.

Problem Determination: Table I, items 2, 3, 4, 13, 29, 36, 37b.

IDC31231I INPUT RECORD TOO LARGE

{ dsname | VTOCHEADER }

Explanation: A record that was to replace another record in the specified output data set (*dname* or VTOCHEADER) does not fit in the output data set track.

System Action: REPAIRV MODIFY terminates. Control returns to Access Method Services. The return code is 12.

Programmer Response: Ensure that the replacement record will fit in the output data set track.

Problem Determination: Table I, items 2, 3, 4, 25a, 29, 36, 37b.

IDC31232I MODIFIED RECORD TOO LARGE FOR { **dsname** | **VTOCHEADER** }

Explanation: The input string specified in the command causes the record being modified to exceed the track boundaries of the specified data set or repair work file (*dsname* or VTOCHEADER).

System Action: REPAIRV MODIFY terminates. Control returns to Access Method Services. The return code is 12.

Programmer Response: Verify that the input string does not cause the modified record to exceed its track boundary.

Problem Determination: Table I, items 2, 3, 4, 25a, 29, 37b.

IDC31233I INCORRECT parameter cchh FOR dsname

Explanation: A count of characters specified in the parameter of REPAIRV DISPLAY/COPY/MODIFY (parameter) showed the length of cchhr to be other than 5, or hhr (COPY) to be other then 3. Anything other then 5 or 3 is invalid.

System Action: REPAIRV DISPLAY/COPY/MODIFY terminates. Control returns to Access Method Services. The return code is 12.

Programmer Response: Correct parameters and resubmit.

Problem Determination: Table I, items 2, 3, 4, 29.

IDC31234I INVALID PARAMETER cchhr FOR DEVICE

Explanation: The address (cchhr) parameter of REPAIRV DISPLAY/COPY/MODIFY is not valid for the device type specified in the UNIT parameter of the DD statement specified by the ddname parameter of INFILE. Either the "cchh" portion of the parameter is incorrect or the UNIT parameter is incorrect.

The five hexadecimal characters cchhr identifies a record address.

System Action: REPAIRV DISPLAY/COPY/MODIFY terminates. Control returns to Access Method Services. The return code is 12.

Programmer Response: Determine the correct device type of the data set and correct either the cchhr in the parameter or the UNIT parameter in the job control language, as appropriate, and resubmit. Ensure that the cc is a valid cylinder address and hh is a valid head (track) address for the device.

Problem Determination: Table I, items 2, 3, 4, 29.

IDC31235I DATASETRANGE cchhr GT cchhr FOR dsname

Explanation: The parameters (cchhr) GT (cchhr) in the DATASETRANGE parameter of REPAIRV DISPLAY/COPY were incorrectly specified. The first cchhr is greater then the second cchhr specified in this parameter.

The five hexadecimal characters identifies a record address.

System Action: REPAIRV DISPLAY/COPY terminates. Control returns to Access Method Services. The return code is 12.

Programmer Response: Correct DATASETRANGE so that the second cchhr is greater then or equal to the first cchhr and resubmit.

Problem Determination: Table I, items 3, 4, 29.

IDC31237I THE SUM OF THE LENGTH SUBPARAMETERS IS TOO { **LARGE** | **SMALL** }

Explanation: The DEBLOCK function tried to use the key and data lengths provided in the LENGTH subparameters and the total sum of these lengths is either larger or smaller than the actual sum of the original records.

System Action: REPAIRV DEBLOCK terminates. Control returns to Access Method Services. The return code is 12.

Programmer Response: Correct the key and data lengths specified in the LENGTH parameter are correct: display the R'0/R'1 records, correct, and rerun.

Problem Determination: Table I, items 2, 3, 4, 29, 36.

IDC31238I UNABLE TO DEFINE dsname

Explanation: REPAIRV COPY was not able to define the repair work file as specified in the DD statement referred to by OUTFILE. The last message issued prior to this one explains why the attempted definition failed.

System Action: REPAIRV COPY terminates. Control returns to Access Method Services. The return code is 12.

Programmer Response: Correct the condition causing the failure.

Problem Determination: Table I, items 2, 3, 4, 29, 34a.

IDC31239I VTOCHEADERADDRESS cchhr DOES NOT REFER TO THE FIRST TRACK OF VTOC

Explanation: The VTOCHEADERADDRESS parameter (cchhr) of the MODIFY function is not the first track of the VTOC of the output volume.

The five hexadecimal characters cchhr identifies a record address.

System Action: REPAIRV MODIFY terminates, control returns to Access Method Services. The return code is 12.

Programmer Response: Correct the condition causing the failure.

Problem Determination: Table I, items 2, 3, 4, 29, 37b.

IDC31240I OUTDATASETADDRESS cchhr DOES NOT REFER TO A RECORD IN VTOC

Explanation: The (cchhr) value in the OUTDATASETADDRESS parameter of the MODIFY function is not within the range of the VTOC.

The five hexadecimal characters cchhr identifies a record address.

System Action: REPAIRV MODIFY terminates. Control returns to Access Method Services. Return code is 12.

Programmer Response: Correct the condition causing the failure.

Problem Determination: Table I, items 2, 3, 4, 25a, 29, 37b.

IDC31241I NEWCOUNT MUST BE EIGHT BYTES LONG

Explanation: The length specified in the NEWCOUNT parameter is less than 8 bytes long.

System Action: REPAIRV MODIFY terminates. Control returns to Access Method Services. The return code is 12.

Programmer Response: Correct the NEWCOUNT parameter to be exactly 8 bytes long.

Problem Determination: Table I, items 2, 3, 4, 29.

IDC31242I BAD RECORD { PRECEDING / SUBSEQUENT TO } RECORD volsercchhr IN OUTPUT dsname

Explanation: It is necessary to read all records in the track to calculate if the record to be modified would fit in the track; either a previous or subsequent record to the one to be modified (volsercchhr) had an I/O error in (dsname).

The five hexadecimal characters cchhr identifies a record address.

System Action: REPAIRV MODIFY terminates. Control returns to Access Method Services. The return code is 12.

Programmer Response: Rerun the job; the error should correct itself, that is, it either goes away or becomes a destage error.

Problem Determination: Table I, items 2, 3, 4, 29, 37b.

IDC31243I THE COUNT OF RECORD ZERO cchhr CANNOT BE MODIFIED

Explanation: The user tried to modify the count, or increase the length of the data field or insert a key in a record zero (cchhr), which is not permissible.

System Action: REPAIRV MODIFY terminates. Control returns to Access Method Services. The return code is 12.

Programmer Response: Ensure that you really want to modify record zero; if you are going to modify record zero, you are allowed only to modify the data field without increasing its length. Resubmit.

Problem Determination: Table I, items 2, 3, 4, 29, 37b.

IDC31244I UNABLE TO DEBLOCK cchh

Explanation: The record pair (R'0 or R'1) that results from the stage error could not be deblocked because the R'1 record contained a dummy data field length of 1. This condition is caused by the loss of the track descriptor during staging.

System Action: The command terminates. The return code is 12.

Programmer Response: Verify that you specified the correct address in the command. The R'1 record can be replaced in the repair work file or in the original data set with the correct records from another source by using the REPAIRV MODIFY command. Alternatively, the R'1 record can be restored by using the REPAIRV MODIFY command.

Problem Determination: Table I, items 2, 3, 4, 29, and 36.

IDC31245I AN UNCORRECTABLE I/O ERROR WAS ENCOUNTERED WHILE MODIFYING cchh OF dsname

Explanation: I/O error was encountered while writing to the specified data set.

System Action: REPAIRV MODIFY processing terminates. Control returns to Access Method Services. The return code is 12.

Programmer Response: The results are unpredictable. Run REPAIRV DISPLAY command to display the track on which the error occurred to determine how much of modify process completed. Take appropriate action to reconstruct data.

Problem Determination: Table I, items 2, 3, 4, 18.

IDC31246I OBTAIN FAILED FOR dsname

Explanation: OBTAIN SVC failed for the specified data set name.

System Action: REPAIRV terminates. Control returns to Access Methods Services. The return code is 12.

Programmer Response: If processing a VSAM data set, ensure that unit and volume information are not present on the DD card for the specified data set name. Correct the condition causing the failure and resubmit.

Problem Determination: Table I, items 2, 3, 4, 25a, and 29.

IDC31247I TRACK DOES NOT BEGIN WITH RECORD 1

Explanation: The data portion of record pair R'0, which shows the original first record number, shows that record number to be other than record 1.

System Action: The command terminates. The return code is 12.

Programmer Response: Issue REPAIRV DISPLAY to display the blocked stage error records R'0 and R'1. If the records appear to be valid, usable records that you want to deblock, issue REPAIRV MODIFY to change the R'0 data portion of record 0, mapping the original record number of record 1 to the value 1. Then, after issuing REPAIRV DISPLAY to verify your change, issue REPAIRV DEBLOCK to deblock your blocked stage error records.

Problem Determination: Table I, items 2, 3, 4, 29, and 36.

IDC31251I CARTRIDGE NOT EJECTED

Explanation: An unsuccessful attempt was made to eject a cartridge with the DIRECTEJECT option of the MODIFYC command. The location of the cartridge is not known.

System Action: The MODIFYC command terminates. The return code is 12.

Programmer Response: Go to Problem Determination.

Problem Determination: Table I, items, 1, 2, 3, 4, 13, 18b, and 30.

IDC31265I A SECURE MOUNTED VOLUME CANNOT BE COPIED

Explanation: A secure volume cannot be copied while it is mounted. The COPYV command checks the inventory data set to see if the DASDERASE flag is on before attempting to copy the volume.

System Action: The command terminates.

Programmer Response: Rerun the COPYV command specifying NOT MOUNTED.

Problem Determination: Table I, items 3, 4, 13, 35a, and 35c.

IDC31366I INPUT DATA SET IS NOT { AN ICFCATALOG / A VVDS }

Explanation: The data set to be diagnosed was not an ICF catalog or a VVDS as the type indicated in the DIAGNOSE command syntax. If the data set to be scanned is an ICF catalog, the syntax should be 'DIAGNOSE ICFCATALOG'; if the data set is a VVDS, the syntax should be 'DIAGNOSE VVDS'.

If the data set to be scanned is an ICF catalog and the syntax of the statement is correct, the format-1 DSCB (data set control block) for the catalog may be invalid.

System Action: The DIAGNOSE processing terminates.

Programmer Response: If the syntax was invalid, correct the statement, and resubmit the job.

If the syntax was valid, examine the format-1 DSCB for the ICF catalog to make sure that bits DS1ORGAM and DS1OPTBC are set to one. Correct the format-1 DSCB, and resubmit the job.

Problem Determination: Table I, items 1, 3, 4, 13, and 25a.

IDC31368I CATALOG MAY NOT BE SPECIFIED WITH ICFCATALOG

Explanation: The CATALOG parameter may not be coded as an include or exclude subparameter for ICFCATALOG. CATALOG qualification is only intended for diagnosis of a VVDS.

System Action: DIAGNOSE considers this an error condition; processing terminated.

Programmer Response: Correct the DIAGNOSE statement and rerun the job. If DIAGNOSE is being run against an ICFCATALOG, replace the catalog parameter with either ENTRIES or LEVEL. If not analyzing a catalog but a VVDS, change the ICFCATALOG parameter to VVDS.

Problem Determination: Table I, items 1, 3, 4, 13, and 25a.

IDC31369I

{ MAXIMUM ERROR LIMIT REACHED / I/O ERROR ON INPUT DATA SET } PROCESSING TRUNCATED.

Explanation: The number of errors encountered in the input or compared data sets has reached the error limit value. This message may also result from I/O errors, if so, message IDC3351I, which precedes IDC31369I, may be used to determine the cause of the I/O error. In either case, this may be indicative of a badly damaged input data set.

System Action: DIAGNOSE considers this an error condition; processing terminated.

Programmer Response: If the ERRORLIMIT value is too low, set a different value and rerun the job. ERRORLIMIT has a default value, determine the default value (you may wish to allow DIAGNOSE to detect more errors than the default value) and rerun the job. If the problem is an I/O error, the data set is too damaged for DIAGNOSE to analyze. Consider initiating BCS or VVDS recovery procedures.

Problem Determination: Table I, items 1, 3, 4, 13, and 25a.

IDC31370I UNABLE TO OBTAIN INFORMATION ON {ds name/dd name}

Explanation: An attempt to extract allocation information for the named data or dd statement has failed. If the data set in question is the input data set, DIAGNOSE cannot continue. If the data set in question is a compare data set then compare processing cannot occur.

System Action: DIAGNOSE considers this an error condition; processing may terminate or continue, depending on which data set incurred the error.

Programmer Response: Check the spelling of the named data set or dd statement. Correct and then rerun the job. If the spelling is not in error, contact your IBM service representative.

Problem Determination: Table I, items 1, 3, 4, 13, and 25a.

IDC31400I UNABLE TO OBTAIN CATALOG NAME

Explanation: CNVTCAT did not receive either the source or target catalog name. The source catalog is identified via the INFILE or INDATASET parameter and the target catalog via the OUTFILE, OUTDATASET or CATALOG parameter.

System Action: The command is terminated.

Programmer Response: Correct the specification of the catalog and rerun the job.

Problem Determination: Table I, items 1, 3, 4, and 13.

IDC31401I UNABLE TO GET NEXT BASE OBJECT

Explanation: Catalog management could not get the next base object and the catalog end of file has not been reached.

Programmer Response: Restore the catalog volume, and all volumes owned by the catalog, correct the problem identified in the associated message and rerun the job.

Problem Determination: Table I, items 1, 3, 4, 13, and 34.

IDC31403I UNABLE TO DETERMINE CATALOG TYPE FOR dsn

Explanation: A catalog management LOCATE failed and the catalog type could not be determined.

System Action: The command is terminated.

Programmer Response: Correct the problem identified in the associated message and rerun the job.

Problem Determination: Table I, items 1, 3, 4, 13, and 34.

IDC31405I INVALID COMBINATION OF CATALOGS FOR CONVERT

Explanation: Prior to converting an OS CVOL or a VSAM catalog it was determined that the source and target object types constitute an invalid conversion combination. The source and target object types were such that the conversion could not be allowed. The following are valid source and target combinations:

Source	Target
OS CVOL	VSAM
OS CVOL	ICF
VSAM	ICF

System Action: Processing of this command is terminated.

Programmer Response: Correct the source and/or target catalog specification and rerun the job.

Problem Determination: Table I, items 1, 3, 4, and 13.

IDC31406I CONVERSION OF THE SYSTEM MASTER CATALOG NOT ALLOWED

Explanation: During catalog validation, it was found that the source catalog specified by the user is the system master catalog. All entries are deleted from the source catalog during conversion and thus conversion of the master catalog cannot be allowed.

System Action: Processing of this command is terminated.

Programmer Response: Verify the source catalog name specification. If in error, correct and rerun the job. If correct, the master catalog must be made a user catalog before it may be converted.

Problem Determination: Table I, items 1, 3, 4, and 13.

IDC31440I SPACE PARAMETER IS INVALID FOR AN ICF CATALOG

Explanation: The catalog selected by LISTCAT to be listed was an ICF catalog. ICF catalogs do not contain space entries. This message is issued if a single entry type parameter of 'SPACE' is specified or if multiple types have been specified and one of them is 'SPACE'. This message is also issued if the ENTRIES parameter is specified for a space entry and the CATALOG parameter is not specified and all catalogs searched are ICF catalogs.

System Action: The command is terminated.

Programmer Response: Check if the correct catalog has been specified to be listed. Check either the LISTCAT CATALOG parameter or the STEPCAT JOBCAT DD parameter. If none are specified, then the master catalog must be an ICF catalog.

Problem Determination: Table I, items 4, and 29.

IDC31461I REPRO MERGECAT FROM MASTER CATALOG NOT ALLOWED

Explanation: During REPRO catalog validation, it was found that the source catalog specified by the user is the system master catalog. All objects that have been successfully merged are deleted from the source catalog; therefore, merging from the master catalog cannot be allowed.

System Action: Processing of this command is terminated.

Programmer Response: Verify the source catalog name specification. If in error, correct and rerun the job. If correct, the master catalog must be made a user catalog before it may be merged.

Problem Determination: Table I, items 1, 3, 4, and 29.

IDC31502I SPECIFIED CCHH IS NOT IN BOUNDS OF THE 3380

Explanation: The cchh value of LOWCCHH or HIGHCCHH is not valid for a 3380 device.

System Action: The system does not process the command.

Programmer Response: Change the value of LOWCCHH or HIGHCCHH. Issue the command again.

Problem Determination: None.

IDC31503I UNABLE TO OBTAIN DEVICE INFORMATION

Explanation: A program issued the DEVTYP (device type) macro instruction to obtain cchh boundaries. The program could not obtain the cchh boundaries probably because of a system error.

System Action: The system does not process the command.

Programmer Response: The system issues this message probably because of a system error. Add an AMSDUMP DD statement to the JCL and issue the DEVTYP macro instruction again.

Problem Determination: None.

IDC31504I NOT ENOUGH ROOM IN THE CACHE TO HOLD THE SPECIFIED DATA

Explanation: The data that the LOWCCHH and HIGHCCHH parameters specify to bind occupies more space than is available in the cache space of the 3880 device.

System Action: The system terminates the command.

Programmer Response: Issue the LISTDATA command with the STATUS parameter to determine the amount of available cache space. Also if the amount of offline space available is excessive, call your IBM representative. Change the values of the LOWCCHH and HIGHCCHH parameters to fit the available cache space. Issue the BIND command again.

Problem Determination: None.

IDC31550I UNABLE TO LOCATE ANY 3380/3350 SUBSYSTEM DEVICES ONLINE

Explanation: In response to a LISTDATA command, the system could find no online subsystem devices for the 3380/3350. The system also displays this message if an AMS Cache-DASD LISTDATA command encounters a return code from its IOSMAP call that indicates there are no paths online to the subsystem.

System Action: The system terminates this processing and continues with other processing.

Programmer Response: Make sure that the subsystem devices (volumes) are online. Issue the LISTDATA command again.

Problem Determination: None.

IDC31601I VOLUME volser NOT ON 3350/3380 SUBSYSTEM

Explanation: The volume that the FILE or VOLUME parameter specifies is not on a 3350 or 3380 subsystem.

System Action: The system does not process the command with the FILE or VOLUME parameter.

Programmer Response: Probable user error or the operator varied offline the device with the volume you are seeking. Correct the DD statement associated with the FILE parameter or correct the volser on the VOLUME parameter. Make sure that the device you want is online and issue the command again.

Problem Determination: None.

IDC31602I LOAD REAL ADDRESS FAILED ON I/O OPERATION

Explanation: The load real address assembler instruction failed during an I/O operation.

System Action: The system could not process the instruction due to a probable system error.

Programmer Response: Add an AMSDUMP DD statement to the JCL. Retry the instruction.

Problem Determination: Table I, items 1, 5, 16, or 29.

IDC31604I UNITTYPE SPECIFIED IS NOT A VALID SUBSYSTEM UNITTYPE

Explanation: If you run the LISTDATA command, 3350 and 3380 are the only valid unit types. The system also displays this message if you run the BINDDATA command with an incorrect subsystem unit type. There is only one valid unit type for BINDDATA: 3380 model 13.

System Action: The system terminates processing.

Programmer Response: Respecify the unit type in the UNIT parameter to meet the requirements for LISTDATA and BINDDATA. Then rerun the job.

Problem Determination: None.

Supervisor Messages (IEA)

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 IEAANIP at IPL time). 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.
Associated and Referenced Publications	*MVS/370 System Programming Library: Debugging Handbook, Volume 1 of 3*, GC28-0708 *MVS/370 System Programming Library: Debugging Handbook, Volume 2 of 3*, GC28-0709 *MVS/370 System Programming Library: Debugging Handbook, Volume 3 of 3*, GC28-0710 *OS/VS2 MVS System Programming Library: Initialization and Tuning Guide*, GC28-0681 *MVS System Initialization Logic*, LY28-1050 *OS/VS2 Data Areas (JES2)*, LYB8-1051 *OS/VS2 Data Areas (JES3)*, LYB8-1055 *TCAM Programmer's Guide*, GC30-2054 *Device Support Facilities Users Guide and Reference*, GC35-0033

IEA000A ddd,CC=3/NO PATHS AVAILABLE
IEA000A ddd,INT REQ,cm,stat,sensbbbbbb,,ser,jjj
[READY THE DRIVE|
RELOAD CARTRIDGE|
UNLOAD CARTRIDGE]
IEA000I ddd,INT REQ,cm,stat,sensbbbbbb,,,jjj
IEA000A ddd,INT REQ,cm,stat - MESSAGE EXIT UNAVAILABLE - [exitname]

Explanation: For the first format of the message, the input/output supervisor received a 'not operational' indication on the last available path to a device. For the second and third format of the message, the I/O supervisor detected a device that requires intervention. For the 3480 Magnetic Tape Subsystem, the second format may be followed by a second line to tell the operator to READY THE DRIVE, RELOAD CARTRIDGE, or UNLOAD CARTRIDGE. For the fourth format of the message, the message writer was unable to locate the routine that builds the device dependent portions of the above two messages. If the name of the routine is available, it is included in the message as exitname. In the message text in hexadecimal, the fields are:

ddd
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.

The format of the sense information for each type of device is given in *MVS/370 System Programming Library: Debugging Handbook*.

bbbbbb

Next 3 sense bytes for the error condition. This field appears only for devices that give more than 2 bytes of sense information. For the 3340, 24 bytes of sense will be given, and for the 3480, seven are given.

ser

Serial number of the volume on which intervention is required. This field appears only for magnetic tapes, direct access devices or 3540s.

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, 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.

For the second 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.
- If a tape drive has been varied online or an offline device specified, message IGF502I is not issued until you mount a tape onto the device that was just varied online.

For the third format of the message, the I/O supervisor detected a 3851 device has an intervention required situation, but the device is capable of handling it. No operator intervention is required.

Problem Determination: Table I, items 2, 30.

IEA000I ddd,cs,err,cm,stat,sens, {dcbctfd|opxxterm|cylntrck} ,[ser] ,jjj [,hh.mm.ss]

IEA000I ddd,cs,err,cm,stat - MESSAGE EXIT UNAVAILABLE - [exitname]

Explanation: For the first format of the message, an uncorrectable input/output error was detected by the I/O supervisor, the basic telecommunication access method (BTAM), or the telecommunication access method (TCAM) routine. In systems with the graphics access method (GAM), unit checks and conditions that require operator intervention indicate devices that do not exist or that were included at system generation time but not attached to the system. Note: For some devices, two lines are required to contain the message.

For the second format of the message, the message writer was unable to locate the routine that builds the device dependent portion of the above message. If the name of the routine is available, it is included in the message as exitname.

Note: Two consecutive commas or a field containing blanks or asterisks in the message text indicates that a field could not be determined or is contained on the next or previous line of the message. If the sense data to be inserted in the sens field of the message text exceeds 6 bytes, the sens field and the optional field that follows (dcbctfd or opxxterm or cylntrck) do not appear on the first line. Consecutive commas appear instead. The system then issues a second line that includes the unit address of the device, the sense data, and, optionally, dcbctfd, opxxterm, or cylntrck. In other words, if the sense data exceeds six bytes, the message has this format:

IEA000I ddd,err,cm,stat,,,[ser],jjj[,hh.mm.ss]

IEA000I ddd,,,sens {,dcbctfd|,opxxterm|,cylntrck}

Explanation: Because two separate WTO instructions issue the two messages shown above, it is possible that one or more unrelated messages could appear between the first message and the second message.

In the message text, the fields are:

ddd

Unit address of the device or line address of the telecommunication device, in hexadecimal. If the error is a channel program check (CPC) or channel protection check (PRC), this field will either be zeros or a device address, depending on the device dependant error recovery procedure (ERP) routine in control. The error was not caused by a hardware error on the device, but was caused by the program issuing the I/O.

cs

The channel set ID, as recorded in the error recovery procedure work area (EWA). If the channel set ID is not available, an asterisk (*) appears in this field.

err

Description of the error based on status and sense information:

ASE - drive assigned elsewhere

BOC - bus out check.

BOT - a BACKSPACE BLOCK or READ BACKWARDS command was issued while the tape was at load point.

CCC - channel control check.

CDC - channel data check.

CEM - CE message

CHC - chaining check.

CMD - command reject.

CPC - channel program check.

CTRL BLK ERR - the tape ERP is using an input/output block (IOB) in which the CSW command address is zero instead of an expected address.

DCC - data converter check (for magnetic tapes only).

DCK - data check.

DC0 - a write data check occurred for a previous WRITE command in the current channel program.

DC1 - a write data check occurred for a WRITE command in a previously completed channel program.

DSE FAILED - a data security erase failure occurred. An IOB intercept condition has been detected and the error is flagged as permanent.

EOT - physical end of tape

EQC - equipment check.

ERROR ON ERG - 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.

FPR - a WRITE command was issued to a tape that is write file protected.

ICC - interface control check.

IOE - input/output error (for errors other than those described above).

IPL - IPL request (for 370x only).

LDA - lost data (for telecommunications only.)

LDC - load display during loading.

MAM - missing address marker (for direct access only.)

NCA - tape not capable. The density capabilities of the tape unit, tape control unit, and the mounted tape are not compatible. This can occur if:

- A tape volume is mounted on an incompatible tape unit.

  For example, an 800 BPI tape is mounted on a 1600 BPI only tape unit.

- An attempt is made to write from the load point in a density that is not compatible with the tape unit.

- A 1600 or 6250 tape unit is not able to read the ID burst in the load point area of the tape.

NIN - not initialized (For 3791 only)

NOISE-ERP - error recovery procedures were in progress when a short record-data check condition was encountered. This situation should not occur, and is an 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.

NOISE-USER - 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.

NPA - the microcodes for the control unit and for the drive are not at the same EC level.

NRF - no record found (for direct access only.)

OVR - overrun (for direct access, magnetic tapes, and some unit record devices. For unit record devices, the sense bit definitions for the specific device type should be referenced to determine the error condition.)

POS - the control unit ERP failed.

PRC - channel protection check.

RST - the I/O Restart routine was entered by Alternate CPU Recovery, the Channel Check Handler (CCH) or the Missing Interrupt Handler (MIH).

SAF - Staging Adapter failure. The Staging Adapter controlling the DASD address specified has lost communications with the mass storage control.

SEN - a unit check occurred during a sense operation. (When this condition is present, the fields cm, stat, sens, and binxcylntrck do not appear in the message text.)

SEQ - BLKID sequence error.

SKC - seek check (for direct access only.)

SNS - a unit check occurred during a sense operation. For this condition, the sens field does not appear in the message.

SUR - subsystem reset.

SUU - subsystem unit unusable or degraded.

TEN - tape tension was lost.

TLC - tape length check.

TOT - time out (for telecommunications only.)

UEX - unit exception.

UNC - unusual command (for 2540 card reader and punch only).

UNEX INTRPT - this is a SECURITY INTERRUPT. During the time a tape drive was NOT READY, the tape might have been replaced or moved, resulting in a problem with positioning. The tape drive is now in READY status, but data might be lost or altered. Therefore, proceed with caution in accepting the results of the operation and consider canceling the job if the results must be perfect.

UNEX LOAD PT - 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.

UNL - the operator unloaded the volume.

UNX - an unexpected interrupt occurred

VOI - a tape void was detected.

WRI - write inhibit switch should be checked.

Note: MSS users should check WRI under "possible values of err and appropriate responses" in the *Operator Response* part of this message.

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

The first byte, in hexadecimal, describes a unit check type error condition (for telecommunication devices). The second byte, in hexadecimal, contains sense information resulting from the execution of a diagnostic write/read or read/skip command (from TCAM) which ended with a unit check status (2701 data adapter unit). For other devices, these same two bytes will appear, in hexadecimal, if a unit check condition is indicated in the stat field. For devices (other than tape units) that give more than two bytes of sense information, this field will also contain the remaining sense bytes, in hexadecimal. For devices which give more than 6 sense bytes, this field will be contained on the second line of the message. For DASD devices, this field will contain the 8 sense bytes for program errors or 24 sense bytes for equipment and data checks. For the 3340 Direct Access Storage Facility, this field will contain 24 sense bytes for seek checks. For the 3480 Magnetic Tape Subsystem, this field contains 32 sense bytes; the field replaceable unit (FRU) sense bytes appear in parentheses.

Note: The message on the system console reflects the sense-byte information from the last entry for direct access devices; the sense-byte information located in the SYS1.LOGREC data reflects the data from the initial error condition.

dcbctfd

Record count, in hexadecimal, not including label records. This field appears only for magnetic tape and indicates the count of the record preceding the error record. For the 3480, the field appears as **.

opxxterm

TP operation code, in hexadecimal, describing the type of channel command word (CCW) being executed when the error occurred. xx is not used, but is followed by the terminal identification characters, in hexadecimal. It may be either two bytes or one byte, depending on the terminal type. If it is one byte, it is left justified. If a dial line is being used with TCAM, the last four digits of the dial number are provided.

cylntrck

Address, in hexadecimal, of the cylinder (cyln), 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 certain disk and drum direct access device errors.

ser

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

jjj

Job name. If the error is a channel program check (CPC) or channel protection check (PRC), this field will indicate the program in error.

hh.mm.ss

Time that the message was received in hours, minutes, and seconds.

Operator Response: For all values of err except NCA and BOT this is probably a hardware error. For magnetic tape devices, proceed with caution in unconditionally accepting the results of the operation. Check that tapes being used by this job have not been replaced or removed. Each message should be considered as a potential warning of a marginal condition.

For other than magnetic tape devices, note that some abnormal error condition occurred. Depending on the severity of the error (check status and sense information) and depending on the installation requirements, take the appropriate action.

Possible values of err and appropriate responses are as follows:

- CMD REJECT - Correct and retry. For 1419/1275, if the command is a X'FF', this is a probable hardware failure. The disengage command failed. Contact hardware support personnel.
- OVR:

  BOC - bus out check.

  EQC - equipment check.

  ICC - interface control check.

  These are permanent hardware faults. Customer engineer action is required.

- DCK - 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 utility cannot complete, the GET ALT function in the IBCDASDI or IEHDASDR utility should be invoked. This will assign the space but will not perform recovery/replace. If no alternate spares are available, contact hardware support personnel.

- WRI - 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 MSS users, there is no physical write inhibit switch; an attempt has been made to write on a virtual volume that was specified READ ONLY on the CREATEV command.

- SAF - Staging Adapter failure. Use your path chart to determine the SSID of the Staging Adapter involved or use 8nn for the SSID, where nn is byte 25 of the MSS sense data in this message. See 'Unusable Staging Adapter Recovery Procedure (SSID = 8nn)' in Part 2 of *Mass Storage System (MSS) Messages* for guidance in Staging Adapter recovery.

- NCA - Verify that the correct tape is mounted and that the tape volume characteristics match the features of the tape unit and the control unit on which it is being used. If the correct tape is mounted and the volume characteristics match the tape unit and tape control unit features, a hardware error has probably occurred. Contact IBM for hardware support.

- BOT - Check bytes 4-6 of the sense data. If they are nonzero, this is probably a hardware error. If they are zero, there is either a programming error or no error.

Problem Determination: Table I, items 2, 30.

IEA000I ddd,err.....hh.mm.ss

Explanation: The processor's error recovery procedures detected an error that requires either a CEM (CE message), or an SUU (subsystem unit unusable) message. An equipment check might occur with either CEM or SUU. Because the system WTO routine can print only one message, the error recovery procedure prints the CEM or SUU message and the system WTO routine prints the remaining message with full sense data. The error recovery procedure continues recovery action based on the error condition.

In the message text, the fields are:

ddd
Unit address of the mass storage control.

err
Description of the error. The values are as follows:

- CEM -- CE message. The Mass Storage Facility has detected an error important to the service representative.

- SUU -- Subsystem unit unusable. The Mass Storage Facility has marked one of its units as unusable because of an error condition. The SSID of that unit is in the second half of sense byte 1 and all of byte 2 in the accompanying message. The system continues processing; notify your service representative.

hh.mm.ss
Time that the message was received in hours, minutes, and seconds.

System Action: The error recovery procedure will continue the recovery action based on the error condition.

Operator Response: Probable hardware error. Each message should be considered as a potential warning of a marginal condition. Depending on the installation requirements, take appropriate action.

Problem Determination: Table I, items 2, 30.

IEA000I 'SYS SWITCH FROM xxx TO zzz STARTED, xxx OFFLINE'

Explanation: The processor's error recovery procedures detected a permanent I/O error and started a switch from the primary mass storage control to the alternate mass storage control. The mass storage control that failed is set offline. In the message, xxx is the address of the mass storage control that failed, which is offline; zzz is the address of the mass storage control being switched to, which is now the primary mass storage control.

System Action: The error recovery procedure continues the switch to the alternate mass storage control.

Operator Action: Probable hardware error. Depending on the installation requirements, notify the system programmer to take the appropriate action.

This message indicates that a switch has started. Watch the console for another switching message that indicates the result of the attempted switch.

Problem Determination: Table I, items 2, 30.

IEA000I 'MSC SWITCH FROM xxx TO zzz STARTED, xxx OFFLINE'

Explanation: The processor's error recovery procedures detected that the primary mass storage control lost the lower connection, and has started a switch from the primary to the alternate mass storage control. The lower connection was lost for one of the following reasons:

- This or some other processing unit issued a VARY OFF command to the primary mass storage control.

- Some other processing unit is doing a system switch because of a permanent I/O error.

In the message, xxx is the address of the mass storage control being switched from, which is offline; zzz is the address of the mass storage control being switched to, which is now the primary mass storage control.

System Action: The error recovery procedure continues processing the switch to the alternate mass storage control.

Operator Response: For the first case, no action is required. The second case is a possible hardware error. Depending upon your installation's requirements, ask the system programmer to take the appropriate action.

This message indicates that a switch has started. Watch the console for another switching message that indicates the result of the attempted switch.

Problem Determination: Table I, items 2, 30.

IEA000I 'SYS SWITCH FROM xxx TO zzz ENDED'

Explanation: The system switch function completed. xxx is the address of the mass storage control switched from, which is offline. zzz is the address of the mass storage control switched to, which is now the primary mass storage control.

System Action: The error recovery procedure reissues the failing channel command words that initiated the switch.

Operator Action: None.

Programmer Response: The switch completed successfully. Determine whether the switch was operator or system initiated. (The operator of the primary processor should be able to answer this question.) If the switch was operator initiated, vary the 'from' mass storage control online. If the switch was system initiated, the MSS job will continue under control of the remaining mass storage control, but you should get the SDA reports and call your service representative to analyze the SDA reports, to determine the reason for the switch, and to take repair action. When the repair is complete, initialize the repaired mass storage control, using the IML procedure, and vary it online.

Problem Determination: Table I, items 2, 30.

IEA000I 'MSC SWITCH FROM xxx TO zzz ENDED'

Explanation: The mass storage control switch function completed. The mass storage control was switched because either:

- This or some other processor issued a VARY OFF command to the primary mass storage control.
- A permanent I/O error caused some other processor to do a system switch.

In the message, xxx is the address of the mass storage control switched from, which is offline; zzz is the address of the mass storage control switched to, which is now the primary mass storage control.

System Action: The error recovery procedure reissues the failing channel command words that initiated the switch.

Operator Response: In the first case, the mass storage control switched from is now offline. To make it capable of being switched to, either by an operator VARY command or a system switch, you must vary it online. In the second case, there is no response.

Programmer Response: The switch completed successfully. Determine whether the switch was initiated by the operator or by the system. (The operator of the primary processor should be able to answer this question.) If the switch was operator-initiated, vary the from-mass storage control online. If the switch was system-initiated, MSS jobs will continue under control of the remaining mass storage control. You should get the SDA reports and call your service representative to analyze them to determine the reason for the switch, and to take repair action. When repair is complete, initialize the repaired mass storage control, using the IML procedure, and vary it online.

Problem Determination: Table I, items 2, 30.

IEA000I 'SYS SWITCH FROM xxx TO zzz FAILED, zzz OFFLINE'

Explanation: The mass storage control being switched to had a permanent I/O error, and is set offline. There is no usable mass storage control. In the message, xxx is the address of the failing mass storage control switched from, which is offline; zzz is the address of the mass storage control being switched to, which is the primary mass storage control, but it is also offline.

System Action: This request and all future I/O requests to this device will be terminated in error by the Mass Storage System Communicator program.

Programmer Response: Take the following recovery actions:

1. The switch failed because of a permanent error detected on the 'to' mass storage control. At this point, neither mass storage control is operational and MSS job cancellation begins. Do the following:
   a. Hold all MSS job queues or enter the QUIESCE command from the console.
   b. Ensure that the channel interface switches for both mass storage controls are enabled at the Mass Storage Facility operator's panel. If the 'to' mass storage control was disabled and should not have been, vary it online and release any MSS job queues that were held. Go to step 13 to recover any volumes not demounted because of canceled MSS jobs.
   c. If for some reason the 'to' mass storage control must remain offline, ensure that its channel interfaces are disabled and that it is offline to other attached hosts. (It is already offline to the host that originated the message.) Go to step 14.
   d. If the Power On and the Power Check indicators are not on, proceed to step 2. If no problem is apparent or the Power Check indicator is on, call your service representative and go to step 3.
2. Press the Power On button on the Mass Storage Facility operator's panel. If power comes on successfully (the Power On indicator is on), wait approximately ten minutes for the IML process to complete, then go to step 9 to determine what the missing device end status is. If power fails to come on, call your service representative and go to step 10.
3. If this is a uniprocessor configuration, proceed to step 4. If this is a multiprocessor configuration, you must determine the mass storage control status for all attached processors. To do this, analyze the console messages of each processor to see if the switch failed on any of them. It is possible that a processor has not addressed the mass storage control since the switch took place. If such a situation exists, go to step 5. If the switch failed on more than one of the attached processors, suspect a problem with the 'to' mass storage control and go to step 7. Otherwise, suspect a mass storage control interface or a processor channel problem and go to step 8.

4. You will now initiate a switch back to the 'from' mass storage control, assuming that its error was temporary and it can now be used. Vary both mass storage controls online. Make sure the IML of the 'from' mass storage control is complete (allow about three minutes from the time the switch failure message occurred). Vary offline the 'to' mass storage control from the primary processor and watch the switching messages. If the switch fails again, both mass storage controls are inoperable and all MSS jobs are to be either canceled or left in hold status until a mass storage control repair is made. Jobs still able to access data without mass storage control assistance can continue if desired. When the mass storage control repair is complete, go to step 13.

5. On those processors that have not initiated switching, display unit status for both mass storage controls. If the mass storage control being switched from is shown as busy, proceed to step 6. Otherwise, analyze the online/offline status of each mass storage control and vary online both mass storage controls if necessary. Then vary the 'from' mass storage control offline and analyze any further messages.

6. Cancel the active jobs running against the mass storage control. If no switch message occurs, display the status of the mass storage controls again. If the 'from' mass storage control is not busy but online, vary that mass storage control offline and analyze any further messages. If the 'from' mass storage control is still busy, IPL that processor again and restart the jobs.

   In either case, if the primary processor is affected, a new primary processor might have to be assigned so that the other processors can continue processing. When the IBM Customer Engineer completes the mass storage control repair, go to step 15.

7. Vary both mass storage controls online for each attached processor. Wait for the IML to complete (about three minutes from the time the switch failure message occurred). From the primary processor, vary the 'to' mass storage control offline to force a switch back to the 'from' mass storage control. If no switch started message appears within a minute, or the switch is not successful, both mass storage controls are inoperable. Cancel or hold all MSS jobs. When the IBM Customer Engineer completes the mass storage control repairs, go to step 15.

8. If other control units on the same channel interface are operating, there is something wrong with this mass storage control interface. In any case, vary the 'to' mass storage control offline and disable it at the Mass Storage Facility operator's panel. Two options are available: (1) hold all MSS jobs for that processor until the mass storage control becomes available, or (2) release all held MSS jobs and let them run to cancellation or completion. If this processor was the primary one, select another processor and issue the ASSIGN command from that processor. When the IBM Customer Engineer completes the mass storage control repair, go to step 15.

9. On all processors attached to the mass storage control, display the status of both mass storage controls. If any mass storage control UCB is busy, follow step 6 for that processor. Start each non-busy processor as follows:

   a. Vary all operational mass storage controls online.

   b. Ensure that all operational mass storage control interface switches are enabled at the Mass Storage Facility operator's panel. Choose a primary processor and, from that processor, issue an ASSIGN command. The ASSIGN command can initiate a successful successful switch. Release all held jobs in the primary processor.

   c. Go to step 13.

10. If this is a B model, proceed to step 11. If the MSS has two A models, check the 'from' mass storage control to ensure it is powered on and its interface switches are enabled. If so, switch back to the 'from' mass storage control assuming that it was a temporary failure. Use the following procedure:

    a. Disable all the interfaces on the 'to' mass storage control.

    b. Vary both mass storage controls online from all attached processors.

    c. Then vary offline the 'to' mass storage control from the primary processor.

       If switching fails, proceed to step 11. Remember, even if the switching is successful, the cartridge store in the powered-off Mass Storage Facility is unusable. You might want to vary it offline. Release all held jobs in all processors. End of procedure.

11. Either hold all MSS jobs or release all held jobs and let them run to completion or termination. When the IBM Customer Engineer completes the mass storage control repairs, go to step 15.

12. If the processors were waiting for return of the mass storage control to either a restart or a continue processing condition, go back to step 9. Otherwise, vary online this mass storage control for all processors and ensure that its channel interfaces are enabled. Also, if this mass storage control was restored because of a power failure, vary the cartridge store online if this is an installation with two A models. End of procedure.

13. It may be necessary or desirable to demount certain volumes prior to resuming the MSS operations. To do so, display DASD online status for all Staging Adapter addresses from all processors involved. Staging Adapter virtual unit addresses having volumes mounted and not busy are candidates for a demount. Using the display information, locate those volumes to be demounted. Issue the UNLOAD CCU or VARY OFF CCU command to demount the volume. The UNLOAD command is used when the CCU is to remain online. Like the VARY OFF command, it is not processed until the unit becomes deallocated. Unlike the VARY OFF command, the UNLOAD command is not processed until a job starts. If this is a problem, start a

dummy job (invalid jobname). Each command issues a demount order to the mass storage control. The UNLOAD or VARY OFF is not ended until all necessary destaging has been done. Release all held jobs in any remaining processors. Again, a successful switch can take place. Go to step 16.

14. On all attached processors, vary the 'from' mass storage control online. Release all held queues or restart the jobs. If switching fails, or, if in a short period of time another switch is initiated, call your service representative and go back to step 11.

15. IML the repaired mass storage control. When the IML is complete, enable all mass storage control interfaces and go back to step 12.

16. You can now restart the cancelled jobs. Analyze any further error messages. End of procedure.

Operator Action: Probable hardware error. Depending on the installation requirements, take appropriate action.

Problem Determination: Table I, items 2, 30.

IEA000I 'MSC SWITCH FROM xxx TO zzz FAILED, zzz OFFLINE'

Explanation: The mass storage control being switched to had a permanent I/O error, and is set offline. There is no usable mass storage control. In the message, xxx is the address of the failing mass storage control switched from, which is offline; zzz is the address of the mass storage control being switched to, which is the primary mass storage control, but it is also offline.

System Action: This request and all future I/O requests to this device will be terminated in error by the Mass Storage System Communicator program.

Programmer Response: Take one of the recovery actions described for the preceding IEA000I message.

Operator Action: Probable hardware error. Depending on the installation requirements, take appropriate action.

Problem Determination: Table I, items 2, 30.

IEA000I 'SYS SWITCH FROM xxx TO zzz, zzz NOT AVAIL'

Explanation: The processor's error recovery procedures detected a permanent I/O error that would normally cause a system switch, but an alternate mass storage control does not exist or is offline. There is no usable mass storage control. In the message, xxx is the address of the failing mass storage control, which is the primary mass storage control, but it is offline; zzz is the address of the alternate mass storage control, which is offline if one exists. If there is no alternate mass storage control, zzz contains 'ALT'.

System Action: This request and all future I/O requests will be terminated in error by the Mass Storage System Communicator program.

Programmer Response: Take the following action:

1. Hold all MSS job queues or, if possible, enter the QUIESCE command from the console. If the message indicates ALT NOT AVAILABLE, proceed to step 2. The 'to' mass storage control is offline in the mass storage control UCBs for that processor. If the 'to' mass storage control is offline and must remain so, make sure that it is offline to all attach processors. Next, in all connected processors, vary online the 'from' mass storage control. Disable all channel interfaces on the 'to' mass storage control at the Mass Storage Facility operator's panel. This can cause switching in other attached processors.

   Release the job queues or, if QUIESCE was used, press PSW Restart. If switching fails or another switch is initiated in a short period of time, call your service representative and go to step 3.

   If the 'to' mass control storage has been placed offline erroneously, vary it back online along with the 'from' mass storage control. Issue the ASSIGN command and analyze any further messages.

2. There is only one valid mass storage control in the system. On all processors, vary the 'from' mass storage control back online. Release all held jobs and monitor the progress of the jobs; if another switch sequence occurs, the mass storage control is inoperable. Go to step 3.

3. Either hold all MSS Jobs or release all held jobs and let them run to completion or termination. When the IBM Customer Engineer completes the mass storage control repair, go to step 4.

4. IML the repaired mass storage control. When the IML is complete, enable all mass storage control interfaces and go to step 5.

5. If the processors were waiting for return of the mass storage control to either a restart or a continue processing condition, go to step 6. Otherwise, vary online this mass storage control for all processors and ensure that its channel interfaces are enabled. Also, if this mass storage control was restored because of a power failure, vary the Cartridge Store online if this is an installation with two A models. End of procedure.

6. On all processors attached to the mass storage control, display the status of both mass storage controls. If any mass storage control UCB is busy, follow step 7 for that processor. Start each non-busy processor as follows:

   a. Vary all operational mass storage controls online.

   b. Ensure that all operational mass storage control interface switches are enabled at the Mass Storage Facility operator's panel. Choose a primary processor and issue an ASSIGN command from that processor. The ASSIGN command can initiate a successful switch. Release all held jobs in the primary processor.

   c. Go to step 8.

7. Cancel the active jobs running against the mass storage control. If no switch message occurs, display the status of the mass storage controls again. If the 'from' mass storage control is not busy but online, vary that mass storage control offline and analyze any further messages. If the 'from' mass storage control is still busy, IPL that processor again and restart the jobs.

   In either case, if the primary processor is affected, a new primary processor might have to be assigned so that the other processors can continue processing. When the IBM Customer Engineer completes the mass storage control repair, go to step 4.

8. It might be necessary or desirable to demount certain volumes before resuming the MSS operations. To do so, display DASD online status for all Staging Adapter addresses from all processors involved. Staging Adapter virtual unit addresses having volumes mounted and not busy are candidates for a demount. Using the display information, locate those volumes to be demounted. Issue either the UNLOAD CCU or VARY OFF CCU command to demount the volumes. The UNLOAD command is used when the CCU is to remain online. Like the VARY OFF command, it is not processed until the unit becomes deallocated. Unlike the VARY OFF command, the UNLOAD command is not processed until a job starts. If this is a problem, start a dummy job (invalid jobname). Each command issues a demount order to the mass storage control. The UNLOAD or VARY OFF command is not ended until all necessary destaging has been done. Release all held jobs in any remaining processors. Again, a successful switch can take place. Go to step 9.

9. You can now restart the canceled jobs. Analyze any further error messages. End of procedure.

Operator Action: Probable hardware error. Depending on the installation requirements, take the appropriate action.

Problem Determination: Table I, items 2, 30.

IEA000I 'MSC SWITCH FROM xxx TO zzz, zzz NOT AVAIL'

Explanation: The processor's error recovery procedures detected that the primary mass storage control lost the lower connection, but the error recovery procedure cannot switch to the alternate because the alternate is either offline or does not exist. The lower connection was lost due either to:

- This or some other processor doing a switch because of an operator VARY command, or
- A permanent I/O error causing some other processor to do a system switch. There is no usable mass storage control.

In the message, xxx is the address of the failing mass storage control, which is the primary mass storage control, but it is offline; zzz is the address of the alternate mass storage control, which is offline if one exists. If there is no alternate mass storage control, zzz contains 'ALT'.

System Action: This request and all future I/O requests to this device will be terminated in error by the Mass Storage System Communicator program.

Programmer Response: Take one of the recovery actions described for the preceding IEA000I message.

Operator Action: Probable hardware error. Depending on the installation requirements, take the appropriate action.

Problem Determination: Table I, items 2, 30.

IEA000I I/O ERR,aaa,bb,cccc,dd00,ffgghhhh

Explanation: This message is sent to the primary operator control station when TCAM error recovery procedures fail to correct an I/O error. This message is in addition to the record of permanent errors that is created on disk when such an error occurs. TCAM inserts no line control, not even EOT, into this type of message. If line control is required, you must see to it that MSGEDIT or MSGFORM inserts the line control.

Note: Some devices display a new line character (X'15') and 15 pad characters (X'32') preceding the message. In the message text, the fields, in hexadecimal format, are:

aaa
Address of the line where the error occurred.

bb
The command code as specified in the failing channel program.

cccc
The status bytes of the channel status word (CCW) as specified in the input/output block (IOB).

dd
The first sense byte as specified in the IOB.

ff
The TP op code as specified in the failing CCW in the channel program for the last retry attempt.

gg
The TP op code of the failing CCW for the first occurrence of the error.

hhhh
For stations on switched lines, if the station is known, hhhh is replaced by the last four dial digits, if assigned. For stations on nonswitched lines, hhh is replaced by polling characters for receiving operations and addressing characters for sending operations. If the station is on a switched line and TCAM cannot identify it at the time the error occurs, hhhh is replaced by the polling characters for stations on this line. If no polling characters are assigned, hhhh is replaced by zeros.

System Action: See the explanation.

Operator Response: In some applications, the generation of the IEA000I message may be faster than the handling capacity of the primary operator control station. When the primary operator control station is the system console, a backlog may create a system queue area shortage. If allowed to continue without operator intervention, a serious shortage could result and could cause a system wait state to be entered. To reduce generation of these error messages, TCAM's threshold support should be used. See the THRESH= operand of the INTRO macro instruction in the *TCAM Programmer's Guide*.

IEA000I SWAP MSC UCBS FAILED

Explanation: The error recovery procedures of the processor on whose console this message appears detected that the primary mass storage control (MSC) lost the lower connection, which is a hardware problem. The error recovery procedures cannot switch to the alternate MSC because the input/output supervisor (IOS) swap of the primary and alternate MSC unit control blocks (UCBs) failed. The lower connection was lost because:

1. Some processor (maybe this one) switched from primary MSC to alternate MSC because of an operator VARY command.

2. A permanent I/O error caused some other processor to switch from the primary MSC to the alternate MSC. In this case, there is no usable MSC.

System Action: The mass storage system communicator program terminates in error all I/O requests to the primary mass storage device.

Operator Response: For case 1, vary the primary MSC back online to resume normal mass storage system (MSS) operations. For case 2, contact the system programmer.

Problem Determination: Table I, items 2 and 29.

IEA001I UNIT ddd, PATH pth INOPERATIVE FOR CHANNEL SET x

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

In the message text, the fields are as follows:

ddd
Unit address of the device, in hexadecimal.

pth
One of the following:

X'80' for primary path channel set 0
X'40' for secondary path channel set 0
X'20' for primary path channel set 1
X'10' for secondary path channel set 1

x
Channel set, 0 or 1, for which the path is inoperative.

System Action: The system will automatically begin reusing the path when it becomes operational.

Operator Response: Probable hardware error. None.

Problem Determination: Table I, items 2, 30.

IEA003I I/O MALFUNCTION TO DEVICE ddd. [I/O TERMINATED.]

Explanation: During a CCH, MIH, or IECVESIO (special I/O) call to the I/O supervisor for device ddd, one of the following occurred:

- The device failed to terminate ongoing I/O activity when a halt device-clear I/O sequence was issued.

- The halt device-clear I/O sequence could not be successfully initiated.

The device has probably become unusable.

System Action: If I/O TERMINATED appears in the message, the most recent I/O request to the device is terminated in error by ERP, unless DDR can successfully swap the volume.

If I/O TERMINATED does not appear in the message, the ERP can retry the request.

Operator Response: Vary device ddd offline or swap it to prevent future I/O requests from encountering this problem.

Problem Determination: Table I, items 2, 18, 24, 30.

IEA004I DEVICES:ddd,ddd,ddd,ddd,...,ddd HAVE BEEN SET FOR I/O REQUEST TERMINATION.

Explanation: One of the following conditions caused this message to be issued:

- In response to an ACR (alternate CPU recovery) call to the I/O supervisor, the listed devices were found to have no paths available from the channels accessible by the operative processor. Each of the devices has been boxed, and remains boxed until: 1) the failing processor is brought back online, or 2) a path to each device from the channels accessible by the operative processor is brought online (by VARY PATH or VARY CHANNEL command).

- In response to a CCH (channel check handler) call to the I/O supervisor because a previously available channel has become unavailable, the listed devices were found to have no available paths. Each of the devices has been boxed and remains boxed until a path to each device is brought online by VARY PATH. This message is associated with message IEA410I.

- During VARY channel,OFFLINE,FORCE processing, the listed devices were found to have no paths available. Each of the devices has been boxed and remains boxed until a path to the device is varied online.

When a device is boxed, these events occur:

- I/O on the device is terminated.

- Any new I/O requests result in permanent I/O errors.

- No new allocations are done for the device.

- If the device was online, it is marked pending offline. A pending offline device goes offline when these conditions occur, in this order:

  1. The device is no longer allocated to any job.

  2. Allocation processing allocates any device in the system.

  If the device was offline, it remains offline.

System Action: This request and all future I/O requests to these devices are terminated in error by the ERP until paths on the channels accessible by the operative processor are made available or the channels accessible by the failing processor are brought back online.

Operator Response: If paths to the listed devices are available on the channels accessible by the operative processor, they should be varied online. If no such paths exist the volume should be swapped. Bringing the failing processor back online (if this is possible) will also eliminate the problem.

IEA018A MIH CONDITION PENDING ON PAGING DEVICE ddd

Explanation: IOS restart processing found an outstanding MIH (missing interrupt handler) condition on paging device ddd. Earlier, MIH processing tried unsuccessfully to issue a message describing the problem.

System Action: Processing continues.

Operator Response: If the device was just mounted (or was offline during IPL and has not been used), issue a VARY ddd ONLINE command to cause a simulated device end.

Check the indicators on paging device ddd for hardware problems. On a disk device, for example, the SELECT LOCK indicator might be on. If you find the problem, follow the procedures for operators in the Principles of Operation Guide for the device.

Check control units or switching units for proper switch settings. If the problem remains, call hardware support personnel.

Programmer Response: None.

Problem Determination: Table I, items 13, 16, 23, and 29.

IEA019A STOP SHARING PROCESSORS TO RE-RESERVE DEVICES RESERVED ON (x,y). REPLY U WHEN ALL SHARING SYSTEMS HAVE BEEN STOPPED

Explanation: The operator entered the VARY CH(x,y) OFFLINE FORCE command. Before vary command processing can take channel x offline, IOS processing must release the reserved devices on channel x and rereserve them on alternate paths. The processors that share these devices might have reserves pending for them, and therefore the sharing processors must be stopped to prevent them from stealing the devices when they are released.

Note: Before this message appeared, IOS processing tried to set up an alternate unconditional reserve path for each reserved device, but could not set up an alternate path for one or more of them. This failure to establish an alternate path can be because the device does not support the unconditional reserve command, or because no alternate path was available at the time.

System Action: The system waits for the operator's reply to this message. When the operator replies U, IOS processing tries to release the devices and then reserve them on an alternate path. IOS boxes any devices it cannot rereserve and issues message IEA026I.

Operator Response: Stop all the processors that are sharing devices on channel x of channel set y. Then reply U to this message.

Programmer Response: None.

Problem Determination: Table I, items 2, 11, 16, 18, and 29.

IEA024I ERROR IN GTF. opt TRACE OPTION WAS DISABLED

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

Note: If opt is SVC, SVC tracing will continue.

System Action: The program check for the error record caused GTF to bypass recording further events for the trace option opt. 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.

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 cataloged 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.

IEA026I FOLLOWING DEVICES FORCED OFFLINE DUE TO ERROR: ddd[,ddd...]

Explanation: Each of the devices listed in the message text has been boxed, which means:

- I/O on the device is terminated.
- Any new I/O requests result in permanent I/O errors.
- No new allocations are done for the device.
- If the device was online, it is marked pending offline. A pending offline device goes offline when these conditions occur, in this order:

  1. The device is no longer allocated to any job.
  2. Allocation processing allocates any device in the system.

  If the device was offline, it remains offline.

This action is necessary for one of the following reasons:

1. Hot I/O (an invalid repeated interrupt condition caused by a hardware malfunction) was detected on a device or control unit, and the operator responded by physically removing the device or control unit from the I/O configuration. The system boxed the device or all devices on the control unit. (Message IEA066A or IEA067A or wait state 066 or 067 precedes this message.)

2. Hot I/O (an invalid repeated interrupt condition caused by a hardware malfunction) was detected on a channel, and the operator responded by resetting the channel or by physically removing the channel from the I/O configuration. The devices listed in this message were boxed because they were reserved or assigned on the failing channel, and the system could not rereserve or reassign the devices over alternate paths. (Message IEA066A or IEA067A or wait state 066 or 067 precedes this message.)

3. An error was detected in a group of channels. The devices listed in this message were boxed because they were reserved or assigned on a failing channel, and the system could not rereserve or reassign the devices over an alternate path. (Message IEA439D or wait state 04C precedes this message.)

4. An inoperative interface was detected for a channel. The devices listed in this message were reserved or assigned on the failing channel, and the system could not rereserve or reassign the devices over alternate paths. (Message IEA438A or wait state 04D precedes this message.)

5. Alternate CPU recovery (ACR) has removed a processor from the system because of hardware errors, but channel reconfiguration hardware (CRH) or channel set switching (CHS) was not present or could not be activated. The devices listed in this message were boxed because they were reserved or assigned on channels that can only be accessed by the failing processor, and the system could not rereserve or reassign the devices over alternate paths. (Message IEA440A or wait state 041 precedes this message.)

6. A channel or control unit error was detected. The operator responded by forcing the device offline or by attempting to recover access to the device along an alternate path, but the attempt was not successful. (Message IEA427A or wait state 06F precedes this message.)

7. An inoperative interface was detected after a channel check or external damage machine check. The hardware has done a system reset on the channels prior to reporting the error. All reserves and assigns that were active on the channels at the time of the reset have been lost. The devices listed in the message were forced offline because they were reserved or assigned at the time of the hardware failure. Message IEA410E precedes this message.

System Action: The system rejects all subsequent requests for the devices with a permanent I/O error.

The devices listed go from pending offline to offline when two conditions are met, in this order:

1. The device is no longer allocated to any job.
2. Allocation processing allocates any device in the system.

Operator Response: The data sets on the devices listed in the message might have been damaged, especially if the device was shared with other systems. Consult the system programmer before using the devices again.

For reason 1 or 2 (hot I/O), contact hardware support personnel.

For reason 3, 4, 5, or 6, the devices can be returned to the system using the VARY online command. (The VARY channel or VARY PATH command does not bring the device online.)

Programmer Response: Verify that the data sets on any device listed in the message have not been damaged.

Problem Determination: Table I, items 2, 11, 18, 30.

IEA030I OPEN FAILED FOR DUMP DATA SET FOR { JS / ST } [DUE TO { Scde / Ucde }]

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 Scde or Ucde appears, the task was abnormally terminated with a system (S) cde or a user (U) code of cde.

System Action: The dump is bypassed and abnormal termination continues.

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

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

IEA036E FOLLOWING DEVICES FORCED OFFLINE DUE TO ERROR: ddd[ddd] VARY OFFLINE TO JES3

Explanation: The devices listed in the message text were boxed. See message IEA026I for an explanation of boxing and the reasons the devices were boxed. Because the devices are managed by JES3 and had not by MVS, they were marked offline.

System Action: The system marked the devices offline and will reject all subsequent requests for the devices with a permanent I/O error.

Operator Response: The data sets on the devices might have been damaged, especially if the devices were shared with other systems. Issue a JES3 VARY OFFLINE for each device to prevent it from being scheduled. Consult the system programmer before using the devices again.

If the devices were boxed because of hot I/O, contact hardware support personnel.

If the devices were boxed for other reasons, they can be returned to the system using the VARY ONLINE command. If a device is managed by JES3, issue a JES3 VARY ONLINE command for it. (The VARY channel or VARY PATH command will not bring the devices online.)

Programmer Response: Verify that the data sets on any device listed in the message have not been damaged.

Problem Determination: Table I, items 2, 11, 18, 30.

IEA066A IOS HAS DETECTED HOT I/O ON DEVICE (ddd,y).
NO DEVICES ARE RESERVED ON THE CHANNEL. TRY TO CORRECT THE PROBLEM AT THE LOWEST POSSIBLE LEVEL (DEVICE FIRST, THEN CONTROL UNIT, THEN CHANNEL) AND REPLY WITH ONE OF THE FOLLOWING:
1 NO DEVICE, CONTROL UNIT OR CHANNEL PHYSICALLY REMOVED. THE DEVICE MAY HAVE BEEN RESET.
2 DEVICE PHYSICALLY REMOVED, FOR EXAMPLE, POWERED OFF.
3 CONTROL UNIT PHYSICALLY REMOVED, FOR EXAMPLE, POWERED OFF OR ALL INTERFACES DISABLED. THE ADDRESSES OF ALL THE DEVICES ON THE CONTROL UNIT MUST BE INCLUDED IN THE REPLY, FOR EXAMPLE, IF DEVICES 250 THROUGH 257 AND 25E ARE ON THE CONTROL UNIT, ENTER:
3,250:257,25E OR 3,25E,250:257
4 CHANNEL PHYSICALLY REMOVED, FOR EXAMPLE, POWERED OFF OR ALL INTERFACES DISABLED. RESET THE CHANNEL IF IT IS A STAND-ALONE CHANNEL AND REPLY 4,RESET. IF IT IS NOT A STAND-ALONE CHANNEL, REPLY 4,NORESET.
ENTER THE REPLY BELOW

Explanation: Hot I/O (an invalid repeated interruption condition caused by a hardware malfunction) has been detected on device ddd on channel set y.

System Action: The channel is disabled. The system waits for the operator to take corrective action and reply to the message. The action the system takes depends on the operator response, as follows:

Response	System Action
1	The channel is enabled and processing continues.
2	The device is boxed (forced offline) and message IEA026I is issued. The channel is enabled and processing continues.
3	The devices included in the reply are boxed (forced offline) and message IEA026I is issued. The channel is enabled and processing continues.
4	The system attempts to reset the channel. If it cannot, the system checks to see whether the operator has reset the channel (the reply was 4,RESET). If the operator reset the channel, the system issues a Halt Device and a Clear I/O instruction for each device on the channel. If either the system or the operator reset the channel successfully, the system issues message IEA071E. The channel is left in the disabled state. (See the description of message IEA071E.) If the channel is not reset successfully, message IEA070A is issued; recovery has failed. The channel is left in the disabled state. (See the description of message IEA070A.)

Operator Response: Try to correct the problem. Notify the system of the action taken by replying as described in the message text with one of the following:

1

2

3,dd1:dd2,dd3 (Where dd1, dd2, and dd3 are device numbers; for example 3,250:257,25E as described in the message text. Note that the semicolon indicates a range of device addresses and the comma indicates a single device.)

4,RESET

4,NORESET

If necessary, contact hardware support personnel. When the device is repaired, it can be varied online.

Note: For replies that the system pre-formats on the warning line during disabled console communications, leave a blank after the comma. Start entering your reply after the blank. The system pre-formats the reply as follows:

```
R 0,
```

Using the response shown for operator response 3, the reply would be:

```
R 0, 3,250:257,25E
```

Problem Determination: Table I, items 2, 18, 30.

Further information about the hot device can be found in the status collection data (SCD) control block in the SYS1.LOGREC

data set. (The format of the SCD is described in *OS/VS2 Data Areas*, a microfiche publication.)

IEA067A IOS HAS DETECTED HOT I/O ON DEVICE (ddd,y).

DEVICES ARE RESERVED ON THE CHANNEL. IF REPLY 4 IS TO BE GIVEN, STOP SHARING PROCESSORS TO MAINTAIN DATA INTEGRITY OF RESERVED VOLUMES.
TRY TO CORRECT THE PROBLEM AT THE LOWEST POSSIBLE LEVEL (DEVICE FIRST, THEN CONTROL UNIT, THEN CHANNEL) AND REPLY WITH ONE OF THE FOLLOWING:
1 NO DEVICE, CONTROL UNIT OR CHANNEL PHYSICALLY REMOVED. THE DEVICE MAY HAVE BEEN RESET.
2 DEVICE PHYSICALLY REMOVED, FOR EXAMPLE, POWERED OFF.
3 CONTROL UNIT PHYSICALLY REMOVED, FOR EXAMPLE, POWERED OFF OR ALL INTERFACES DISABLED. THE ADDRESSES OF ALL THE DEVICES ON THE CONTROL UNIT MUST BE INCLUDED IN THE REPLY, FOR EXAMPLE, IF DEVICES 250 THROUGH 257 AND 25E ARE ON THE CONTROL UNIT, ENTER:
3,250:257,25E OR 3,25E,250:257
4 CHANNEL PHYSICALLY REMOVED, FOR EXAMPLE, POWERED OFF OR ALL INTERFACES DISABLED.
RESET THE CHANNEL IF IT IS A STAND-ALONE CHANNEL AND REPLY 4,RESET. IF IT IS NOT A STAND-ALONE CHANNEL, REPLY 4,NORESET.
ENTER THE REPLY BELOW.

Explanation: Hot I/O (an invalid repeated interrupt condition caused by a hardware malfunction) has been detected on device ddd on channel set y. Devices are reserved or assigned on the channel.

System Action: The channel is disabled. The system waits for the operator to take corrective action and reply to the message. The action the system takes depends on the operator response as follows:

Response	System Action
1	The channel is enabled and processing continues.
2	The device is boxed (forced offline) and message IEA026I is issued. The channel is enabled and processing continues.
3	The devices included in the reply are boxed (forced offline) and message IEA026I is issued. The channel is enabled and processing continues.
4	The system attempts to reset the channel. If it cannot, the system checks to see whether the operator has reset the channel (the reply was 4,RESET). If the operator reset the channel, the system issues a Halt Device and a Clear I/O instruction for each device on the channel. If either the system or the operator reset the channel successfully, the system issues message IEA071E. (See the description of message IEA071E.) The channel is left in the disabled state and message IEA421E is issued. If the channel is not reset successfully, message IEA070A is issued; recovery has failed. The channel is left in the disabled state. (See the description of message IEA070A.)

Operator Response: Try to correct the problem. Then, notify the system of the action taken by replying 1, or 2, or 3 and the device addresses, or 4,RESET, or 4,NORESET as described in the message text. In order to maintain data integrity when replying 4,RESET or 4,NORESET, stop all systems that share reserved devices with this system **before** entering the reply. Restart the stopped systems after message IEA421E appears.

If necessary, contact hardware support personnel. When the device is repaired, it can be varied online.

Note: For replies that the system pre-formats on the warning line during disabled console communications, leave a blank after the comma. Start entering your reply after the blank. The system pre-formats the reply as follows:

```
R 0,
```

For an operator response of 3, the reply might be:

```
R 0, 3,250:257,25E
```

Problem Determination: Table I, items 2, items 2, 18, 30.

Further information about the hot device can be found in the status collection data (SCD) control block in the SYS1.LOGREC data set. (The format of the SCD is described in *OS/VS2 Data Areas*, a microfiche publication.)

IEA068A IOS HAS DETECTED HOT I/O ON CHANNEL (x,y).

NO DEVICES ARE RESERVED ON THE CHANNEL. RESET THE CHANNEL IF IT IS A STAND-ALONE CHANNEL AND THEN REPLY GO,RESET BELOW. IF IT IS NOT A STAND-ALONE CHANNEL, REPLY GO,NORESET BELOW.

Explanation: Hot I/O (an invalid repeated interruption condition caused by a hardware malfunction) has been detected on channel x on channel set y, or on a direct access device on channel x on channel set y. The system cannot reset the channel.

System Action: The channel is disabled. The system waits for the operator to take corrective action and then reply to the message.

If the operator has reset the channel, (the reply was GO,RESET), the system issues a Halt Device and a Clear I/O instruction for each device on the channel. The system then attempts to restart active I/O operations. The first time the problem occurs on this channel, the channel is enabled and processing continues. The second time the problem occurs, the channel is left in the disabled state and message IEA071E is issued. (See the description of message IEA071E.)

If the operator did not reset the channel (the reply was GO,NORESET), message IEA070A is issued; recovery has failed. The channel is left in the disabled state. (See the description of message IEA070A.)

Operator Response: Reply as described in the message text. If necessary, contact hardware support personnel. When the channel or direct access device is repaired, it can be varied online.

Note: For replies that the system pre-formats on the warning line during disabled console communications, leave a blank after the comma. Start entering your reply after the blank. The system pre-formats the reply as follows:

```
R 0,
```

Thus, the reply might be:

```
R 0, GO,NORESET
```

Problem Determination: Table I, items 2, 18, 30.

Further information about the hot device can be found in the status collection data (SCD) control block in the SYS1.LOGREC data set. (The format of the SCD is described in *OS/VS2 Data Areas*, a microfiche publication.)

IEA069A IOS HAS DETECTED HOT I/O ON CHANNEL (x,y). DEVICES ARE RESERVED ON THE CHANNEL. STOP SHARING PROCESSORS TO MAINTAIN DATA INTEGRITY OF RESERVED VOLUMES. RESET THE CHANNEL IF IT IS A STAND-ALONE CHANNEL AND THEN REPLY GO,RESET BELOW. IF IT IS NOT A STAND-ALONE CHANNEL, REPLY GO,NORESET BELOW.

Explanation: Hot I/O (an invalid repeated interruption condition caused by a hardware malfunction) has been detected on channel x of channel set y, or on a direct access device on channel x on channel set y. Devices are reserved or assigned on channel x.

System Action: The channel is disabled. The system waits for the operator to take corrective action and reply to the message.

The system attempts to reset the channel. If it cannot, the system checks to see whether the operator has reset the channel (the reply was GO,RESET). If the operator reset the channel, the system issues a Halt Device and a Clear I/O instruction for each device on the channel.

If either the system or the operator reset the channel successfully, devices reserved or assigned on channel x are rereserved or reassigned. If a device cannot be rereserved or reassigned, it is boxed (forced offline) and message IEA026I is issued. The system then attempts to restart active I/O operations. The first time the problem occurs on this channel, the channel is enabled, message IEA421E is issued, and processing continues. The second time the problem occurs, the channel is left in the disabled state and messages IEA421E and IEA071E are issued. (See the description of message IEA071E.)

If the channel is not reset successfully, message IEA070A is issued; recovery has failed. The channel is left in the disabled state. (See the description of message IEA070A.)

Operator Response: In order to maintain data integrity, stop all systems that share reserved or assigned devices with this system; however, if the sharing system is part of the same JES3 complex and the devices are managed by JES3, only the original system needs to be stopped. Then reply GO,RESET or GO,NORESET as described in the message text. Restart the stopped systems after message IEA421E appears.

If necessary, contact hardware support personnel. When the channel or direct access device is repaired, it can be varied online.

Note: For replies that the system pre-formats on the warning line during disabled console communications, leave a blank after the comma. Start entering your reply after the blank. The system pre-formats the reply as follows:

```
R 0,
```

Thus, the reply might be:

```
R 0, GO,RESET
```

Problem Determination: Table I, items 2, 18, 30.

Further information about the hot channel or direct access device can be found in the status collection data (SCD) control block in the SYS1.LOGREC data set. (The format of the SCD is described in *OS/VS2 Data Areas*, a microfiche publication.)

IEA070A RECOVERY FOR CHANNEL (x,y) HAS FAILED. THE CHANNEL WILL BE LEFT DISABLED AND OFFLINE. DEVICES FOR WHICH THIS CHANNEL IS THE LAST PATH WILL BE BOXED (FORCED OFFLINE). ACTIVE I/O WILL NOT BE REDRIVEN. RESERVED DEVICES, IF ANY, HAVE NOT BEEN RERESERVED OR RELEASED. EITHER RE-IPL OR REPLY U BELOW.

Explanation: Channel x on channel set y was not reset successfully following a hot I/O condition (an invalid repeated interrupt condition caused by a hardware malfunction.) This message is preceded by message IEA066A, IEA067A, IEA068A, IEA069I, or IEA072I or by wait state 066, 067, 068, or 069.

System Action: If the operator replies U, the channel is left in the disabled state. Each device on channel x that is not accessible over an alternate path is boxed (forced offline), and message IEA004I is issued. The system does not attempt to restart the I/O operations. Message IGF991E appears later for any active I/O. If any devices are reserved on or assigned to channel x, they are not released, nor are they rereserved or reassigned over alternate paths. However, if a device supports dynamic pathing, and dynamic pathing is operating, and an alternate online path exists to the device, the device will remain reserved or assigned over the alternate path; it can be released or unassigned over the alternate path.

Operator Response: Notify the system programmer. Depending on the requirements of your installation, reply U to continue processing, or re-IPL the system.

Note: For replies that the system pre-formats on the warning line during disabled console communications, leave a blank after the comma. Start entering your reply after the blank. The system pre-formats the reply as follows:

```
R 0,
```

Thus, the reply might be:

```
R 0, U
```

Problem Determination: Table I, items 2, 18, 30.

Further information about the hot channel can be found in the status collection data (SCD) control block in the SYS1.LOGREC data set. (The format of the SCD is described in *OS/VS2 Data Areas*, a microfiche publication.)

IEA071E CHANNEL (x,y) FORCED OFFLINE AND DISABLED FOR INTERRUPTS

Explanation: Channel x on channel set y was reset successfully as a result of one of the following:

1. Hot I/O (an invalid repeated interrupt condition caused by a hardware malfunction) was detected on a device, control unit, or channel. This message is preceded by message IEA066A, IEA067A, IEA068A, IEA069I or IEA072I or by wait state 066, 067, 068, or 069.

2. Hot I/O was detected on a channel that was not specified as valid during system generation.

   Note: This message is issued only if a previous hot I/O recovery attempt did not stop the hot I/O from recurring.

System Action: The channel is forced offline and left in the disabled state. In case 1, if any devices were reserved on or assigned to channel x, they are rereserved or reassigned. If a device cannot be rereserved or reassigned, it is boxed (forced offline) and message IEA026I is issued. The system attempts to restart active I/O operations. If channel x represents the last path to a device, the device is boxed and message IEA004I is issued.

Operator Response: If the channel was not specified as valid during system generation, notify the system programmer.

Problem Determination: Table I, items 2, 18, 30.

Further information about the hot device can be found in the status collection data (SCD) control block in the SYS1.LOGREC data set. (The format of the SCD is described in *OS/VS2 Data Areas*, a microfiche publication.)

IEA072I CHANNEL (x,y) HOT. NO RESERVED DEVICES. RECOVERY IN PROGRESS

Explanation: Hot I/O (an invalid repeated interruption condition caused by a hardware malfunction) has been detected on channel x on channel set y, or on a direct access device on channel x on channel set y.

System Action: The channel is disabled. The system attempts to reset the channel without operator assistance.

If the channel is reset successfully, the system attempts to restart active I/O operations. The first time the problem occurs on this channel, the channel is enabled and processing continues. The second time the problem occurs, the channel is left in the disabled state and message IEA071E is issued. (See the description of message IEA071E.)

If the channel is not reset successfully, message IEA070A is issued; recovery has failed. The channel is left in the disabled state. (See the description of message IEA070A.)

Operator Response: None. If necessary, contact hardware support personnel. When the channel or direct access devices is repaired, it can be varied online.

IEA073A ddd, PAGE DATA SET -
{NO PATHS AVAILABLE / ser NOT MOUNTED / I/O ERROR READING VOLUME LABEL / INTERVENTION REQUIRED}

Explanation: The page data set cannot be used for the reason given in the message. ddd is the device number and ser is the serial number of the volume containing the page data set. Message IEE125A follows this message.

System Action: The system waits for the operator to reply to message IEE125A. When the reply is received, the system resumes processing.

Operator Response: If NO PATHS AVAILABLE appears in the message, physically restore a path to the device. For example, turn on a control unit switch or a channel switch.

If ser NOT MOUNTED appears in the message, mount the correct volume on device ddd.

If I/O ERROR READING VOLUME LABEL appears in the message, make sure the correct volume is mounted on device ddd.

If INTERVENTION REQUIRED appears in the message, ready the unit.

When the required action has been taken, reply to message IEE125A.

Problem Determination: Table I, items 2, 11, 30.

IEA101A SPECIFY SYSTEM PARAMETERS FOR RELEASE xx.yy.zzz [VER = ww...w]

Explanation: This message is issued during system initialization to allow the operator to change certain system parameters that were specified during system generation, or after system initialization to allow the operator to change system parameters via IEASYSxx members of SYS1.PARMLIB. In the message text, xx is the release number, yy is the release level, and zzz is the system type (PCP, MFT, MVT/MP, VS2). The VER = ww...w field, is an optional VS2 system version identifier. The default value is VER = SP132JBB1328. (AMASPZAP was used to put this value in the CVTVERID field of the CVT. See *OS/VS2 MVS System Programming Library: Initialization and Tuning Guide*.

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

Operator Response: Reply as specified by the system programmer.

IEA107I prm IGNORED

Explanation: One of the following occurred:

- In reply to message IEA101A, the operator specified a value for the parameter named in the message text. However, in the current IEASYSxx member of SYS1.PARMLIB, OPI = NO is specified for that parameter. The system therefore accepts the value the operator specified.

- Both the BLDL and BLDLF system parameters were specified. These two parameters are mutually exclusive. The system ignores the BLDL value and ignores the BLDLF value.

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). If BLDL is the parameter in question, be sure that you have not specified both the BLDL and BLDLF system parameters.

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
mod
mod

Explanation: During nucleus initialization, parts of the resident directories have not completed. The module names not found in 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 to the system programmer and save the master console log.

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.

IEA120A DEVICE ddd SHARED PR VOLID NOT READ. REPLY 'CONT' or 'WAIT'

Explanation: Device ddd is a shared device and is presently reserved by a processor other than the processor from which an IPL is being performed. If device ddd is not shared, the volid has not been read.

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

Operator Response: To wait until the device is released by the processor that is presently using it, enter REPLY xx,'WAIT'. To wait until the volid has been read, reply 'WAIT'. Normal processing will continue after the device is available.

Note: If the wait time is excessive, there might be a problem with the device. A hardware malfunction can cause the device to appear reserved.

Otherwise, enter REPLY xx,CONTINUE. This reply will result in the device being marked unavailable to the processor 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 processor that originally reserved it.)

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

IEA139E PC/AUTH SERVICES ARE INOPERABLE.

Explanation: Because of an unrecoverable error, the program call services and program authorization services (PC/AUTH services) are inoperable.

System Action: The system schedules an SVC dump. In most cases, tasks executing when the error occurred continue normally, and the PC (program call) instruction and other cross-memory instructions can still be used. After the error, programs that attempt to use the PC/AUTH services abend with system completion code 053, reason code X'nn98'.

Operator Response: Notify the system programmer.

Programmer Response: The unrecoverable error could be a hardware error or a system error. To recover use of the PC/AUTH services, instruct the operator to re-IPL the system.

Problem Determination: Table I, items 2 and 18. Print the SVC dump(s) using AMDPRDMP with the FORMAT, SUMDUMP, LOGDATA, SUMMARY, and PRINT CURRENT options.

IEA151W RESERVES LOST. UNABLE TO PLACE DEVICES OFFLINE.

Explanation: The system encountered an error while attempting to place one or more devices offline in response to a previous hardware error. Message IEA427A, IEA438A, IEA439A, IEA440A, IEA067A, or IEA069A or wait state 041, 04C, 04D, 067, 069, or 06F might precede this message.

System Action: The system enters wait state 04E.

Operator Response: Probable software error. If the failing device, control unit, or channel is identified by a previous message or

wait state, bypass the problem by physically reconfiguring the system to remove the failing equipment. Take a stand-alone dump and re-IPL the system.

If you do not know which unit encountered the hardware error, proceed with the problem determination items and re-IPL the system.

Contact IBM for programming support.

Problem Determination: Table I, items 2, 11, 18, 29.

IEA152I HARDCPY SPECIFICATION INVALID

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

System Action: The system issues message IEA332A.

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

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

IEA162I dsn CANNOT BE RECOGNIZED FOR NONVIO RESTRICTION

Explanation: Data set dsn was in the list of paging data sets specified on the NONVIO= system parameter. However, ASM (auxiliary storage manager) did not recognize the data set name (dsn) because data set dsn was not in the list of paging data sets specified on the PAGE= system parameter.

System Action: The system ignores the data set name (dsn) and continues processing the NONVIO= system parameter. Other system initialization continues.

Operator Response: Notify the system programmer.

Programmer Response: Before you reload (re-IPL) the system, check to see if the data set name (dsn) was the result of a misspelling on the NONVIO= system parameter. If it was, correct it. Otherwise, add data set dsn to the list of data sets specified on the PAGE= system parameter, or remove data set dsn from the list specified on the NONVIO= system parameter.

IEA163E ALL PAGING RESOURCES ARE RESTRICTED VIA NONVIO SPECIFICATION

Explanation: All of the local paging data sets specified on the PAGE= system parameter are also specified on the NONVIO= system parameter. Therefore, there are no local paging data sets available for VIO, and ASM (auxiliary storage manager) must direct VIO pages to NONVIO data sets.

System Action: System initialization continues.

Operator Response: Report this message to the system programmer.

Programmer Response: If you need a paging data set for VIO pages, wait until system initialization processing completes. Then use the PAGEADD command to add the data set.

IEA208I func FUNCTION INOPERATIVE

Explanation: The nucleus initialization program (NIP) has detected unrecoverable error conditions during initialization of function func. 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.

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, 25b, 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 request; however, more storage was requested than was available.

System Action: The system is placed in a wait state with a code of X'63'.

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

Programmer Response: See the description of wait state code X'63'.

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.

IEA301A mem { NOT FOUND IN / IS ALIAS } dsn

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

Note: A noteworthy instance of this message is in the following sequence:

- IEA301I IEASYS00 NOT FOUND IN SYS1.PARMLIB
- IEA324I SYSP INPUT TERMINATED IN IEASYS00
- IEA320A RESPECIFY PARAMETERS OR CANCEL

This particular sequence occurs when the primary IEASYSxx member, IEASYS00, cannot be found during processing of the response to message IEA101A, SPECIFY SYSTEM PARAMETERS. This message sequence occurs because the system reads IEASYS00, expects it to be present, and considers its absence unintentional. This message sequence occurs even if the operator specified IEASYSxx members of SYS1.PARMLIB other than IEASYS00. Processing resumes once the operator makes a response to IEA320A. The initial response to IEA101A is ignored during this processing. Consequently, the SYSP system parameter must be specified in the response to IEA320A to access IEASYSxx members of SYS1.PARMLIB.

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.

IEA302I TOD CLOCK INOPERATIVE

Explanation: NIP found that the time-of-day (TOD) clock is not working. In an MP environment, this message means that TOD clocks on all CPUs were found to be inoperative.

System Action: The initialization process continues since the timer initialization routines, which are invoked during master scheduler initialization after NIP processing is complete, may be able to correct the problem. NIP processing may be slightly degraded if many teleprocessing control units or shared DASD devices are in the configuration and require initialization.

Programmer Response: If timer initialization cannot correct the problem during its processing after NIP has completed, additional messages and information will be provided that may require hardware support to be provided.

Problem Determination: Table I, item 30.

IEA303W 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: Re-IPL the system and report this message to the system programmer.

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 cde, which is the address portion of the wait state PSW. The first 4 digits of cde are an identifier (if non-zero) which is unique to the wait state code which is in the last 4 digits of cde.

System Action: The system enters a wait state.

Operator Response: Notify the system programmer of this wait state code.

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 and make sure it is not greater than 80 characters in length.

IEA306I 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.

IEA311I 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 DISMOUNTED

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 is not on an already-mounted volume. This message asks 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 press ENTER to indicate 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. If the necessary dataset is on a non-demountable volume, make sure that the device is online and ready and then reIPL.

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. See the note to the explanation of message IEA301I.

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 pressing the enter key. 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, IEA332A, or IEA906A 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 - 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 *OS/VS2 System Programming Library: Initialization and Tuning Guide).*

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 in the *OS/VS2 System Programming Library: Initialization and Tuning Guide*) or press the enter key to cancel the use of the parameter for this IPL.

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 or process the link library data sets identified by dsn because of one of the following:

1. The operator canceled 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.

5. More data sets remained to be processed after 15 active concatenations were created to the LINK library. (15 concatenations is the system limit.)

The first three conditions would have been reported by previous messages; IEA317A, IEA211I, IEA319I, respectively.

System Action: The system lists the data sets that could not be concatenated to SYS1.LINKLIB and processing continues.

Operator Response: Report this message to the system programmer.

Programmer Response: Probable user error. Correct the condition that caused the error:

1. No action is required.

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.

5. Reorder the data set names so that the 15 data sets that you want concatenated come first in the list, or put the data set names in a separate LNKLSTxx list and respond to message IEA101A with the LNK=xx system parameter to specify the list.

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

IEA328I LNKLSTxx INPUT TRUNCATED AT dsn

Explanation: The maximum number of data set names that can be defined in the selected LNKLSTxx members has been exceeded. The system will process the first 40 data set names. In selecting those that may be concatenated to SYS1.LINKLIB; the remaining data set names, beginning with dsn, have been ignored.

System Action: Processing continues.

Operator Response: Report this message to the system programmer.

Programmer Response: Probable user error. Make sure that the total number of data set names does not exceed 40 when defining the possible combinations of LNKLSTxx members that might be selected during IPL.

Problem Determination: Table I, items 11, 25a to list the LNKLSTxx members, 29.

IEA329I RETRIABLE ERROR. RECENT COMMANDS MAY NEED TO BE REPEATED

Explanation: The command queue buffer (CQB) queue was invalid. The following commands cause CQB entries to be built:

- CONTROL C,A
- CONTROL C,E
- CONTROL C,I
- CONTROL M

If you have issued any of these commands recently, they might have to be reissued.

System Action: The system truncates the CQB queue at the last valid entry in the queue. The command that had an invalid entry and all subsequent commands in the queue are lost.

Operator Response: If any of the commands were issued and apparently not executed, reissue the commands. If the problem recurs, notify the system programmer.

Programmer Response: Probable system error. Contact IBM for programming support.

Problem Determination: Table I, items 2, 7a, 7d, 11, 29.

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.

IEA331I LINK LIBRARY CONCATENATION
SYS1.LINKLIB
dsn
dsn
...

Explanation: This system's LNK system parameter includes the L (list) keyword. This message lists the data sets that the system concatenated to SYS1.LINKLIB.

System Action: Processing continues.

Operator Response: None.

Programmer Response: None.

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.

IEA337I ddd, INVALID TAPE VOLUME -
{CONTAINS IBM STANDARD LABEL|
FILE PROTECTED|
FILE PROTECTED & IBM STANDARD LABEL}

Explanation: The nucleus initialization program (NIP) requires an unlabeled scratch tape. The message text indicates that the tape volume on device ddd is unacceptable because it contains an IBM standard label, is file protected, or both.

System Action: After this message, NIP issues messages IEA316A and IEA315A, then waits for a scratch tape volume to be mounted and readied on device ddd.

Operator Response: Respond as indicated in messages IEA316A and IEA315A.

IEA340I REAL OR VIRTUAL STORAGE NOT AVAILABLE FOR func

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

System Action: If func is not a necessary system function, the system will continue processing. If, however, func is a necessary system function, the system enters a disabled wait state (X'38').

Functions and system actions are as follows:

func	System Action
PFT	Wait state X'38'
BLDL/BLDLF	Respecification offered by prompt message
MLPA	Message IEA353I issued - prm INPUT TERMINATED
FIX	Message IEA353I issued - prm INPUT TERMINATED
ASM	Wait state x'38'

Note: PFT and ASM are not system parameters.

Operator Response: Report this message to the system programmer.

Programmer Response: If message IEA956I or message IEA968I was issued previously, probable hardware error. Real storage might have a defective frame located at a fairly low address, thereby limiting the size of the contiguous storage area available for the nucleus buffer. If message IEA956I or message IEA968I was not issued previously, probable user error. Make sure that sufficient storage is available for NIP processing. You might need to reduce the number or the size of your optional system facilities, such as the FLPA (fixed link pack area) or the fixed BLDL list.

Problem Determination: Table I, items 11, 29.

IEA344I QUICK START FAILED; COLD START INITIATED

Explanation: The CLPA parameter was not specified, and the paging space did not contain a reusable link pack area. This could be a normal situation, if this is the first IPL after a new SYS1.STGINDEX data set and new paging data sets have been presented to the system. Messages issued previously during the initialization of the paging space, if any, may give additional information pertaining to the LPA.

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

Operator Response: None.

IEA347A SPECIFY MASTER CATALOG PARAMETER

Explanation: This message is issued during system initialization to allow the operator to specify either the normal master catalog or an alternate master catalog that will be used by the system.

System Action: The system waits for the operator's response, and then generates the name of the member of SYS1.NUCLEUS that will be used to find the master catalog.

Operator Response: To select an alternate master catalog, specify the two-place alphameric identifier of the alternate catalog to be used. The two-place alphameric response replaces nn in the name SYSCATnn to form the name of the member of SYS1.NUCLEUS that contains the alternate master catalog information. If the reply is a null line, the default name SYSCATLG is used.

IEA349I

ddd,rc,

{'MSCRTCHN',MSGDISP (MOUNT) FAILED
'Dvolser', 'MSCRTCHN',MSGDISP (DISMOUNT) FAILED
'D ', 'MSCRTCHN',MSGDISP (DISMOUNT) FAILED
'SCRTCHN',MSGDISP (VERIFY) FAILED}

Explanation: The nucleus initialization program (NIP) requires an unlabeled scratch tape. Because message IEA337I failed to display on device ddd, as indicated by MSGDISP FAILED in the message text, NIP issued this message to the console.

The return code **rc** indicates why the message failed to display on device ddd:

rc	Meaning
4	Device ddd does not support message display.
8	Message display was requested by an unauthorized program. To request message display, a program must be authorized by the authorized program facility (APF), or run in supervisor state, or run under storage protection key 0 through 7.
12	An I/O error occurred when the system tried to display the message on device ddd.

Operator Response: Respond as indicated in the message text:

'MSCRTCHN',MSGDISP (MOUNT) FAILED
Mount an unlabeled scratch tape volume on device ddd.

'Dvolser ','MSCRTCHN',MSGDISP (DISMOUNT) FAILED
Demount the specified tape volume with volume serial of volser from device ddd; because the tape volume is file protected, it cannot be used by NIP. Instead, mount an unlabeled scratch tape volume on device ddd.

'D ','MSCRTCHN',MSGDISP (DISMOUNT) FAILED
Demount the current tape volume from device ddd; because it is file-protected and has an IBM standard volume label, it cannot be used by NIP. Instead, mount an unlabeled scratch tape volume on device ddd.

' SCRTCHN',MSGDISP (VERIFY) FAILED
The tape volume on device ddd is an unlabeled scratch tape as required by NIP.

Operator Response: The operator should check the display on device ddd. If the problem persists, contact your hardware support personnel.

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: Processing continues.

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, 26c for SYS1.PARMLIB, and 29.

IEA352I LIST mem FOR prm INVALID text

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

MODNAME mod
mod identifies the name of the invalid module specified.

INCORRECT LIBNAME FORMAT
The PARMLIB list did not properly define a module source library.

EXCEED MAX BLDL ENTRIES
The PARMLIB list contained too many module names; BLDL has more than X'7FFF' names.

INCORRECT VOLID FIELD
The PARMLIB list contained volid's that were specified in the wrong format, or possibly not specified at all.

EXCEED APF TABLE STORAGE
The PARMLIB list IEAAPFxx contains entries with a character count exceeding the maximum storage allocated for the APF table (2040 bytes).

System Action: The system prompts the operator to respecify or cancel the parameter.

Operator Response: Probable user error. Respond to the prompt message and report this message to the system programmer.

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

IEA353I prm INPUT TERMINATED AT mod

Explanation: The definition of the parameter prm 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 prm is CLPA, an LPA cold start has failed.

System Action: Processing continues. Modules specified before mod are added to the LPA. If prm 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 prm 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:

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.

STORAGE UNAVAILABLE
Virtual storage is too small 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 a record from the SYS1.LPALIB directory.

PGOUT ERROR
One of the following occurred:

- An error during execution of a PGOUT macro instruction in an attempt to page out the LPA area.
- An error during execution of a PGFIX/PGFREE macro instruction in an attempt to page fix/free the temporary directory.

NON-EXECUTABLE MODS
Non-executable modules were found on SYS1.LPALIB.

System Action: The system follows this message with disabled wait state X'03A', and, if any modules were successfully loaded into the LPA, with message IEA353I.

Operator Response: Probable user error. Notify 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 mod IGNORED

Explanation: This message follows message IEA301I. If message IEA301I specifies NOT FOUND, the directory entry for aliasname in SYS1.LPALIB specifies that it is an alias of mod, but mod is not in the directory of SYS1.LPALIB. If IEA301I specifies IS ALIAS, mod is an alias in the directory of SYS1.LPALIB.

System Action: This message follows message IEA301I (specifying mod). 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.

Programmer Response: If message IEA301I specifies IS ALIAS, delete aliasname from the SYS1.LPALIB.

IEA357I ERRORS IN { IEALOD00 / IEAPAK00 } LIST
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 mod 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. mod 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 mod IMPROPER - The name of a module in the list has more than eight characters. mod 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.
- mod 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 mod - An I/O error occurred while reading the list. mod is the last valid module name processed preceding the detection of the I/O error.
- mod NOT FOUND IN LPA - Module mod 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.

IEA358I SYS1.LPALIB MODULE mod NON-EXECUTABLE

Explanation: Module mod on SYS1.LPALIB is marked non-executable and cannot be loaded into the system link pack area.

System Action: Processing continues in order to detect any additional modules which might be non-executable. Message IEA354I will follow the last message IEA358I.

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

Programmer Response: Replace the non-executable modules on SYS1.LPALIB with executable versions.

Problem Determination: Table I, item 2.

IEA359E BUFFER SHORTAGE FOR RETAINED ACTION Messages - 80% FULL

Explanation: The action message retention facility is active, and 80% of the buffer area used to retain immediate action (descriptor codes 1 and 2) and eventual action (descriptor codes 3 and 11) messages is full.

System Action: Immediate action and eventual action messages continue to be retained.

Operator Response: Use the DISPLAY R command to display the details of all outstanding immediate action and eventual action messages. If the action requested by a message has been performed, delete the message using the CONTROL C command. If the action has not been performed, perform the action. Use the DISPLAY R command again to determine if the message was deleted when the request was satisfied. If the message was not deleted, delete it using the CONTROL C command. ***Note*** When

enough messages are deleted so that the buffer area is less than 75% full, the system issues message IEA361I, and deletes message IEA359E.

Problem Determination: Table I, items 2, 7a, 7d, 11, 29.

IEA360A SEVERE BUFFER SHORTAGE FOR RETAINED ACTION MESSAGES - 100% FULL

Explanation: The action message retention facility is active and the buffer area used to retain immediate action (descriptor code 1 and 2) and eventual action (descriptor code 3 and 11) messages is full.

System Action: Any new immediate action and critical eventual action (descriptor code 11) messages are retained, but they are kept in CSA (common service area). These messages can still be accessed with the DISPLAY R command and deleted using the CONTROL C command. Non-critical eventual action messages (descriptor code 3) are no longer retained. Console message buffers (WQEs) might start to back up and messages IEA405E and IEA404A might be issued.

The system deletes this message when the shortage is no longer critical, but a shortage still exists unless message IEA361I is issued.

Operator Response: Use the DISPLAY R command to display the details of all outstanding immediate action and eventual action messages. If the action requested by the message has been performed, delete the message using the CONTROL C command. If the action has not been performed, perform the action. Use the DISPLAY R command again to determine if the message was deleted when the request was satisfied. If the message was not deleted, delete it using the CONTROL C command.

If more messages must be deleted, delete some or all of the retained eventual action messages. If the shortage still persists, you might want to delete some or all of the retained immediate action messages. (To delete action messages, use the CONTROL C command.)

If a shortage still exists, you might want to deactivate the action message retention facility (using the CONTROL M,AMRF=N command).

Problem Determination: Table I, items 2, 7a, 7d, 11, 29.

IEA361I BUFFER SHORTAGE RELIEVED FOR RETAINED ACTION MESSAGES

Explanation: The shortage of buffer area used to retain action messages has been relieved. The buffer area is now less than 75% full. This message was preceded by message IEA359E or both IEA359E and IEA360A, which indicated the extent of the shortage.

System Action: None.

Operator Response: None.

IEA362E BUFFER EXTENSION FAILED FOR RETAINED ACTION MESSAGES

Explanation: The action message retention facility is active, and the system could not extend the buffer area used to retain immediate action (descriptor code 1 or 2) and eventual action (descriptor code 3 or 11) messages. A high level of system activity rather than an error condition might cause this condition.

System Action: Any new immediate action and critical eventual action (descriptor code 11) messages are retained, but they are kept in CSA (common service area). These messages can still be accessed with the DISPLAY R command and deleted with the CONTROL C command. Non-critical eventual action messages (descriptor code 3) are no longer retained. Console message buffers (WQEs) might start to back up. When this happens, messages IEA405E and IEA404A might be issued.

The system deletes this message when the need to extend the buffer area no longer exists or when the system is able to extend the buffer area.

Operator Response: If the system does not delete the message or if the message appears frequently, notify the system programmer and try to reduce the number of messages in the buffer area. To reduce the number of messages, use the DISPLAY R command to display details of all outstanding immediate action and eventual action messages. If the action requested by a message has been performed, delete the message using the CONTROL C command. If the action has not been performed, perform the action. Use the DISPLAY R command again to determine if the message was deleted when the request was satisfied. If the message was not deleted, delete it using the CONTROL C command.

If more messages must be deleted, delete some or all of the retained eventual action messages. If the system is still unable to expand the buffer area, you might want to delete some or all of the retained immediate action messages. (To delete action messages, use the CONTROL C command.)

If a shortage still exists, you might want to deactivate the action message retention facility (using the CONTROL M,AMRF=N command).

Programmer Response: Check for a shortage of storage in the master scheduler address space. If there is sufficient storage, contact IBM for programming support.

Problem Determination: Table I, items 2, 7a, 7d, 11, 29.

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 or when special NIP processing is being performed, 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.

IEA364E

{ AMRF [RESTART] FAILED, INACTIVE - RETAINED MESSAGES DELETED
MPF FAILED, INACTIVE - MPF TABLE DELETED }

Explanation: If the first format of the message appears, the action message retention facility (AMRF) failed as a result of a system error. If RESTART appears in the message, the action message retention facility was active at the time of the failure, and the system was unable to restart the facility after the failure occurred. If RESTART does not appear in the message, the facility was active at some time during the IPL. At the time of the failure, the facility was no longer active, although the buffer area for the facility still contained retained messages.

If the second format of the message appears, the message processing facility (MPF) was active, but it failed because of a system error.

System Action: If the first format of the message appears, the action message retention facility is inactive. Any messages that were retained previously are no longer available. If the facility was active before the failure occurred, action messages are no longer retained.

If the second format of the message appears, the system has deleted the message table, and MPF is inactive.

Operator Response: If AMRF failed, and you want to start the action message retention facility, issue the CONTROL M,AMRF=Y command.

If MPF failed and you want MPF to be active, issue the SET MPF=xx command, where xx is the last two digits of an MPFLSTxx parmlib member.

In either case, if the problem continues to occur, notify the system programmer.

Programmer Response: If necessary, contact your IBM representative for help in correcting the system error that is causing the problem. If MPF failed, the error occurred during the MPF table scan routine.

Problem Determination: Table I, items 2, 7a, 7d, 11, 29.

IEA365E COMMAND SCHEDULER RESTART FAILED, ABEND RECURSION
THE FOLLOWING COMMANDS ARE INOPERATIVE:
D C D C,K D PFK D R REPLY

Explanation: The command scheduler failed. (The command scheduler is the command task of the console communications address space.) Module IEAVN701 (the communications task address space initialization routine) tried to restart the command scheduler, but the restart also failed.

This message follows message IEE481I, which identifies the system completion code (ABEND code) of the original command scheduler error.

System Action: The system continues with whatever processing it can do without the command scheduler.

Operator Response: If necessary, re-IPL to restart the console communications address space.

Programmer Response: Refer to *VS2 System Codes* for information about the system completion code that appears in message IEE481I.

Problem Determination: Table I, items 2, 29, and 33.

IEA366W MULTIPLE CONSOLE SUPPORT INOPERATIVE WAIT STATE 201 - REIPL

Explanation: Because of a failure during execution of module IEAVN700 (the console communications address space create routine), MCS (multiple console support) is not working.

The system is entering wait state 201.

Bits 32 - 47 of the wait PSW contain one of these reason codes:

8001 Module IEEMB881 was unable to establish the console communications address space.

8002 The console communications address space create routine (IEAVN700) could not establish an ESTAE environment.

Fccc The ccc field contains the system completion code for the error.

System Action: System initialization stops. The system attempts to take an SVC dump, and then enters wait state 201.

Operator Response: Record the contents of the wait PSW and report this message to the system programmer. Re-IPL when the problem has been corrected.

Programmer Response: Correct the error identified in the wait PSW. If Fccc appears, see *VS2 System Codes* for the meaning of system completion code ccc.

Problem Determination: Table I, items 2, 29, and 33.

IEA367A MULTIPLE CONSOLE SUPPORT INOPERATIVE ERROR CODE = xxxx REPLY ANY CHARACTER TO CONTINUE WITHOUT MULTIPLE CONSOLE SUPPORT

Explanation: Because of an error in module IEAVN701 (the console communications address space initialization routine), MCS (multiple console support) is not working. As a result, the communications task (COMM TASK) is no longer working. The error code in the message text shows the reason:

8001 An ESTAE environment cannot be established.

8002 The ATTACH of IEAVMQWR or IEEVWAIT was not successful.

8003 The error occurred during a POST for IEAVN700.

8004 The error occurred during a POST for IEAVN701.

8005 The error occurred during an update to the command address space table.

Fccc The error is described by system completion code (ABEND code) ccc.

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

Operator Response: If you do not want processing to continue without MCS, re-IPL.

To continue without MCS, reply with any character. The system then does whatever processing it can. When it can no longer continue without MCS, the system enters an enabled wait state.

Programmer Response: Correct the problem identified by the error code. If Fccc appears, see *VS2 System Codes* for the meaning of system completion code ccc.

Problem Determination: Table I, items 2, 29, and 33.

IEA404A SEVERE WTO BUFFER SHORTAGE - 100% FULL

Explanation: The limit of the number of available console message buffers (WQEs) has been reached. Non-privileged tasks might be put in a wait state.

System Action: Non-privileged jobs issuing messages are put in a wait state until the number of WQEs is reduced below the limit.

Operator Response: Because messages are being backed up in the system and WQEs are not being freed, issue a DISPLAY CONSOLES command to see if some consoles have an unusually large WTO message buffer count. If so:

- If the console is a display console, then put it in roll mode.
- Satisfy any outstanding intervention-required messages. (A paper-producing console might be out of paper.)
- Nothing might be wrong; the type of jobs that are running might cause message traffic to be heavy. In this case, on the next IPL, increase the value of WTOBFRS in the reply to message IEA101A.

To reduce the number of WQEs used until a re-IPL is feasible, it might be necessary to cancel some jobs in execution or reduce the use of DISPLAY commands.

The D C command may be used to detect backed up consoles. If there are backed up consoles, use the K Q and/or K S command to alleviate the problem.

Problem Determination: Table I, items 2, 7ad, 11, 29.

IEA405E WTO BUFFER SHORTAGE - 80% FULL

Explanation: The number of WQEs currently in use is 80% of the limit value specified at IPL.

System Action: None.

Operator Response: Because messages are being backed up in the system and WQEs are not being freed, issue a DISPLAY CONSOLES command to see if some consoles have an unusually large WTO message buffer count. If so:

- If the console is a display console, then put it in roll mode.
- Satisfy any outstanding intervention-required messages. (A paper-producing console might be out of paper.)
- Nothing might be wrong; the type of jobs that are running might cause message traffic to be heavy. In this case, on the next IPL, increase the value of WTOBFRS in the reply to message IEA101A.

The D C command may be used to detect backed up consoles. If there are backed up consoles, use the K Q and/or K S command to alleviate the problem.

Problem Determination: Table I, items 2, 7ad, 11, 29.

IEA406I WTO BUFFER SHORTAGE RELIEVED

Explanation: The shortage of console message buffers (WQEs) has been relieved. The shortage has been previously indicated by message IEA405E and/or IEA404A.

System Action: None.

Operator Response: None.

Problem Determination: Table I, items 2, 7ad, 11, 29.

IEA407I DIRECTORY ENTRY FOR MODULE mem INVALID IN SYS1.LPALIB

Explanation: The nucleus initialization program (NIP) has encountered an invalid directory entry for member mem while attempting to build the link pack directory from SYS1.LPALIB.

System Action: Processing continues with the next member.

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

Programmer Response: Determine the cause of the invalid directory entry, and re-linkedit member mem, if necessary.

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

IEA408I ALTERNATE NUCLEUS 'x' LOADED

Explanation: This message is issued during system initialization. It informs the operator that the alternate nucleus x has been loaded, where x identifies member IEANUC0x of SYS1.NUCLEUS.

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

Operator Response: None.

IEA409I UNABLE TO MOUNT MSS VOLUME ser ON Vxxx, DEVICE NOT ACCESSIBLE

Explanation: A VATLSTxx (Volume Attribute List) entry specified that an MSS volume, ser, was to be mounted on device xxx. No path exists to the device, or the device is inoperative. The message can also be issued if the unit was offline and the path validation routine was not in the system.

System Action: The VATLSTxx entry specifying volume ser is ignored. Processing continues with the remaining VATLSTxx entries.

Operator Response: None.

IEA410E CHANNEL (x,y) FORCED OFFLINE

Explanation: During a machine check interruption it was discovered that channel x of channel set y has become unavailable for use. The channel will not be available for the duration of the IPL.

System Action: The channel is taken offline. Further processing analyzes the status of the devices on channel x of channel set y. Message IEA004I is issued if there are no alternate paths available. This message is not removed automatically from a display console. It must be removed manually.

Operator Response: None. Probable hardware error.

Problem Determination: Table I, items 2, 18, 30.

IEA411I SLIP TRAP ID=xxxx DISABLED FOR { **MATCHLIM** / **PRCNTLIM** }

Explanation: SLIP processing has disabled the SLIP trap identified by xxxx for one of the following reasons:

- The conditions for this SLIP trap were met as many times as specified, directly or by default, in the MATCHLIM operand of the trap definition.
- The percentage of system processing time used to process PER interrupts exceeded the maximum as specified, directly or by default, in the PRCNTLIM operand of the trap definition.

System Action: SLIP processing disables the SLIP trap. If the trap is a PER trap, SLIP processing deactivates PER for the system. An SVC dump is scheduled if the trap was defined with the ACTION=TRDUMP option.

Programmer Response: None.

IEA412I SLIP TRAP ID=xxxx, yyy SDUMPS NOT SCHEDULED

Explanation: SLIP processing attempted to issue one or more dumps for the SLIP trap identified by xxxx, but one of the following conditions exists:

- The internal resources required to process the SVC dump(s) are not available because the resources are currently being used to process another SVC dump. This situation can only occur if the SUMLIST or LIST option was specified in the trap definition.
- The SDUMP macro instruction was issued, but another dump is in progress, all the dump data sets are full, or the system is set to ignore requests for SVC dumps.

In the message, yyy is the number of dumps that cannot be scheduled.

System Action: SLIP processing continues. The SVC dumps are not produced.

Programmer Response: None.

IEA413I SLIP TRAP ID=xxxx DATA UNAVAILABLE

Explanation: While checking current conditions to see if a match is present for the SLIP trap identified by xxxx, the SLIP processor was unable to access data in the target location. (The target location was specified in the DATA operand of the trap definition.) Either the data itself or an indirect pointer to the data might be paged out.

A count is kept of the number of times the data is unavailable to the SLIP processor.

If the SLIP trap is a PER trap, this message is only issued the first time the data is unavailable. Otherwise, a message is issued each time the data is unavailable.

System Action: SLIP processing continues. The current conditions do not meet the criteria for a match.

Programmer Response: None. The current value of the unavailable data counter can be displayed using the DISPLAY SLIP=xxxx command.

IEA414I SLIP UNABLE TO DEACTIVATE PER

Explanation: The SLIP global PER activation/deactivation routine encountered an error while attempting to deactivate PER in the system because of a previous error in this routine. Message IEE743I precedes this message.

System Action: SLIP processing schedules an SVC dump. The status of the following resources that control PER in the system is unknown:

- PER control registers
- PER bit in the old PSWs for each processor
- PER bit in the PSWs that are stored in RBs
- PER bit in the SVC, external, and I/O new PSWs for each processor
- PER bit in the ASCB for each address space

Thus, PER interrupts might continue to occur. Although they are not processed by the SLIP processor, they can cause system degradation.

Programmer Response: You might be able to correct the status of the resources that control PER by setting and then disabling a PER trap for an address space that is not currently active in the system. If the status of the resources cannot be corrected, monitor the performance of the system to be sure it is operating within acceptable limits. Examine the dump provided and take the appropriate action.

Problem Determination: Table I, items 2, 16, 18, 29, 33.

IEA415I SLIP ERROR ATTEMPTING TO ACTIVATE/DEACTIVATE PER, DUMP SCHEDULED

Explanation: The SLIP local PER activation/deactivation routine encountered an error while attempting to activate or deactivate PER in an address space. The accompanying SVC dump identifies the address space.

System Action: SLIP processing schedules an SVC dump. The status of PER in the address space in which the SLIP routine was executing is unknown. If the error occurred while attempting to set or enable a PER trap, the trap might not be monitoring this address space. If the error occurred while attempting to disable or delete a PER trap, PER interrupts might continue to occur in this address space, causing system degradation; however, the interrupts are not processed by the SLIP processor.

Programmer Response: You might be able to correct the status of PER in the address space. If the error occurred while attempting to set or enable a PER trap, use the SLIP MOD command to disable the same trap and then enable it. If the error occurred while attempting to disable or delete a PER trap use the SLIP SET and SLIP MOD commands to set and then disable a PER trap for an address space that is not currently active in the system.

If this status of PER cannot be corrected, examine the dump provided and take the appropriate response.

Problem Determination: Table I, items 2, 16, 18, 29, 33.

IEA418I IOS KEY WORD PARAMETER INVALID

Explanation: The IOS key word used in response to message IEA101A SPECIFY SYSTEM PARAMETERS FOR RELEASE xx.yy.zzz is invalid. The key word must be specified as IOS=xx, where xx is two alphanumeric characters used to specify the parmlib member IECIOSxx, which contains the options to be used by the I/O supervisor.

System Action: The operator is prompted for the correct value with message IEA332A.

Operator Response: Reply to the message IEA332A.

Programmer Response: If the incorrect IOS parameter was specified in SYS1.PARMLIB member IEASYSxx, correct the specification.

Problem Determination: Table I, items 2 and 26c.

IEA419I ERROR -- IECIOSxx RECORD n -
{ dddddddd }
{ I/O ERROR }

Explanation: An error has been found in the SYS1.PARMLIB member IECIOSxx. The xx indicates the exact member as specified by the operator, the n indicates the sequence number of the record on which the error occurred. In the case of a syntax error, dddddddd represents either an invalid verb, operand, or delimiter. If it is an invalid delimiter, up to 8 characters (possibly valid) following the invalid delimiter are indicated in this field. I/O ERROR indicates that an I/O error occurred in reading record n.

System Action: If I/O ERROR appears, processing is terminated for this member. The records already processed are used as specified. In the case of a syntax error, only the record in error is ignored and processing continues.

Operator Response: Report this error to the system programmer.

Programmer Response: Correct the error in IECIOSxx.

Problem Determination: Table I, items 2 and 26c.

IEA420A NO FULL CAPABILITY CONSOLES,REASON=xxxx
TO RESTORE MASTER CONSOLE:
1) PRESS ENTER, REQUEST, OR END ON ANY AVAILABLE CONSOLE
2) PRESS THE EXTERNAL INTERRUPT KEY

Explanation: Multiple console support (MCS) is trying to do a console switch for the reason shown in the REASON=xxxx field, but no full capability console is available to MCS. A no-consoles condition has occurred. The possible values for xxxx are:

xxxx	Explanation
EXT	The external interrupt key was pressed.
IOER	An I/O error occurred on the failing console.
SWER	A software error occurred for the failing console.
VMST	A VARY MSTCONS command was issued.
OPER	An open failure occurred for the console.
ACR	Alternate CPU recovery forced the console switch.
VCHN	A VARY CH command was issued.
VCPU	A VARY CPU command was issued.

System Action: The console communications task waits until the no-consoles condition is resolved. A backup of write-to-operator queue elements (WQE's) occurs as WQE's are not freed. When the limit of WQE's (specified at IPL time) is reached, system processing will slow down and eventually stop, unless the no-consoles condition is resolved.

Operator Response: To resolve the no-consoles condition and recover the master console, perform the operations indicated in the message. If the no-consoles condition continues, repeat the indicated steps on a different device that was specified as a console at system generation. If no device is capable of becoming a console, re-IPL the system.

Problem Determination: Table I, items 2, 7d, 11, 13, 16, and 18.

IEA421E START STOPPED PROCESSORS

Explanation: The system has recovered from the situations described by wait state codes 04C, 04D, 067, 069 or 06E or messages IEA438A, IEA439D, IEA067A, IEA069A, IEA072I or IEA019A.

Operator Response: Restart the processors stopped during the recovery processing for situations described by wait codes 04C, 04D, 067, or 069 or 06E or messages IEA438A, IEA439D, IEA019A, IEA067A, IEA069A, or IEA072I.

System Action: Processing continues. This message is not removed automatically from a display console, and must be manually removed.

Problem Determination: Table I, items 2, 18, and 30.

IEA422I ABEND IN IEAVTJBN DURING PROCESSING FOR SLIP

Explanation: The SLIP PER selection interface routine encountered an error while trying to determine if PER should be active for a particular address space. The accompanying SVC dump identifies the address space.

System Action: SLIP processing schedules an SVC dump. The status of PER in the address space identified in the dump is unknown. PER might not be active in an address space where it should be active or it might be active in an address space where it should not be active. In the latter case, PER interrupts might

continue to occur, causing system degradation; however, the interrupts are not processed by the SLIP processor.

Programmer Response: Examine the dump and take the appropriate action.

Problem Determination: Table I, items 2, 16, 18, 29 and 33.

IEA423I ERROR IN IEECB915

Explanation: An error occurred in module IEECB915. This module is the interface between the SLIP processor module (IEAVTSLP) and the communication routine in the SLIP command processor (IEECB905). Information about the cause of the problem can be found in the SYS1.LOGREC data set.

System Action: Module IEECB915 terminates, and an error record is written to the SYS1.LOGREC data set. Messages generated by the SLIP processor module cannot be issued. The messages are held until the communication routine in the command processor receives control at a later time; for example, when a trap is deleted.

Programmer Response: None. If the problem recurs, follow the instruction under Problem Determination.

Problem Determination: Table I, items 18, 29.

IEA424I SLIP ERROR DURING PER ACTIVATION/DEACTIVATION, MODEL PSA NOT UPDATED

Explanation: The SLIP global PER activation/deactivation routine was not able to page-fix the model PSA (prefix storage area) and therefore could not update the PER bit in the external, SVC, and I/O new PSWs in the model PSA.

System Action: If a processor is varied online, the PER bit in the external SVC, and I/O new PSWs in the PSA associated with that processor will be incorrect.

Programmer Response: Follow the Problem Determination instructions and contact IBM for programming support.

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

IEA427A xxx FAILURE ON PATH (cuu,csid) REPLY WITH RECOVERY OPTION

Explanation: A failure occurred along a path to a device; xxx is one of the following to describe the failure:

CONTROL UNIT
A control unit was inoperative.

CHANNEL
The failure occurred in a channel.

CONTROLLER
A controller was inoperative.

UNDETERMINED
An undetermined error

The failing path is identified in the message by the device address cuu and the channel set ID csid. No device is reserved on the path and no I/O operation is active on the path to indicate which system owns the device on the failing path.

System Action: The system quiesces the device. All subsequent requests for the device are held until the system received the reply to this message.

Operator Response: Verify that the device is owned by this system to ensure that your reply does not usurp another system's ownership of the device.

Respond with one of the following replies when the message text contains CONTROL UNIT, CHANNEL, or UNDETERMINED:

'YES' Use this reply to try to recover access to the device through an alternate path, if an alternate path exists. Because the system uses the unconditional reserve command to gain access to the device, the operator *must* do the following before replying YES:

- Issue the QUIESCE command on all other systems that share the device with this system and have the device online.
- Make sure these QUIESCE commands are successful.

Once the other systems are successfully quiesced, respond YES. The system will attempt recovery. If recovery is successful, message IEA428I displays the alternate path. The system takes the device out of the quiesced state and tries to restart the device. If the restart command is not successful, the system proceeds as if the reply were NO.

Warning: Data set integrity might be lost if the device is online to another system and that system is not quiesced prior to replying YES.

'NO' Use this reply to box the device. Boxing means:

- I/O on the device is terminated.
- Any new I/O requests result in permanent I/O errors.
- No new allocations are done for the device.
- If the device was online, it is marked pending offline. The device goes offline when these conditions occur, in this order:
  1. The device is no longer allocated to any job.
  2. Allocation processing allocates any device in the system.

If the device was offline, it remains offline.

Messages IEA429I and IEA026I are issued. The device cannot be allocated again until the VARY command is used to make the device available.

'NOOP' Use this reply to attempt to restart the device without making any attempt at recovery. If the error recurs, this message is issued again.

Respond as follows when the message text contains CONTROLLER:

1. VARY the path offline.

   If the VARY PATH command is not successful, physically disable the path by turning the interface switch at the control unit to DISABLE. Do not return the switch to ENABLE until you re-IPL the system.

2. Reply NOOP to this message.

IEA428I DEVICE (cuu,csid) HAS BEEN RECOVERED THROUGH ALTERNATE PATH (nuu,csid)

Explanation: A failure was previously detected along a path to a device. The path was reserved for the system or was in use by the system. The system has now recovered access to the device through an alternate path. The failing path is identified in the message by device address cuu and channel set ID csid. The alternate path is identified by device address cuu and channel set ID csid.

System Action: If a channel program was active at the time the failure occurred, the program is restarted.

Operator Response: Probable hardware error along the failing path. Contact hardware support personnel.

IEA429I DEVICE (cuu,csid) COULD NOT BE RECOVERED THROUGH AN ALTERNATE PATH

Explanation: A failure was previously detected along a path to a device. The path was reserved for the system or was in use by the system. An attempt to recover access to the device through an alternate path was not successful for one of the following reasons:

- No alternate paths were available for the device.
- The unconditional reserve command is not supported by the DASD hardware.
- No recovery was requested.

The failing path is identified in the message by device address cuu and channel set ID csid.

System Action: If a channel program was active at the time the failure originally occurred, the program is posted with a permanent error condition.

Operator Response: Probable hardware error along the failing path. Contact hardware support personnel.

IEA438A CHANNEL RECOVERY IN PROGRESS. STOP ALL SHARING SYSTEMS. CHANNEL SET = n. REPLY 'U' AFTER ALL SHARING SYSTEMS HAVE BEEN STOPPED.

Explanation: An I/O interrupt indicates that a channel in channel set n is unavailable for use. At least one device is reserved on or assigned to the failing channel.

In order to maintain data integrity for the devices or volumes on the devices attached to the failing channel, all systems that share devices with this system must be stopped before recovery processing continues.

System Action: The processor waits for the operator to reply. When the reply is received, the system attempts to recover the failing channel.

If recovery processing is successful, the channel is available for use and the reserved or assigned devices are rereserved or reassigned on the channel. Any waiting or active I/O is restarted using the channel.

If recovery processing is not successful, the channel is forced offline and message IEA410E is issued. Each device reserved on or assigned to the channel is rereserved or reassigned over an alternate path. If a device cannot be rereserved or reassigned, it is boxed (forced offline), message IEA026I is issued, and all I/O requests for the device are terminated in error until the device is varied online. Any waiting or active I/O is restarted on alternate paths. If an alternate path is not available, message IEA004I is issued and the I/O is not completed.

Message IEA421E is issued.

Operator Response: Stop all systems that share any devices with this system. Then, reply 'U' to continue recovery processing on this processor. The stopped systems can be restarted after message IEA421E appears.

Problem Determination: Table I, items 2, 18, 30.

IEA439D CHANNEL RECOVERY IN PROCESS. STOP ALL SHARING SYSTEMS. CHANNEL SET = n. SHOULD THE FOLLOWING CHANNELS BE RECOVERED? REPLY 'Y' OR 'N' AFTER ALL SHARING SYSTEMS HAVE BEEN STOPPED a,b,c...

Explanation: A machine check interruption routine indicates that a group of channels in channel set n is temporarily unavailable. Devices are reserved on or assigned to these channels. The message identifies the failing channels.

In order to maintain data integrity for the devices or volumes on the devices attached to the unavailable channels, all systems that share devices with this system must be stopped before recovery processing continues.

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

If the reply is 'N', the indicated channels are forced offline and message IEA410E is issued for each channel.

Each device reserved on or assigned to one of the channels is rereserved or reassigned over an alternate path. If a device cannot be rereserved, or reassigned it is boxed (forced offline), message IEA026I is issued, and all I/O requests for the device are terminated in error until the device is varied online. Any waiting or active I/O is restarted on alternate paths. If an alternate path is not available, message IEA004I is issued and the I/O is not completed.

If the reply is 'Y', the processor attempts to recover the indicated channels. Wait 60 seconds to allow recovery processing to complete.

If recovery is successful, the channels are available for use and the reserved or assigned devices are rereserved on or assigned to these channels. Any waiting or active I/O is restarted using these channels.

If recovery processing is not successful, the system proceeds as if the reply were 'N'.

Message IEA421E is issued.

Operator Response: Stop all systems that share any devices with this system. Then, reply 'N' to force the channels offline or reply 'Y' to attempt to recover the channels. The stopped systems can be restarted after message IEA421E appears.

Problem Determination: Table I, items 2, 18, 30.

IEA440A PROCESSOR RECOVERY IN PROGRESS. STOP SYSTEMS SHARING THE FOLLOWING DEVICES: ddd[,ddd]...

Explanation: A processor has failed. The devices listed in this message are reserved on or assigned to channels that can only be accessed by the failing processor.

In order to maintain data integrity, all systems that share the devices listed in the message must be stopped while the system attempts to recover the device reservations or assignments. This message is followed by message IEE125A.

System Action: The processor waits for the operator to reply to message IEE125A. When the reply is received, the system attempts to rereserve or reassign each device over an alternate path on a channel that can be accessed by the operative processor. If an alternate path is available, the device remains online. If an alternate path is not available, the device is boxed (forced offline) and message IEA026I is issued.

Operator Response: Stop all systems that share the devices listed in the message. Then, reply 'U' to message IEE125A to continue recovery processing. Restart the stopped systems after message IEA858E is issued.

Problem Determination: Table I, items 2, 11, 30.

IEA442E ddd REPORTS DISABLED INTERFACE ON nn -- FAULT CODE = cccc -- NOTIFY CE

Explanation: An I/O request failed because one of the pair of storage directors within a 3880 storage control unit is disabled. The operative storage director detects and reports the disabled status of the other. The meaning of the variables in the message text is as follows:

ddd The address of the I/O device that reported the disabled status of storage director nn.

nn The identification number of the disabled storage director.

cccc The fault code that the customer engineer uses to find the reason why the storage director is disabled.

System Action: The system records the disabled status of storage director nn in SYS1.LOGREC and retries the I/O request on device ddd.

Operator Response: Notify your customer engineer.

Problem Determination: Table I, items 2, 18, and 30. If storage director nn is not a part of the system that issued this message, also complete Table I, items 2, 18, and 30, for the system that includes storage director nn.

IEA443I DYNAMIC PATHING NOT AVAILABLE -- REASON CODE xx

Explanation: During an IPL, dynamic pathing could not be established. The possible values for reason code xx are:

Reason Code	Explanation
04	A recovery routine could not be established.
08	Initialization processing could not establish IECVDPTH as a listener for the VARY ONLINE and VARY OFFLINE events.
12	IOS processing was unable to create the path group ID, or was unable to obtain storage for the path group ID.

System Action: Dynamic pathing is not available for the current IPL. Processing continues.

Operator Response: Notify the system programmer.

Programmer Response: If you want to establish dynamic pathing, correct the problem and repeat the IPL.

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

IEA444I DYNAMIC PATHING NOT { OPERATIONAL ON / REMOVED FROM } { DEVICE ddd / PATH (ddd,y) }

Explanation: A VARY command was entered, or the system invoked channel recovery processing. As part of reconfiguration processing or channel recovery processing, the dynamic pathing module (IECVDPTH) made an unsuccessful attempt to establish or remove a path or path group. The explanation of each of the possible message texts is:

DYNAMIC PATHING NOT OPERATIONAL ON DEVICE ddd

One of the following occurred:

- An attempt to establish dynamic pathing for device ddd was not successful. The path group was not established.
- An attempt to add a path or to remove a path from an established path group was not successful. IECVDPTH disbanded the path group; that is, IECVDPTH removed the path group ID from all of the paths to device ddd.

DYNAMIC PATHING NOT OPERATIONAL ON PATH(ddd,y)

An attempt to add path(ddd,y) to the path group was not successful, where path(ddd,y) is the path to device ddd on channel set y. IECVDPTH then made an unsuccessful attempt to disband the path group. However, path(ddd,y) might have been varied online successfully even though it could not be added to the path group. If path(ddd,y) was varied online, the device identifies the path as belonging to a system other than the one to which the established path group belongs.

DYNAMIC PATHING NOT REMOVED FROM DEVICE ddd

An attempt to remove the path group from device ddd was not successful. IECVDPTH made an unsuccessful attempt to disband the path group.

DYNAMIC PATHING NOT REMOVED FROM PATH(ddd,y)

An attempt to remove path(ddd,y) from its path group was not successful, where path(ddd,y) is the path to device ddd on channel set y. IECVDPTH made an unsuccessful attempt to disband the path group.

System Action: Processing continues.

Operator Response: Notify the system programmer.

Programmer Response: If there are a number of hardware entries for device ddd in SYS1.LOGREC, probable hardware problem. If the path group ID information in the SYS1.LOGREC OBR-DPA record is not correct, probable software problem. Contact the appropriate IBM representative for assistance.

Problem Determination: Table I, items 2, 13, 29, and 30.

IEA446D CHANNEL RECOVERY IN PROGRESS. CHANNEL SET y. SHOULD THE FOLLOWING CHANNELS BE RECOVERED REPLY 'Y' OR 'N'
a b c

Explanation: A machine check interruption routine (IECVIRST) indicates that a group of channels in channel set y is temporarily unavailable. The channels are listed in the message text. There are no outstanding reserves on these channels.

This message asks the operator if he wants the system to do recovery processing for these channels.

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

If the reply in N, the system forces the channels offline and issues message IEA410E for each of them.

If the reply is Y, the system attempts to recover the channels. If the recovery is not successful, the system proceeds as if the operator had replied N.

Operator Response: Reply Y or N. If you reply Y, allow 60 seconds for recovery processing to complete.

Programmer Response: None.

IEA447E 1,PATH cuu TO DEVICE ss-cc-d UNAVAILABLE, DATA PATH SWITCH MAY BE OPEN

IEA447E n,PATH cuu TO DEVICE ss-cc-d UNAVAILABLE

Explanation: Device ss-cc-d cannot be reached through path cuu because of one of the following:

- A hardware failure
- The data path switch for the device is open

The fields in the message are as follows:

cuu — The path identifier of the unavailable path.

ss-cc-d — The storage director identifier of the storage director that detected the problem.

n = 1 — The data path switch is probably open.

n = 2 — All online paths are experiencing the failure.

n = 3 — Some, but not all, of the online paths are experiencing the failure.

System Action: Processing continues.

Operator Response: If n = 1, close the data path switch.

If n = 2, VARY offline device ss-cc-d and notify the system programmer.

If n = 3, VARY offline path cuu and notify the system programmer.

Problem Determination: None.

IEA448I 1,SENSE DATA LOGGED FOR DEVICE ss-cc-d

IEA448I 2,SENSE DATA LOGGED FOR CONTROLLER ss-cc-X

Explanation: The specified device or controller has returned environmental data. The data has been written to SYS1.LOGREC.

ss-cc-d — Storage director identifier of the storage director that caused the data to be logged.

ss-cc-X — Controller identifier of the controller that caused the data to be logged.

System Action: Processing continues.

Operator Response: Notify the system programmer.

Problem Determination: None.

IEA449A RESET WRITE INHIBIT SWITCH ON PAGING DEVICE - cuu

Explanation: The 3880 Storage Control Model 11 detected a 3350 write inhibit switch in the read position. cuu is the path ID of the path that reported the error. The last digit of cuu indicates the physical 3350. The possible values of the last digit of cuu in hexadecimal and the meaning of each follow:

Digit	Meaning
0 or 8	Device 0
1 or 9	Device 1
2 or A	Device 2
3 or B	Device 3
4 or C	Device 4
5 or D	Device 5
6 or E	Device 6
7 or F	Device 7

System Action: The error recovery procedure (ERP) reissues the channel command words (CCWs) that failed.

Operator Response: Set the 3350 write inhibit switch to the R/W (read/write) position.

When the write inhibit switch has been set to the R/W position, reply 'U' to this message. This message may be followed by another IEA449A message. If you receive another IEA449A message after setting the switch, reply 'U' to continue processing.

Programmer Response: None.

Problem Determination: Table I, items 2, 18, 30.

IEA451I MICROCODE LOGICAL ERROR - FAULT CODE = cccc-ss-xx-xx

Explanation: An internal logic error occurred during a subsystem storage operation on the 3880 cache control units.

The fields in the message are:

cccc The fault symptom code from sense bytes 22 and 23.

ss-xx-xx The physical identifier of the reporting storage director.

System Action: The system terminates I/O processing for this request. If the error occurred in the 3880 cache control units, subsystem storage is taken offline, and future I/O requests are processed directly with the DASD.

Operator Response: The system issues this message because of a microcode error. Follow installation procedures to take corrective action.

Programmer Response: If the error occurred on the Model 11, reconfigure the system to move the paging data to another subsystem. Otherwise, no action is required.

Problem Determination: Table I, items 2, 18, 30.

IEA452I SUBSYSTEM STORAGE EQUIPMENT CHECK - FAULT CODE = cccc-ss-xx-xx

Explanation: An equipment check occurred during a subsystem storage operation on the 3880 cache control units.

The fields in the message are:

cccc The fault symptom code from sense bytes 22 and 23.

ss-xx-xx The physical identifier of the reporting storage director.

System Action: The system terminates I/O processing for this request.

Operator Response: The system issues this message because of a hardware error. Follow installation procedures to take corrective action.

Programmer Response: None.

Problem Determination: Table I, items 2, 18, 30.

IEA453I SUBSYSTEM STORAGE AVAILABILITY THRESHOLD CROSSED - cccc-ss-xx-xx

Explanation: The amount of subsystem storage offline in the 3880 cache control units crossed a reporting boundary making a portion of the subsystem storage unusable.

The fields in the message are:

cccc The fault symptom code from sense bytes 22 and 23.

ss-xx-xx The physical identifier of the reporting storage director.

System Action: The error recovery procedure (ERP) reissues the channel command words (CCWs) that failed.

Operator Response: The system issues this message because of a hardware error. The subsystem storage remains operational, allowing service to be deferred until it is convenient. Follow installation procedures to take corrective action.

Programmer Response: None.

Problem Determination: Table I, items 2, 18, 30.

IEA454I SUBSYSTEM STORAGE IS UNUSABLE - FAULT CODE = cccc-ss-xx-xx

Explanation: Subsystem storage in the 3880 cache control units is unusable due to previously reported failures of a device or subsystem storage. The failures are recorded in the error recording data set.

The fields in the message are:

cccc The fault symptom code from sense bytes 22 and 23.

ss-xx-xx The physical identifier of the reporting storage director.

System Action: The system terminates I/O processing for this request. If the problem occurred in the 3880 cache control units, subsystem storage is taken offline, and future I/O requests are processed directly with the DASD.

Operator Response: The system issues this message because of a hardware error. Follow installation procedures to take corrective action.

Programmer Response: If the problem occurred on the 3880 Model 11, reconfigure the system to move the paging data to another subsystem. Otherwise, no action is required.

Problem Determination: Table I, items 2, 18, 30.

IEA455I SUBSYSTEM STORAGE MUST BE INITIALIZED - FAULT CODE = cccc-ss-xx-xx

Explanation: An error occurred during a subsystem storage operation on the 3880 Storage Control Model 11. The data in the cache may not be valid.

The fields in the message are:

cccc The fault symptom code from sense bytes 22 and 23.

ss-xx-xx The physical identifier of the reporting storage director.

System Action: The system terminates I/O processing for this request.

Operator Response: The system issues this message because of a hardware error. Re-IPL the system to reinitialize the subsystem storage. Follow installation procedures to take corrective action.

Programmer Response: If the subsystem storage remains unusable following the system IPL, reconfigure the system to move the paging data to another subsystem.

Problem Determination: Table I, items 2, 18, 30.

IEA457I TRACK FORMAT NOT SUPPORTED FOR PAGING - DEVICE ddd - cccc-ss-xx-xx

Explanation: The 3880 Storage Control Model 11 detected an invalid track format or no-record-found error.

The fields in the message are:

ddd The device number for the DASD.

cccc The fault symptom code from sense bytes 22 and 23.

ss-xx-xx The physical identifier of the reporting storage director.

System Action: The error recovery procedure (ERP) reissues the channel command words (CCWs) that failed.

Operator Response: Notify the system programmer of this message.

Programmer Response: Format the paging packs attached to storage director 1 of the 3880 Model 11.

Problem Determination: Table I, items 2 and 29.

IEA458I STORAGE DIRECTOR COMMUNICATION FAILED - FAULT CODE = cccc-ss-xx-xx

Explanation: The 3880 cache control unit storage directors cannot communicate. cccc is the fault.

The fields in the message are:

cccc The fault symptom code from sense bytes 22 and 23.

ss-xx-xx The physical identifier of the reporting storage director.

System Action: The error recovery procedure (ERP) reissues the channel command words (CCWs) that failed.

Operator Response: If the problem occurred on the 3880 Control Unit, check the 3880 Enable/Disable switches to ensure that they are enabled. If the problem occurred on the 3880 Control Unit or if the 3880 switches are enabled, this problem is probably the result of a hardware failure. Follow installation procedures to take corrective action.

Programmer Response: None.

Problem Determination: Table I, items 2, 18, 30.

IEA459I CACHING RESET - REDEFINE BOUND AREAS/NON CACHING DEVICES - cuu

Explanation: Caching was automatically reinitialized by the 3880 Control Unit following a storage director communication timeout or a subsystem storage control structure failure. In the message text, cuu is the logical address of the reporting path.

System Action: The error recovery procedure (ERP) reissues the channel command word (CCW) that caused this message to be issued. Bound areas of cache and the non-caching state of the devices were reset.

Operator Response: If any bound areas or non-caching devices are required, they must be established. If none are required, no action is required.

Programmer Response: None.

Problem Determination: None.

IEA466I PATH(cuu,x) PERMANENT I/O ERROR,FAULT CODE=cccc

Explanation: The system detected a permanent I/O error associated with one path for a device with multiple paths. The fields in the message are:

cuu Path identifier for the path associated with the error.
x Channel set of the path associated with the error.
cccc Fault code for the error.

System Action: The system used another path for the I/O request, and the request was completed successfully on the other path.

Operator Response: Notify the system programmer. If the error persists, vary the path offline.

Programmer Response: Contact IBM for hardware support, if needed.

Problem Determination: Table I, items 2, 18, 30.

IEA467E PATH(cuu,x)WRITE INHIBITED(type) FOR ALL WRITE OPERATIONS

Explanation: The system detected a hardware write error associated with a path for which recovery was unsuccessful. Subsequent writes to that device or any other device on that path could result in loss of data.

The fields in the message are:

cuu Path identifier for the path associated with the error.

x Channel set of the path associated with the error.

type Type of interface associated with the storage director against which the Diagnostic Control Command Inhibiting Write Operations was issued. The type is one of the following:

SD (storage director)
CHANNEL
CONTROLLER

System Action: The system varies the path offline, then retries the failing chain on another path to the same device, if another path is available.

Operator Response: Follow established installation procedures to correct the hardware problem. Notify the system programmer.

The following is the recovery procedure if no online paths remain:

1. Vary force offline one of the devices attached to the interface.
2. Cancel all jobs that are using the device.
3. Vary online at least one path to the device.
4. Vary the device online and make sure that no jobs allocate it.
5. Issue an online ICKDSF CONTROL WRITEALLOW command to one device attached to the previously failing interface.
6. Now vary online all remaining paths that the system had varied offline.

The following is the recovery procedure if one or more paths remain online:

1. Issue an online ICKDSF CONTROL WRITEALLOW command to one device attached to the previously failing interface.
2. Now vary online all remaining paths that the system had varied offline.

Programmer Response: After the hardware malfunction is corrected, submit a job to run an ICKDSF CONTROL command to reset the fenced condition to one of the devices attached to the fenced interface. See *Device Support Facilities Users Guide and Reference* for the CONTROL command.

Problem Determination: Table I, items 2, 18, 30.

IEA468E WRITE INHIBITED PATH(cuu,x) ENCOUNTERED

Explanation: The system tried to issue I/O to a device through a path that was previously write inhibited.

The fields in the message are:

cuu Path identifier for the path.
x Channel set of the path.

System Action: The system varies the path offline, then retries the failing chain on another path to the same device, if another path is available.

Operator Response: Follow established installation procedures to correct the hardware problem. Notify the system programmer.

See message IEA467E for recovery procedures.

Programmer Response: After the hardware malfunction is corrected, submit a job to run an ICKDSF CONTROL command to reset the fenced condition to one of the devices attached to the fenced interface. See *Device Support Facilities Users Guide and Reference* for the CONTROL command.

Problem Determination: Table I, items 2, 18, 30.

IEA469I PATH(cuu,x) HAS BEEN VARIED OFFLINE

Explanation: The system varied a path offline because of an I/O error that occurred on that path.

The fields in the message are:

cuu Path identifier for the path.
x Channel set of the path.

System Action: The system varies the path offline, then retries the failing chain on another path to the same device, if another path is available.

Operator Response: Notify the system programmer.

Programmer Response: None.

Problem Determination: Table I, items 2, 18, 30.

IEA470W THE PROCESSOR CONTROLLER HAS FAILED. SOME CRITICAL SYSTEM FUNCTIONS HAVE FAILED. AN ORDERLY SHUTDOWN OF THE SYSTEM SHOULD BE IMMEDIATELY ATTEMPTED IN ORDER TO MINIMIZE THE IMPACT OF THIS FAILURE.

Explanation: The processor controller (also known as the MSSF, maintenance service and support facility) has encountered a hardware failure. MVS cannot function when the processor controller is not operational.

System Action: A complete MVS system failure is imminent. MVS will not remain functional for any predictable period of time.

Operator Response: If MVS is still responding to your commands, attempt an orderly shutdown, following the procedures of your installation. Notify the system programmer.

Programmer Response: This is a hardware problem. Contact IBM for support.

IEA500A RESTART INTERRUPT DURING
jjj sss
UNKNOWN JOBNAME
ASID = asid MODE = { **TASK** / **SRB** / **WAIT** / ***** } **PSW = ppp...pp**
REPLY RESUME TO RESUME INTERRUPTED PROGRAM OR ABEND TO ABEND INTERRUPTED PROGRAM

Explanation: The operator caused a restart interruption and specified REASON 0. This message identifies the work that was in progress at the time of the interruption, and asks the operator if he wants to resume that work or terminate it.

The meaning of the fields that identify the work are:

jjj the jobname
sss the stepname
asid the address space ID
MODE one of the following:

- TASK, if the work was running under a TCB
- SRB, if the work was running under an SRB
- WAIT, if the system wait task had control
- *, if it was none of the above

ppp...pp the PSW at the time of the restart interruption

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

Operator Response: Reply RESUME if you want the job that was in progress to continue. Reply ABEND to terminate the job with system completion code 071.

Programmer Response: None.

IEA501I SYSTEM NON-DISPATCHABILITY INDICATOR IS OFF.
WAS ON, IS NOW BEING RESET.
[WRITE-TO-OPERATOR BUFFER LIMIT EXCEEDED. ISSUE K M,MLIM COMMAND TO RAISE LIMIT.]
[NO BATCH JOBS OR TIME SHARING USERS FOUND. RECOMMEND YOU DISPLAY ACTIVE AND DISPLAY QUEUES.]

Explanation: The operator caused a restart interruption and specified REASON 1. REASON 1 tells the system to take certain diagnostic and repair actions. This message reports the results of some of those actions.

The first line tells what the system found when it checked the nondispatchability indicator (the CSDSYSND flag) -- either the system found the indicator off, or the system found it on and scheduled a routine to set it off and to mark all ASCBs dispatchable.

If the two lines beginning with the words WRITE-TO-OPERATOR BUFFER appear, the number of WTO buffers equals or exceeds the established limit.

If the lines beginning with the words NO BATCH JOBS appear, the system checked all ASCB's (address space control blocks), but found no batch jobs and no time sharing users. However, there may be started tasks in the system.

System Action: Restart processing continues.

Operator Response: If WRITE-TO-OPERATOR BUFFER LIMIT EXCEEDED appears, use the K M,REF command to display the limit, and the K M,MLIM=nnnn command to raise the limit.

If NO BATCH JOBS OR TIME SHARING USERS FOUND appears, and you expected to find some, use the D ACTIVE and D QUEUE commands to help identify the problem. For example, perhaps the job queues are being held and therefore no jobs can be initiated.

Programmer Response: None.

IEA502A RESTART REASON COULD NOT BE READ, REPLY WITH REASON CODE

Explanation: MVS experienced a restart interrupt and could not obtain the restart reason code from the MSSF (maintenance and service support facility).

System Action: MVS waits for the operator to respond.

Operator Response: Reply to this message with the same restart reason code that you entered on the system console when you requested a PSW restart. If you did not enter a restart reason code on the system console, reply 0.

IEA530I CPUID MISMATCH - CPUID xxxxxxxxxx USED

Explanation: (1) An IPL is being done on an attached processor system with the maintenance switch in the APU position, (2) The Mass Storage Control is being varied online with the Mass Storage Control processor offline but with the channel reconfiguration hardware active, or (3) the Mass Storage Control tables do not agree with the current configuration. For these cases, the CPUID of the processor with the Mass Storage Control interface and the CPUID in the Mass Storage Control tables do not agree. The CPUID from the Mass Storage Control tables was used.

System Action: Mass Storage System processing will continue with the CPUID from the Mass Storage Control tables.

Operator Response: Check if the CPUID to be used is valid for the system. If the reason is case 3 above, notify your system programmer because the Mass Storage Control tables are not defined correctly. do not run any jobs.

Problem Determination: Table I, items 2, 13, 17, and 29.

IEA531I UNABLE TO READ MSC TABLES - REASON CODE = xxx

Explanation: During the processing to bring the Mass Storage Control online (during either an IPL or a VARY MSC ONLINE), the Mass Storage Control tables could not be read.

System Action: Mass Storage System processing will continue with the CPUID of the processor with the Mass Storage Control interface.

Operator Response: Notify your system programmer.

Problem Determination: Table I, items 2, 13, and 30.

IEA532I UNABLE TO DETERMINE CPUID - CPUID xxxxxxxxxx USED

Explanation: During the processing to bring the Mass Storage Control online (during an IPL or a VARY MSC ONLINE), the CPUID could not be determined from the Mass Storage Control tables.

System Action: Mass Storage System processing will continue with the CPUID of the processor with the Mass Storage Control interface.

Operator Response: Notify your system programmer. The Mass Storage Control tables can be in error.

Problem Determination: Table I, items 2, 13, and 30.

IEA533I MSS INOPERATIVE. ICBMSG05 LOAD FAILED. ABEND CODE = xxx

Explanation: The LOAD macro issued ot load module ICBMSG05 failed. Mass Storage System Communicator initialization cannot complete.

System Action: Processing continues without the Mass Storage System.

Operator Response: Notify your system programmer. Vary online a Mass Storage Control to obtain Mass Storage System operation. While the Mass Storage System is inoperative, jobs calling for mass storage volumes will fail. Under these conditions, jobs that require the Mass Storage System should not be started.

Programmer Response: Take corrective action according to abend code in the message.

IEA534I MSS INOPERATIVE. ICBMISG05 GETMAIN FAILED. R/C = xxx

Explanation: A GETMAIN macro issued for SP245 storage failed during execution of ICBMSG05 Mass Storage System initialization code. This failure does not stop system initialization. However, the Mass Storage System will be inoperative until ICBMSG05 can successfully execute.

System Action: Processing continues with the Mass Storage System inoperative.

Operator Response: Contact your system programmer.

Programmer Response: Take corrective action according to the return code from the GETMAIN macro. If the failure conditions can be corrected and when the conditions are corrected notify the system operator to vary online the Mass Storage Control to restore Mass Storage System operations.

IEA538I MSC INITIALIZATION DELAYED - TOD CLOCK INVALID

Explanation: The TOD clock is invalid during MSC (mass storage control) initialization. MSC initialization is delayed until MSSC (mass storage system communicator) task initialization. MSC is initialized at this time whether or not the TOD clock is valid.

System Action: The system continues processing. Before MSSC task initialization, the system issues message IEA888A, which allows the operator to change the value of the TOD clock.

Operator Response: None for this message, but respond to message IEA888A.

IEA604A D ddd,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 ddd, in hexadecimal.

Operator Response: Demount the volume. Then respond as indicated for message IEA605A, which follows this message.

IEA605A M ddd,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 ddd.

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 ddd,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:

ddd
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.

IEA700I cde[-rc] { jjj / aaa } sss ff [ddddddd]

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

In the message text, the fields are:

cde
System completion code.

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

jjj
job name

sss
step name

ff
Flag byte. A '00' indicates that the GETMAIN or FREEMAIN macro instruction was entered via an SVC instruction. An '80' indicates that GETMAIN or FREEMAIN was entered via a branch and that job jjj has been replaced by branch address aaa.

aa
Return address of the calling routine from register 14 if the entry to GETMAIN or FREEMAIN was not via an SVC instruction.

ddddddd
Variable data in hexadecimal. Data is 3 to 5 full words in length.

The length and meaning of the hexadecimal data ddddddd is dependent on system completion code cde and reason code rc given in the message text. The meanings of the applicable reason codes are as follows:

cde	*rc*	*Meaning*
305	1	Specified virtual storage area was not in named subpool.
305	2	Specified subpool could not be found.
30A	1	Specified virtual storage area was not in named subpool.
30A	2	Specified subpool could not be found.
30A	4	Zero length was not specified for subpool FREEMAIN.
378	1	Specified virtual storage area was not in named subpool.
378	2	Specified subpool could not be found.
378	4	Zero length was not specified for subpool FREEMAIN.
40A		Subpool FREEMAIN for SQA, CSA, subpools 254 or 255, or invalid subpool; or problem program freeing subpool 0.
478		Subpool FREEMAIN for SQA, CSA, subpools 254 or 255, or invalid subpool, or problem program freeing subpool 0.
504		Length and address lists overlap.
	05	Length and address lists overlap.
604	1	Parameter list for the GETMAIN macro instruction contained an invalid address, or the address of the parameter list was invalid.
605	1	Parameter list for the FREEMAIN macro instruction contained an invalid address, or the address of the parameter list is invalid.
804	1	Requested amount of virtual storage was not available.
804	2	A negative length was specified.
	0A	1 Requested amount of virtual storage was not available.
878	1	Requested amount of virtual storage was not available.
878	2	A negative length was specified.
905		Address not multiple of 8.
90A		Address not multiple of 8.
978		Address not multiple of 8.
A05	1	The area being freed overlaps an area that is already free.
		of 4p A05 2 Part of the area being freed is still fixed in real storage.
A0A	1	The area being freed overlaps an area that is already free.
A0A	2	Part of the area being freed is still fixed in real storage.
A78	1	The area being freed overlaps an area that is already free.
A78	2	Part of the area being freed is still fixed in real storage.
B04		Problem program requests subpool 128 to 255 or authorized program requests invalid subpool.
B05		Problem program requests subpool 128 to 255 or authorized program requests invalid subpool.
B0A		Problem program requests subpool 128 to 255 or authorized program requests invalid subpool.
B78		Problem program requests subpool 128 to 255 or authorized program requests invalid subpool.
D05		No AQE when there should be one (LSQA not owned by requesting task).
D0A		No AQE when there should be one (LSQA not owned by requesting task).
D78		No AQE when there should be one (LSQA not owned by requesting task).

In the variable data field, word 1 contains the address of the currently addressable ASCB, and word 2 contains the address of the TCB to which the storage is related. The contents of words 3, 4, and 5 depends on system completion code cde and reason code rc:

cde	*rc*	*word 3*	*word 4*	*word 5*
305	1	x2	x5	
305	2	x2	x5	
30A	1	x2	x5	
30A	2	x2	x5	
30A	4	x2	x5	
40A		x2	x5	
378	1	x2	x5	
378	2	x2	x5	
378	4	x2	x5	
40A		x2	x5	
478		x2	x5	
504		x1		
505		x1		
604	1	x1		
605	1	x1		
804	1	x2	x3	
804	2	x2	x4	
80A	1	x2	x3	
878	1	x2	x3	
878	2	x2	x4	
905		x2	x5	
90A		x2	x5	
978		x2	x5	
A05	1	x2	x5	x7
A05	2	x2	x5	
A0A	1	x2	x5	x7
A0A	2	x2	x5	
A78	1	x2	x5	x7
A78	2	x2	x5	
B04		x2		
B05		x2	x5	
B0A		x2		
B78		x2		
D05		x2	x5	
D0A		x2	x5	
D78		x2	x5	

where:

x1- Address of the GETMAIN or 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.

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.

x3- Number of bytes in the largest available block of virtual storage in your region.

x4- Full length as specified.

x5- Beginning address of the virtual storage area to be freed.

x7- Number of bytes of overlap into free area.

Programmer Response: Refer to the explanation of completion code cde in the *VS2 System Codes* for the complete response to this message.

IEA703I cde[-rc] jjj sss MODULE ACCESSED mod

Explanation: During execution of a LINK, LOAD, ATTACH, or XCTL macro instruction, the control program encountered an error while loading module mod. The system completion code is cde. This message provides additional information on the error.

In the message text, the fields are:

cde
system completion code

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

jjj
job name

sss
step name

mod
the name of the module being accessed at the time of the error.

This message is issued for the following completion codes:

cde	*rc*	*Explanation of Reason Code*
106	0B	FETCH's FRR unexpectedly received control
106	0C	Not enough storage for FETCH to do GETMAIN
106	0D	Invalid record type in load module
106	0E	Invalid address in load module
106	0F	Uncorrectable input/output error
306	04	Program not found in indicated authorized library
306	08	Uncorrectable I/O error
306	0C	Authorized user requested a module which could not be found on an authorized library, but a module with the same name was found on an unauthorized library.
306	14	The LOAD macro instruction was issued with the GLOBAL=YES parameter, but the module to be loaded is not reentrant or is in an unauthorized library.
306	18	The LOAD macro instruction includes the GLOBAL=(YES,F) parameter for a module with page boundary alignment.
406		LINK, ATTACH, or XCTL to LOAD ONLY module
706		Load module marked by linkage editor as 'not executable'
806	00	The LOAD macro instruction was issued with the ADDR parameter or the LSEARCH=YES parameter, but the specified module could not be found.

806	04	Specified entry point not found
806	08	Uncorrectable input/output error
806	0C	SVC routine not in LPA
806	10	DCB not open or invalid for BLDL
906		Maximum use count exceeded
A06		Serial reusable load module already queued for prior request
D06		A task tried to LOAD the module, but the module had already been LOADed, with different attributes, within the same job step task TCB chain.

Programmer Response: Refer to the explanation of completion code cde in the *VS2 System Codes* for the complete response to this message.

IEA768I FAILURE IN CREATING DUMPSRV ADDRESS SPACE mc, rc, rsn

Explanation: An error occurred during the creation of the dumping services (DUMPSRV) address space. The fields mc, rc, and rsn contain, respectively, a module code, return code, and reason code. The codes give additional information about the error.

Value of mc	Explanation
01	The failure occurred in the system address space creation routine, IEEMB881. The rc and rsn fields contain the return code and reason code that IEEMB881 placed in register 15 and register 0. These values are documented in *MVS System Initialization Logic*.
02	The failure occurred in the DUMPSRV address space initialization routine, IEAVTSAI. The possible value for rc and its meaning is:
04	A GETMAIN for the SDUMP virtual buffer failed. Values are not assigned to field rsn.
03	The DUMPSRV address space initialization routine, IEAVTSAI, received a nonzero return code from the master scheduler initialization WAIT/POST routine, IEEMB883. The rc field contains the nonzero return code. The meaning of the return code is explained in *MVS System Initialization Logic*.

System Action: The system takes no more enabled suspend summary dumps. It substitutes disabled summary dumps for SVC dumps that have the SUSPEND=YES parameter. Other system processing continues.

Operator Response: Inform the system programmer of this message.

Programmer Response: Call your IBM representative for programming assistance.

Problem Determination: Table I, items 18 and 29.

IEA792I ADDRESS SPACE asid CANNOT BE TERMINATED - JOB jjj

Explanation: An error occurred during address space termination for address space ID asid. jjj is the job name for the initiated task, the started task, the mount, or the TSO logon that was executing in the address space.

System Action: The system removes the address space control block (ASCB) from the termination queue and does not complete termination of the address space. The system will ignore any attempts to cancel or force the address space.

In most cases, the system writes in SYS1.LOGREC an error record that contains the ASCB at SDWAVRA.

Operator Response: Notify the system programmer.

Problem Determination: Table I, items 2, 18, 29.

IEA800A cde COMMUNICATION TASK ABEND, [NO] DUMP TAKEN

Explanation: This message informs the system operator that Commtask has abnormally terminated and a dump was or was not taken. cde is the ABEND completion code.

System Action: This message is also recorded on the SYS1.LOGREC data set to aid in problem determination.

Operator Response: None.

IEA801I { UNIDENTIFIED TASK / jjj sss } { JS / ST } FAILED WHILE IN MUST COMPLETE STATUS

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

System Action: Exclusive systems enqueued resources follow this message. The 'must complete' status is reset.

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

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

IEA802W DAT ERROR IN SYSTEM ADDRESS SPACE

Explanation: A DAT (dynamic address translation) error occurred for a system address space. RTM (recovery termination manager) does not terminate the address space because the ASCBNOMT and ASCBNOMD fields of the ASCB (address space control block) show that the MEMTERM option of the CALLRTM macro instruction is not valid for the address space. The address space is crucial for system operation.

System Action: The system enters a wait state with wait state code A00.

Operator Response: Notify the system programmer.

Programmer Response: Correct the error and re-IPL the system.

Problem Determination: Table I, items 2 and 18.

IEA803I { JS / ST } **FAILED WHILE IN 'STEP MUST COMPLETE' STATUS DUE TO** { Ucde / Scde }

Explanation: Either the job step task (JS) or a subtask (ST) failed while operating in 'step must complete' status. The error that caused the failure is represented by the system (Scde) or the user (Ucde) completion code.

System Action: The operator is notified of this, along with exclusive systems resources held. The 'must complete' status is reset.

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.

IEA804E VIOLATION OF MSSF TP PORT PROTOCOL DETECTED IN JOB jjj

Explanation: Job jjj is still using the monitoring and system support facility (MSSF) teleprocessing port (TP port) after it has issued a DEQ to release logical control of the TP port. When the next job enqueued on the TP port tries to take control of it, the next job receives return code 08 in register 15, indicating that the TP port is not available.

System Action: Job jjj keeps control of the TP port until job jjj completes. System processing continues.

Operator Response: Notify the programmer responsible for job jjj. Cancel job jjj if the programmer determines that job jjj should no longer be using the TP port.

Programmer Response: Modify job jjj so that the job issues a TP DISCONNECT before it issues a DEQ to release control of the port.

IEA805I RECOVERY DISCONNECT OF MSSF TP PORT ISSUED FOR JOB jjj

Explanation: Job jjj was using the monitoring and system support facility (MSSF) teleprocessing port (TP port) when either the job step that made the connection to the TP port terminated, or the address space in which job jjj was running terminated. At the time of termination, the job step had not disconnected from the TP port. The MSSF SVC resource manager has issued a DISCONNECT to make the port available to other jobs.

System Action: Processing continues.

Operator Response: None.

Programmer Response: If job jjj or its address spacc completed normally, review the program to be sure that the job step that connects to the TP port issues a DISCONNECT before it completes. If job jjj or its address space terminated abnormally, confirm that the abend prevented the job step that connected to the TP port from issuing a DISCONNECT.

IEA806I jjj.sss 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 (system completion code X'28'). In the message text, jjj indicates the job name, and sss, 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-rc jjj sss ff ddddddd [ddddddd]

Explanation: The control program detected an error during the execution of a LINK, LOAD, DELETE, XCTL, or SYNCH 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:

rc
Reason code, one of the following:

1 LINK, LOAD, or XCTL parameter list invalid.

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

3 LINK, LOAD, XCTL - DE supplied in the parameter list is too small to describe the requested module or contains an invalid c-byte (user data field length).

4 SYNCH parameter list invalid. Either an undefined field in the parameter list contains a non-zero value, or the program issuing the SYNCH macro instruction is not authorized to use the parameters specified in the macro instruction.

5 A request for an alias was made. However, the CDE that was found for the major name was already an alias.

6 LOAD includes both the ADDR=addr parameter and the GLOBAL=YES parameter.

jjj
Job name

sss
Step name

ff
Always 0

ddddddd
Address of LINK, LOAD (SVC 122), XCTL, or SYNCH parameter list in hexadecimal. Always 0 for LOAD (SVC 6) or DELETE macro instructions.

[dddddddd]

Variable data in hexadecimal, either one or two fullwords, whose meaning depends on the reason code:

rc	Word 1	Word 2
1		
2	X1	
3	X1	X2
5	X1	

Where:

X1 is the address of EP/DE

X2 is the expected length of DE or the invalid length (because of an invalid c-byte)

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 ERROR IN BUFFER REMAINDER OF BUFFER IGNORED

Explanation: An invalid length field in the GTF trace buffers was discovered.

System Action: Remainder of buffer is not formatted.

Programmer Response: None.

Problem Determination: Table I, items 4, 7a, 13, 29.

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.

IEA837I DISCARD ALL PERFORMED FOR CACHE AT cua

Explanation: Auxiliary storage manager (ASM) initialization issues this message when a DISCARD ALL is executed for the cache of a 3880 control unit, model 11, with control unit address cua.

For the first use of the cache in a cold start or a quick start, the message is strictly informational: ASM initialization automatically performs a DISCARD ALL for the cache during these starts. If more than one page or swap data set on the DASD backs the cache, ASM will issue this message only for the first data set detected.

For a warm start, this message may indicate a problem: ASM initialization performed the DISCARD ALL after a sense subsystem status request to the cache indicated that a DISCARD ALL was required. This DISCARD ALL invalidates any warm start data that could have been in the cache. The warm start will not be allowed to continue if ASM determines that warm start data may have been lost.

System Action: The system continues operation. If warm start data was lost, the system issues message ILR003A to force a quick start; in response to ILR003A, the operator replies U to invoke CVIO processing.

Operator Response: For a warm start, notify the system programmer.

Programmer Response: For a warm start DISCARD ALL, further diagnostics may be necessary to determine the cache status and the reason for the DISCARD ALL.

Problem Determination: Table I, item 29

IEA839I WARM START DATA IS INVALID, QUICK START MAY BE FORCED

Explanation: The previous IPL did not complete auxiliary storage management (ASM) initialization. During that initialization period, the ASM resource initialization module (RIM) reset a 3880 control unit, model 11. This reset makes the warm start data, which might be in the 3880 control unit cache, invalid. The system does not allow the warm start to continue.

System Action: The system forces a quick start (the CVIO system parameter).

Operator Response: Report this message to the system programmer.

Programmer Information: This situation occurs when a local page data set that contains VIO pages is associated with a 3880 control unit, model 11, that the ASM RIM reset. When the ASM RIM detects a bad cache, the ASM RIM resets the 3880 control unit, model 11, to make the cache usable. The warm start data is lost. The system forces a quick start.

Problem Determination: Table I, item 29.

IEA840I mem NOT FOUND IN SYS1.LINKLIB

Explanation: The MSTRJCL= parameter specified has no associated member (mem) in SYS1.LINKLIB. The MSTRJCL= parameter may have been specified incorrectly because no SYS1.LINKLIB member exists that is associated with this parameter.

System Action: The operator is prompted to respecify the MSTRJCL= parameter or enter an EOB.

Operator Response: Report this message to the system programmer.

Programmer Response: If a SYS1.LINKLIB member is missing, create the SYS1.LINKLIB member and re-IPL. If the MSTRJCL= parameter was specified incorrectly, correct the system default parameter member and re-IPL. If the parameter was overridden by the operator and specified incorrectly, notify the operator of the error and re-IPL.

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

IEA841E { **PLPA** / **COMMON** / **DUPLEX** / **LOCAL** / **SWAP** } **DATA SET dsn UNUSABLE DUE TO BAD CACHE AT ddd**

Explanation: The page or swap data set, dsn, is on a device (for example, a 3350) that is attached to an auxiliary storage subsystem, such as a 3880 control unit, model 11. The auxiliary storage subsystem is using a cache for the page or swap data set, dsn. When the system tested the cache, the control unit reported that the cache is unusable. The cache has failing hardware. Data set dsn is cataloged on the volume at device address ddd.

System Action: Cold start: the system issues message IEA922D giving the operator a choice. The operator may choose a new data set name or the operator may choose the ignore option.

Quick start:

- If dsn is a PLPA, LOCAL, or SWAP data set, the system issues message IEA922D giving the operator a choice. The operator may choose a new PLPA , LOCAL, or SWAP data set name or the operator may choose the ignore option.
- If dsn is a DUPLEX data set, the system suspends duplexing and the IPL continues.
- If dsn is a COMMON data set and PLPA pages did not overflow to dsn on the cold start associated with this quick start, the system issues message IEA922D giving the operator a choice. The operator may choose a new COMMON data set name or the operator may choose the ignore option.

  If PLPA pages overflowed to dsn, a COMMON data set, the quick start cannot continue. The system forces a cold start and issues message IEA929I (the text of message IEA929I is CLPA FORCED). The system also issues message IEA922D giving the operator a choice. The operator may choose a new COMMON data set name or the operator may choose the ignore option.

Warm start:

- If dsn is a PLPA or SWAP data set, the system issues message IEA922D giving the operator a choice. The operator may choose a new PLPA or SWAP data set name or the operator may choose the ignore option.
- If dsn is a COMMON data set and PLPA pages did not overflow to dsn on the cold start associated with this warm start, the system issues message IEA922D giving the operator a choice. The operator may choose a new COMMON data set name or the operator may choose the ignore option.

  If PLPA pages overflowed to dsn, a COMMON data set, the warm start cannot continue. The system forces a cold start and issues message IEA929I (the text of message IEA929I is CLPA FORCED). The system also issues message IEA922D giving the operator a choice. The operator may choose a new COMMON data set name or the operator may choose the ignore option. The local page data set information is not preserved.
- If dsn is a LOCAL page data set and there are VIO pages in dsn, the warm start cannot continue. The system forces a quick start (message IEA930I). If there are no VIO pages in dsn, the warm start continues but dsn is not used as the LOCAL page data set for this IPL.

Operator Response: Report this message to the system programmer. See the description of message IEA922D.

Programmer Response: To correct the error, have the auxiliary storage subsystem that uses the cache serviced.

Problem Determination: Table I, item 29.

IEA842E { **PLPA** / **COMMON** / **DUPLEX** / **LOCAL** / **SWAP** } **DATA SET dsn UNUSABLE DUE TO I/O ERROR**

Explanation: During initialization of page and swap data sets, data set dsn is unusable because of an I/O error in open processing.

System Action: Cold start: the system issues message IEA922D giving the operator a choice. The operator may choose a new data set name or the operator may choose the ignore option.

Quick start:

- If dsn is a PLPA, LOCAL, or SWAP data set, the system issues message IEA922D giving the operator a choice. The operator may choose a new PLPA , LOCAL, or SWAP data set name or the operator may choose the ignore option.
- If dsn is a DUPLEX data set, the system suspends duplexing and the IPL continues.
- If dsn is a COMMON data set and PLPA pages did not overflow to dsn on the cold start associated with this quick start, the system issues message IEA922D giving the operator a choice. The operator may choose a new COMMON data set name or the operator may choose the ignore option.

If PLPA pages overflowed to dsn, a COMMON data set, the quick start cannot continue. The system forces a cold start and issues message IEA929I (the text of message IEA929I is CLPA FORCED). The system also issues message IEA922D giving the operator a choice. The operator may choose a new COMMON data set name or the operator may choose the ignore option.

Warm start:

- If dsn is a PLPA or SWAP data set, the system issues message IEA922D giving the operator a choice. The operator may choose a new PLPA or SWAP data set name or the operator may choose the ignore option.
- If dsn is a COMMON data set and PLPA pages did not overflow to dsn on the cold start associated with this warm start, the system issues message IEA922D giving the operator a choice. The operator may choose a new COMMON data set name or the operator may choose the ignore option.

  If PLPA pages overflowed to dsn, a COMMON data set, the warm start cannot continue. The system forces a cold start and issues message IEA929I (the text of message IEA929I is CLPA FORCED). The system also issues message IEA922D giving the operator a choice. The operator may choose a new COMMON data set name or the operator may choose the ignore option. The local page data set information is not preserved.
- If dsn is a LOCAL page data set and there are VIO pages in dsn, the warm start cannot continue. The system forces a quick start (message IEA930I). If there are no VIO pages in dsn, the warm start continues but dsn is not used as the LOCAL page data set for this IPL.

Operator Response: Report this message to the system programmer. See the description of message IEA922D.

Programmer Response: To correct the error, have the auxiliary storage subsystem using the cache serviced.

Problem Determination: Table I, item 29.

IEA846I
SYSTEM CONSOLE INTERFACE UNSUCCESSFUL
[AUTOMATIC STORE STATUS MAY NOT BE OPERATIONAL ON CPU x]
[ALTERNATE NUCLEUS ID LOAD PARAMETER NOT OBTAINED ON IPLED CPU x [yyy]]
[RESTART OPTIONS MAY NOT BE DISPLAYED ON CPU x [yyy]]

Explanation: During NIP or IPL processing, a system module was not able to signal the system console in support of the operator SC (system control) frame. One or more of the functions of the SC frame are not available or were not performed.

The explanation and operator response for each of the possible message texts are:

AUTOMATIC STORE STATUS MAY NOT BE OPERATIONAL ON CPU x.

The system tried unsuccessfully to activate the automatic store status function on the operator's SC (system control) frame on processor x. This function stores the system status whenever the stand-alone dump program is loaded. (The function might already be active.)

Operator Response: Check the automatic store status indicator on the operator's SC (system control) frame on processor x to see if the function was already active. If the indicator is on, no action is necessary. If it is off, no action is required immediately. However, you should do a manual store status before you IPL the stand-alone dump program.

ALTERNATE NUCLEUS ID LOAD PARAMETER NOT OBTAINED ON IPLED CPU x [yyyy]

The operator IPLed processor x, but the system could not get the load parameters from the operator's SC frame. The load parameters might include an alternate nucleus ID. If they do, the wrong nucleus might be loaded.

If you are running a 3081 processor, the reason code yyyy appears in the message text. Possible values of yyyy in hexadecimal and the meaning of each follow:

yyyy	Meaning
zz40	MSSF (maintenance and service support facility) error. Possible values of zz and the meaning of each follow: 00 Internal error, can be retried 01 File error, can be retried 02 File error, cannot be retried 03 File error, can be retried 04 File error, cannot be retried 05 File error, can be retried 07 File error, can be retried
03F0	The processor that you requested is not installed.
04F0	The processor that you requested is not in the configuration.

Operator Response: Check the load parameters display on the operator's SC frame to see if it includes an alternate nucleus ID. If it does not, no further action is needed.

If the load parameters display does include an alternate nucleus ID, see if it is the same as the one that was loaded. (Nucleus 1 was loaded unless message IEA408I appeared identifying some other nucleus.)

If the nucleus in the display is the same as the one that was loaded, no further action is needed.

If the alternate nucleus ID in the display is not the same as the one that was loaded, use the ALT= parameter to enter the correct nucleus ID in reply to message IEA101A. (Message IEA101A will appear as a regular part of NIP or IPL processing.)

RESTART OPTIONS MAY NOT BE DISPLAYED ON CPU x [yyy]

The system tried unsuccessfully to display the restart options on the operator's SC frame on processor x. (The options might already be displayed.)

If you are running a 3081 processor, the reason code yyyy appears in the message text. Possible values of yyyy in hexadecimal and the meaning of each follow:

yyyy	Meaning
zz40	MSSF (maintenance and service support facility) error. Possible values of zz and the meaning of each follow: 00 Internal error, can be retried 01 File error, can be retried 02 File error, cannot be retried 03 File error, can be retried 04 File error, cannot be retried 05 File error, can be retried 07 File error, can be retried
03F0	The processor that you requested is not installed.
04F0	The processor that you requested is not in the configuration.

Operator Response: Check the restart options display on the operator's SC frame on processor x. If the restart options are displayed, no action is necessary and the operator can use the options at that console.

If the restart options are not displayed, notify the system programmer. The operator can do a restart from the console, but the restart parameter value defaults to REASON 0.

System Action: Processing continues.

Programmer Response: Determine why the system was unable to signal the console. If necessary, contact IBM for hardware support.

IEA849I SYSMDUMP DATA SET FULL NO DUMP TAKEN TO dsn

Explanation: The system attempted to take a SYSMDUMP to data set dsn, a SYS1.SYSMDPxx data set with a disposition of SHARE. There was no end-of-file (EOF) indicator on the first record of the data set. The absence of an EOF indicator signals that the data set is full; therefore, the system could not take the SYSMDUMP, and the dump data is lost.

System Action: Other processing continues.

Operator Response: None.

Programmer Response: Create a routine that copies the contents of dsn to another data set and writes an EOF indicator on the first record of dsn after each SYSMDUMP. Because the system issues message IEA993I each time it writes a SYSMDUMP, provide your routine as part of the exit routine for the WTO macro instruction that issues IEA993I. See *System Programming Library: Supervisor* for more information.

IEA850I FOLLOWING WILL BE PROCESSED ser ON devtyp ccc-ccc

Explanation: This message lists all volume attribute list entries that were encountered before the I/O error referred to in message IEA949A.

ser ON devtyp ccc-ccc is written for each volume. ser is the serial number of the volume, devtyp is the device type, and ccc-ccc specifies the characteristics requested for 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

System Action: Processing continues. Attributes will be set as indicated unless overridden by subsequent entries.

Operator Response: None.

IEA851I FOLLOWING MAY BE MOUNTED ser ON devtyp

IEA851A REPLY DEVICE ADDRESSES OR U

Explanation: All volumes described in VATLSTxx, permanently resident and reserved volume attribute list in SYS1.PARMLIB, were not mounted at system start.

ser ON devtyp is written once for each unmounted volume. ser is the serial number of a volume to be mounted and devtyp is the type of device, such as 2314 or 3330, that the volume is to be mounted on. devtyp 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.

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

Operator Response: If any of the listed volumes are 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. Mount the required volumes on the devices replied, after message IEA860A appears.

If no volumes are to be mounted, enter REPLY xx,'U'.

IEA852I ddd ADDRESS INVALID - n

IEA852A REPEAT REPLY.

Explanation: The reply to message IEA851A is invalid. Message IEA852I is issued for each invalid device in the reply and it is followed by message IEA852A. ddd identifies the device in error and n identifies the cause of the error as follows:

n	Meaning
1	Duplicate device address.
2	Device address is unknown to the system.
3	Device contains a permanently resident or reserved volume.

4 Device is not direct access.

5 Device type is not needed to satisfy mount of the requested volumes.

6 Program to check for data path to the offline device was not in the system.

7 No data path available to the device.

8 No operational data path to the device.

9 Device is for an exposure within a multiple exposure device, but is not the base exposure.

10 Device address for a non-demountable device that was online at IPL.

11 Device address is for a 3850 Mass Storage System (MSS) device.

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

Operator Response: Probable user error. Enter the reply again correctly or enter REPLY xx,'U'.

Problem Determination: Table I, items 2, 7a, 29. Make sure that the device is defined to the system correctly.

IEA853A REPLY CONT, END OR RESPECIFY.

Explanation: While reading VATLSTxx, referred to in message IEA949A, the system detected an uncorrectable input/output error.

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

Operator Response: If the system can continue without VATLSTxx, enter REPLY xx,'CONT' or REPLY xx,'END' or REPLY xx,'nn', where nn is a new VATLST number. If the reply is CONT, the system will try to continue processing other specified VATLST members. If the reply is END, no more VATLST processing will be done. If the reply is nn, VATLSTnn will be processed before processing the remaining VATLST members.

Problem Determination: Table I, items 2, 7a, 11, 29.

IEA854I ERROR READING VOLUME LABEL.

Explanation: The system cannot read the volume label on the device whose address is specified in subsequent message (either IEA985I or IEA948I). If message IEA306I precedes this message, an input/output error occurred when reading the label. Otherwise the volume does not contain a standard label or, in the case of Mass Storage System (MSS) volume, the volume serial number on the label does not match the volume serial number requested from the 3850 MSS. The later case can occur when an MSS volume label has been clipped to a different serial number.

System Action: On an MSS volume, the VATLSTxx entry is ignored; processing continues with the remaining VATLSTxx entries. For non-MSS volumes the system waits for the correct volume to be physically mounted, as long as all device addresses specified in reply to IEA851A have not yet had volumes mounted on them. If they have, the system does not wait; a mount request for the desired volume must be issued later.

Operator Response: For MSS volumes, no response is necessary. For non-MSS volumes, if the wrong volume is mounted, remove it and mount the correct volume. If no volume can be mounted (for example, there is an error on that device), and the device is listed in IEA860A, reply 'NO' to message IEA893A when all other required devices have been mounted (that is, when the required devices are not listed on IEA893A).

Problem Determination: Table I, items 2, 7a, 11, 29.

IEA855I INVALID VATLSTxx ENTRY

Explanation: There is an invalid entry in VATLSTxx (permanently resident and reserved volume attribute list).

System Action: Processing continues with the remaining VATLSTxx entries.

Programmer Response: Using IEBPTPCH, print the VATLSTxx member from SYS1.PARMLIB. Correct the invalid entry by use of the IEBUPDTE utility. Note that the device type might be valid, but it was not specified as valid during system generation.

IEA856W ACR RECURSIVELY INVOKED BY CPU x

Explanation: An attempt was made to invoke ACR while another ACR process was still active in the system. In the message text x is the processor address.

System Action: An attempt is made to record the LOGREC buffer on SYS1.LOGREC for the indicated processor, and all processors are placed in a wait state.

Operator Response: A probable hardware error exists on more than one processor. Take a stand alone dump, then the system should be restarted and the EREP service aid program should be scheduled for execution.

Problem Determination: Table I, items 11, 18, 30.

IEA857W UNREC {H / S} ACR ERR-x-R = nn D = dd

Explanation: An unrecoverable error was encountered during ACR processing. ACR has attempted recovery and was unsuccessful. Recovery was being attempted by R for D. In the message text, the fields are as follows:

H Hardware error encountered.
S Software error encountered.
ERR-x Where x is:

1 The failure occurred prior to entering post processing.
2 The failure occurred during ACR post processing.

R Recovery processor; nn is the processor ID.
D Inactive processor; dd is the processor ID.

System Action: An attempt is made to record the LOGREC buffer for the inactive processor in SYS1.LOGREC. All processors are placed in a wait state.

Operator Response: If H is indicated, a probable hardware error exists. If S is indicated, a probable software error exists. Take a stand-alone dump, then restart the system and schedule the EREP service aid program for execution.

Problem Determination: If H is indicated, see Table I, items 11, 18, 30. If S is indicated, see Table I, items 11, 18, 29 or 30.

IEA858E ACR COMPLETE, CPU x NOW OFFLINE [BUT PHYSICAL VARY FAILED]

Explanation: ACR was invoked and has successfully placed a failing processor logically offline. In the message text, x is the processor address. If BUT PHYSICAL VARY FAILED appears in the message text, the monitoring and system support facility (MSSF) tried unsuccessfully to vary the failing processor physically offline.

System Action: Processing continues. This message is not automatically removed from a display console. The operator must manually delete the message with the CONTROL (K) command.

Operator Response: Delete the message from the console and schedule the EREP service aid program for execution. If BUT PHYSICAL VARY FAILED appears in the message text and you want to take processor x physically offline, enter the VARY CPU OFFLINE command.

Problem Determination: Table I, items 2, 18, 30.

IEA859I UNREQUESTED VOLUME. UNIT ddd NOW UNLOADED.

Explanation: A volume was mounted on a unit specified by the operator in response to message IEA851A for which no entry exists in VATLSTxx.

System Action: The volume is unloaded.

Operator Response: Mount a volume requested in message IEA851A on this unit. Reply 'U' to message IEA893A when the device is ready. If no volume can be mounted on this unit, reply 'NO' to message IEA893A when all other required devices have been mounted, that is, when the required devices are not listed in message IEA893A.

Problem Determination: Table I, items 2, 7a, 11, 29. Display the label on the volume.

ddd,ddd,...
IEA860A REPLY U WHEN ALL DEVICES ARE READY.

Explanation: Volume attribute processing is waiting for the volumes to be mounted on these devices.

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

Operator Response: Mount volumes, as listed in message IEA851I, on these devices. When the devices are ready, reply 'U' to this message.

IEA861A VAL=nn NOT FOUND. REPLY U OR CORRECT VALUE

Explanation: No volume attribute list (VATLST) with the suffix nn exists in SYS1.PARMLIB.

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

Operator Response: If an error was made in the reply to message IEA101A, enter REPLY xx,nn where nn is a correct value. Enter REPLY xx,U to ignore this volume attribute list and continue processing any other specified lists.

Problem Determination: Table I, items 2, 7a, 11, 29. Use IEBPTPCH to list the members of SYS1.PARMLIB.

IEA862I RCT INITIALIZATION FAILED

Explanation: The region control task was unable to initialize an address space for a START, MOUNT, or LOGON request.

System Action: This address space is terminated due to an error during initialization of the address space by the region control task.

Programmer Response: None.

Problem Determination: Table I, items 7, 16, 18, 27, 29.

IEA863I { TOD / COM / MT } =parms SPECIFICATION INVALID IN COMMNDxx

Explanation: A TOD, COM, or MT parameter in the identified SYS1.PARMLIB member was syntactically incorrect. The first 16 bytes of the parameters in error (including the key word) are given in the parms field in the message.

System Action: The parameter is ignored. Processing of the COMMNDxx member continues.

Operator Response: Probable user error. Take appropriate action as specified by the installation operating procedure and report this message to the system programmer.

Programmer Response: List, check, and correct the syntax of the parameters in the specified COMMNDxx member. Make sure that the installation operating procedure tells the operator what to do if invalid parameters are found in any COMMNDxx members.

Problem Determination: Table I, items 2, 26c, 29.

IEA864I GETMAIN FAILED FOR COMMNDxx - (cm)

Explanation: A conditional GETMAIN for SQA core for the specified command (cm) failed due to insufficient SQA space. This command was one of the 'canned' commands implemented by the system programmer.

System Action: Processing of the COMMNDxx members is discontinued. No 'canned' commands will be issued. Message IEA208I func FUNCTION INOPERATIVE will follow this message.

Operator Response: Take the appropriate action as specified by the installation operating procedure.

Programmer Response: Make sure that sufficient storage is available for NIP processing. List the COMMNDxx members being used for the current IPL.

Problem Determination: Table I, items 11, 26, 29.

IEA865I SYSTEM ERROR DURING NIP PROCESSING OF prm PARAMETER - IPL TERMINATED

Explanation: A system error was detected while processing the parameter indicated by prm in the message text. The error was detected while attempting to prompt for the parameter specified in the message and could mean that processing modules have been overlaid or some necessary data destroyed.

System Action: The system will enter a disabled wait state with a wait state code of 03D displayed in the wait state PSW.

Operator Response: Dump real storage and notify the system programmer of this message. Then re-IPL the system.

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

IEA866I VOLUME ser ON [V]xxx REQUIRED ON A { devtyp / Vyyy }

Explanation: Volume ser is mounted on unit xxx, but the VATLST entry for this volume specified device type 'devtyp' or 3850 Mass Storage System (MSS) unit 'yyy'. If V is specified, unit xxx is a MSS unit.

System Action: If ser is not a premounted, P/R volume, it will be unloaded. If volume ser is a premounted, P/R volume, message IEA947A will be issued.

Operator Response: If the volume is unloaded, the correct volume may be mounted on the device type specified in the message.

IEA867I DUPLICATE VOLUME ser. UNIT ddd NOW UNLOADED.

Explanation: Volume serial number ser duplicates the serial number of a volume already mounted.

System Action: The volume on device ddd has been unloaded.

Operator Response: Mount a different volume on the unit if ddd is listed in message IEA860A, or if all units listed in message IEA860A have not come ready. If the unit was replied in response to message IEA851A, the volume must have a serial number listed in message IEA851A.

IEA868I PARMTZ MEMBER IN PARMLIB INVALID. SYSGEN VALUE BEING USED

Explanation: The time zone value specified in the PARMTZ PARMLIB member is unacceptable for one of the following reasons:

- The value is not between 00.00.00 and 12.00.00.
- The value is not in the proper syntax format. That format is:

E ,hh[.mm[.ss]]	where E and W indicate whether the time
W	zone is East or West of the GMT zone.

System Action: The time zone constant specified in the PARMTZ PARMLIB member is not used. The system will use the time zone value specified at system generation time.

Operator Response: Probable user error. Take the appropriate action as specified by the installation operating procedure and report this message to the system programmer.

Programmer Response: Make sure that the time zone value specified in the PARMTZ PARMLIB member is between 00.00.00 and 12.00.00 and it is in the proper syntax.

IEA869I DSS INOPERATIVE, { LOCATE / OPEN } FAILED FOR SYS1.DSSVM

Explanation: An attempt was made to 1) locate the SYS1.DSSVM data set in the system catalog, or 2) open the SYS1.DSSVM data set. When the attempt failed, DSS was made inoperative and control returned to NIP.

System Action: Processing continues.

Programmer Response: Make sure that the data set has been allocated and cataloged properly.

Problem Determination: Table I, items 2, 17b, 25a, 29.

IEA870I DSS INOPERATIVE, ALIAS IQAINI00 NOT FOUND IN LPA

Explanation: The DSS RIM (IEAVNPB6) was unable to find a CDE or LPDE in the link pack area (LPA) for the entry point IQAINI00 (in load module IQAENV00). DSS was made inoperative and control returned to NIP.

System Action: Processing continues.

Programmer Response: Make sure that module IQAENV00 with alias IQAINI00 is link-edited correctly into SYS1.LPALIB.

Problem Determination: Table I, items 2, 17b, 25c, 27, 29.

IEA871I { SYS1.NUCLEUS / SYS1.DSSVM } I/O ERROR DURING DSS RIM PROCESSING

Explanation: IOS was unable to read from or write to the indicated data set because of an I/O error.

System Action: Processing continues.

Operator Response: Record the device address on which the error occurred.

IEA872I INVALID IPS IN IEAIPSxx

Explanation: System resources manager initialization processing has found invalid IPS data in the IEAIPSxx member of SYS1.PARMLIB.

System Action: All IPS data in this member is ignored. Message IEA906A is issued. The message requests the operator to respecify the IPS parameter.

Operator Response: Probable user error. Take the appropriate action as specified by the installation operating procedure. IPL/NIP processing can continue if the operator specifies another valid IEAIPSxx member or enters EOB in response to message IEA906A. Report this message to the system programmer.

Programmer Response: List, check and correct the syntax of the IPS parameters in the specified member. The SET command can be issued to obtain more error information about the IPS. Ensure that the installation operating procedure tells the operator what to do if the specified member is rejected during IPL/NIP processing.

Problem Determination: Table I, items 2, 26c, 29.

IEA873I SKELETON IPS IN CONTROL - ALL USERS AT SAME LEVEL

Explanation: This message indicates that the skeleton IPS has been used by the system.

System Action: The system continues processing with a skeleton IPS. The valid performance group numbers are 1 and 2. There will be no distinction in the performance given to users among various performance groups.

Operator Response: The operator may subsequently use the SET command to specify a valid IPS to supersede the skeleton IPS. Report this message to the system programmer.

Programmer Response: Ensure that the installation operating procedure tells the operator what to do if the skeleton IPS has been used. Create a valid IEAIPSxx member for SYS1.PARMLIB using a utility program such as the IEBUPDTE program.

Problem Determination: Table I, items 2, 29.

IEA874I INVALID { OPT / prm SPECIFICATION } IN IEAOPTxx

Explanation: System resources manager initialization processing has found an invalid parameter value in the IEAOPTxx member of SYS1.PARMLIB. If 'prm SPECIFICATION' appears in the message, prm is the key word identification for a category of system resources manager tuning parameters.

System Action: All OPT data in the member is ignored. Message IEA906A is issued. The message requests the operator to respecify the OPT parameter.

Operator Response: Probable user error. Take the appropriate action as specified by the installation operating procedure. IPL/NIP processing can continue if the operator specifies another valid IEAOPTxx member or enters EOB in response to message IEA906A. Report this message to the system programmer.

Programmer Response: List, check and correct the syntax of the OPT parameters in the specified member. If an MVS/System Product is installed on the system, the SET command can be issued to obtain more error information about the OPT. Ensure that the installation operating procedure tells the operator what to do if the specified member is rejected during IPL/NIP processing.

Problem Determination: Table I, items 2, 26c, 29.

IEA875I SYS1.DUMPxx FULL

Explanation: The first record in the SYS1.DUMP data set, SYS1.DUMPxx, is not an end-of-data record. The data set might contain an SVC dump.

System Action: The data set is unavailable for use by SVC dump.

Operator Response: None. This message is generated as part of the response for a LIST request on the DUMP option in the reply to message IEA101A.

IEA876I SYS1.DUMPxx EMPTY

Explanation: The first record in the SYS1.DUMP DASD data set, SYS1.DUMPxx, is an end-of-data record.

System Action: The data set is available for use by SVC dump.

Operator Response: None. This message is generated as part of the response for a LIST request on the DUMP option in the reply to message IEA101A.

IEA877A SPECIFY FULL DASD SYS1.DUMP DATA SETS TO BE EMPTIED, TAPE UNITS TO BE USED AS SYS1.DUMP DATA SETS OR 'GO'

Explanation: The operator has specified a LIST request on the DUMP option in the reply to message IEA101A. This message is issued after the operator has been informed of the status (empty or full) of each DASD SYS1.DUMP data set.

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

Operator Response: Reply with the last two digits of the names of those full DASD SYS1.DUMP data sets which are to be reused (data that exists in the data set is lost) and/or tape units to be used as SYS1.DUMP data sets, or 'GO'. If DASD data set names and/or tape units are given in the reply, they will be made available to SVC dump. If the operator replies with 'GO', the current status of the SYS1.DUMP data sets will remain unchanged.

Examples of operator replies are as follows:

- R xx,'DA=(yy{,yy,.....})'

  Note: yy is the last two digits of the name SYS1.DUMPxx that have been indicated by message IEA875I. To empty more than one DASD SYS1.DUMP data set, specify the last two digits of each SYS1.DUMPxx data set name, separated by commas.

- R xx,'(TA,ddd,ddd)'

  Note: ddd and ddd are tape device addresses to be used by SVC dump. The devices specified cannot be devices that have already been made available to SVC dump.

- R xx,'DA=(yy),(TA,ddd)'

- R xx,'GO'

IEA878I NO DASD SYS1.DUMP DATA SETS AVAILABLE

Explanation: The operator requested the DASD function of the DUMP option in the reply to message IEA101A, but there are no DASD SYS1.DUMP data sets available.

System Action: There are no DASD SYS1.DUMP data sets available for use by SVC dump.

Operator Response: None.

IEA879A DEVICE AT ddd UNACCEPTABLE FOR A SYS1.DUMP DATA SET - RESPECIFY

Explanation: For the DUMP option of the reply to message IEA101A, or in response to message IEA877A, or a previous issuance of this message, the operator specified (TA,ddd) where ddd is an unacceptable unit address for a SYS1.DUMP tape data set:

- The unit control block (UCB) for ddd cannot be found.
- Device ddd is not a 2400 series tape device.
- Device ddd is not available, not operational, or nonexistent.
- An uncorrectable error has occurred.
- The device specified in response to a previous issuance of this message has been previously specified, and is not the device that originally encountered the error.
- If ddd is blank, a syntax error occurred in a previous response to this message.

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

Operator Response: Probable user error. Verify that the device is operational and is specified correctly. Then enter (TA,ddd) again. If the second attempt also fails, specify another tape device or press EOB to skip, and notify the system programmer.

IEA880I SYS1.DUMPxx UNACCEPTABLE FOR A SYS1.DUMP DATA SET

Explanation: This message indicates that the DASD data set is unusable by SVC dump:

- The data set is on an unsupported device.
- An uncorrectable error has occurred.

System Action: The data set will not be made available for SVC dump. Processing continues.

Operator Response: None.

IEA881I TOO MANY SYS1.DUMP DATA SETS

Explanation: More than 10 data sets have been specified for SYS1.DUMP data sets.

System Action: The first 10 data sets encountered will be used as SYS1.DUMP data sets. The others will be ignored.

Operator Response: None.

IEA882A REPLY FOR LIST REQUEST OF DUMP OPTION INVALID - RESPECIFY

Explanation: An invalid reply was generated to message IEA877A:

- A full DASD SYS1.DUMP data set was incorrectly specified.
- A tape unit to be added to the SYS1.DUMP data sets was incorrectly specified.

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

Operator Response: Probable user error. Respecify the reply to message IEA877A.

IEA883I MODULE { **IEAVTSDR** / **IEAVTSDT** / **IEAVTSSD** / **IGC0005A** / **IEAVTSSV** / **IEAVTSXT** / **ISGDSDMP** } **NOT FOUND**

Explanation: SVC dump initialization processing was unable to find the indicated module in the Link Pack Area. Initialization will continue but the SVC Dump function is running impaired.

System Action: System initialization continues. If IGC005A or IEAVTSDT appears in this message, no SVC DUMPS can be taken by the system. If IEAVTSSD appears in this message no summary SVC dumps will be taken by the system. If IEAVTSDR appears in this message, SVC Dump recovery will not support memory terminations. If IEAVTSSV appears in the message, the system will not take any more suspend summary dumps. If IEAVTSXT or ISGDSDMP appears, the system will not do any more dump exit processing.

Operator Response: Notify the system programmer of this message.

Programmer Response: Place the missing modules specified by this message in SYS1.LPALIB. Re-IPL the system to establish full SVC Dump function.

IEA884I PARAMETERS INVALID FOR SYS1.PARMLIB MEMBER mem

Explanation: When mem is IEAABD00, IEADMP00, IEADMR00, the installation default options for SYSABEND, SYSUDUMP, SYSMDUMP dumps, respectively, are invalid.

System Action: If this message is followed by message IEA885I, there are valid and invalid parameters in mem. The valid options will be used for mem. Otherwise, all options were invalid and no default dump options will be recognized.

Operator Response: Report this message to the system programmer or installation manager. The message indicates that the member mem should be corrected in SYS1.PARMLIB.

IEA885I VALID OPTIONS FOR SYS1.PARMLIB MEMBER mem

{ SDATA = op,op,...,op }
{ PDATA = op,op,...,op }

Explanation: Valid and invalid dump options were defined in SYS1.PARMLIB for member mem. The SDATA and/or PDATA options listed will be used as installation defaults.

System Action: Valid dump options will be recognized.

Operator Response: Report this message to the system programmer or installation manager.

IEA886A TOD CLOCK(S) MUST BE SET

Explanation: No time-of-day clock is in the set state.

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

Operator Response: Enter REPLY xx,'prm' where prm may be as follows:

DATE = yy.ddd[,CLOCK = hh.mm.ss][,GMT][,IPS = nn]

yy - is the year 00-99.

ddd- is the day 001-366.

hh - is the hour 00-23.

mm - is the minute 00-59.

ss - is the second 00-59.

nn - is a 2-character value which when appended to IEAIPS specifies a member name.

The bracketed parameters are optional. If GMT is specified, the entered DATE and CLOCK values are understood to be Greenwich Mean values. If GMT is omitted, they are understood to be local values, and will be converted by the system to a GMT value with which to set the clocks.

IEA887A CPU xx LOCAL DATE = yy.ddd,CLOCK = hh.mm.ss

IEA887A TOD CLOCK(S) MUST BE SET WITH GMT, OR SELECT ADDRESS

Explanation: There are at least 2 set time-of-day clocks in the system which are not in synchronism.

The local date and clock values for each set clock are displayed. In the message text, yy specifies the year (00-99), ddd specifies the day (001-366), hh specifies the hour (00-23), mm specifies the minute (00-59), ss specifies the second (00-59), and xx specifies the CPU address (00-15).

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

Operator Response: Reply as in message IEA886A, or enter REPLY xx,"ADDR = xx" where xx is the address of the CPU whose CLOCK and DATE values are displayed in the message. The IPS parameter is also acceptable in the latter reply.

The latter response causes all time-of-day clocks in the system to be synchronized to the value in the clock of the selected CPU.

IEA888A GMT DATE = yy.ddd,CLOCK = hh.mm.ss

IEA888A LOCAL DATE = yy.ddd,CLOCK = hh.mm.ss REPLY U, OR GMT/LOCAL TIME

Explanation: The system issues this message to display the local time and date and the GMT (Greenwich mean time) and GMT date for the operator's verification. If there is one TOD (time-of-day) clock in the system, it is set. If there is more than one TOD clock, all set TOD clocks are synchronized.

In the message text, yy is 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 for the operator to reply.

Operator Response: If the values displayed are acceptable, enter:

R xx,U

where xx is the message reply identification.

If you wish to change any of the local values, enter one of the following, according to what you want changed:

R xx,DATE = yy.ddd
R xx,CLOCK = hh.mm.ss
R xx,DATE = yy.ddd,CLOCK = hh.mm.ss

For example, if you think it is 2:30 p.m., November 11, 1981, and the reply id is 00, enter:

R 00,DATE = 81.315,CLOCK = 14.30.00

If you wish to change a GMT value, you must add ,GMT to your reply. For example:

R 00,DATE = 81.315,CLOCK = 14.30.00,GMT

If you want to specify which IEAIPSxx member of SYS1.PARMLIB you want to use to govern installation performance, you can enter the IPS parameter. However, processing of the new IPS value is delayed until initialization has proceeded far enough for a SET command to execute. You can enter the IPS parameter by itself or in conjunction with the CLOCK, DATE, and/or GMT parameters. For example:

R 00,DATE = 81.315,CLOCK = 14.30.00,GMT,IPS = 01

If you change a value, the system issues this message again with the new values displayed.

IEA889A DEPRESS TOD CLOCK SECURITY SWITCH

Explanation: One of the following situations exists, which requires that the time-of-day clocks be synchronized:

- The operator has accepted the values displayed in message IEA888A.
- A CPU has been varied online.
- A timing facilities damage machine check has occurred.

In order to synchronize the time-of-day clocks, the security switch must be pressed.

System Action: The system waits until the operator acknowledges receipt of the message. When acknowledgement is received, the system determines if the switch has been pressed. If it has not been pressed within 30 seconds, or if the operator has pressed the switch but releases it before the synchronizing procedure can complete, the message is reissued.

Operator Response: Reply using only the reply id to acknowledge your receipt of the message. (No reply text is required.) Then, press the security switch and hold it down for 5 to 10 seconds.

IEA890I cm FAILED - MEMORY COULD NOT BE CREATED

Explanation: An address space could not be created for the command. Address space create or address space initialization failed while trying to complete initialization for the address space.

Note: Failure may be due to system overload or lack of paging space.

System Action: The partially created address space is cleaned up and the command is aborted.

Programmer Response: If message was issued when trying to start an initiator, ASM may have run out of paging space. It may be necessary to re-IPL and specify larger or additional paging data sets. If these are not readily available, it may be possible to re-IPL with existing page data sets after modifying ASM paging constant ILRSLOTC as described under wait code 03C.

Operator Response: Enter the command again. Inform the system programmer that this message has been issued if the message is issued again.

IEA891I NO MAXUSER VALUE SPECIFIED, DEFAULT VALUE OF 256 USED

Explanation: The NO MAXUSER value was specified; default value is being used.

System Action: Processing continues.

Operator Response: None.

IEA892I MAXUSER VALUE OF val IS TOO LARGE FOR AVAILABLE SQA

Explanation: SQA core could not be obtained to build the ASVT for the MAXUSER value specified. Either the MAXUSER value is too large, or SQA is insufficient.

System Action: Processing continues.

Operator Response: If the MAXUSER is too large, respecify a smaller value. Otherwise, examine the use of SQA and re-IPL the system. If the problem persists, contact the system programmer.

Problem Determination: Table I, items 2, 29.

ddd,ddd,...
IEA893A NOT READY. REPLY U WHEN DEVICES ARE READY, OR NO IF NOT MOUNTING.

Explanation: Volume attribute processor is waiting for the volumes to be mounted on these devices.

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

Operator Response: When all of the volumes in message IEA851A that you require have been readied on the devices listed in message IEA860A, reply 'U'. If any devices have not been readied, message IEA893A will be reissued, listing those devices. Respond as above if there are more volumes to be mounted. If no more volumes are to be mounted on the devices listed, reply 'NO'.

IEA894I REQUESTED VOLUME ON REQUESTED UNIT. ddd NOW UNLOADED.

Explanation: A volume requested in VATLSTxx was mounted on a device address that was not in the reply to message IEA851A.

System Action: The volume is unloaded.

Operator Response: Mount the volume on a requested unit if the attributes are to be processed.

IEA895A FORMAT ERROR. REPEAT REPLY.

Explanation: An error exists in the reply to message IEA851A.

System Action: The reply is ignored and the system waits for the operator to enter another reply.

Operator Response: Enter the reply again correctly, or reply 'U'.

IEA896I RECORDING FUNCTION NO LONGER ACTIVE

Explanation: Due to errors considered unrecoverable, the recording function has been turned off. No further writing to SYS1.LOGREC or the operator via this function will occur.

System Action: All further requests for recording are rejected. Requestors are given a return code indicating that the facility is no longer active.

Operator Response: If recording is deemed critical, the system must be re-IPLed.

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

IEA897I RTM BLDCPOOL FAILED

Explanation: Recovery/termination management initialization has failed to acquire a pool of quickcells via the BLDCPOOL service that is necessary to the functions operation.

System Action: Initialization is terminated. The system is placed in a disabled wait state with a wait state code of X'45' displayed in the wait state PSW.

Operator Response: Report this message to the system programmer.

Problem Determination: Table I, items 11, 29.

IEA898E CPU x HAS PERMANENTLY DAMAGED
{TOD CLOCK / CLOCK COMPARATOR / CPU TIMER}

Explanation: A sufficient number of machine checks have occurred on the specified timing component on processor x since the last local midnight or IPL to cause the system to mark it as unusable.

System Action: The system does not attempt to use the specified component on processor x until a re-IPL occurs.

Note: If the time-of-day clock is specified, the processor's clock comparator is also considered to be unusable.

If the time-of-day clocks or clock comparators have failed on **all** processors, tasks with outstanding real or wait type intervals and those requesting new intervals are abnormally terminated.

If the damaged component is a CPU timer, task type intervals are not timed for tasks executing on processor x. If all CPU timers available to the task are permanently damaged, the tasks with outstanding task type intervals and those requesting new intervals are abnormally terminated.

If the damaged component is a CPU timer and an MVS/System Product is installed on the system, job step timing is no longer accurate.

If the damaged component is a time-of-day clock or clock comparator and an MVS/System Product is not installed, job step timing is no longer accurate.

Operator Response: If the system action is unacceptable, enter a VARY CPU x, OFFLINE command.

If the specified timing component(s) have failed on **all** processors, contact IBM for hardware support. After the timing components have been repaired, re-IPL the system.

IEA899I LOCAL TIME CHANGE REJECTED--NO GOOD TOD CLOCKS

Explanation: The operator requested that the local time be changed, or reset to its IPL-time value. A good time-of-day clock is required for this operation, but none exists. Message IEA898I should have appeared previously, once for each time-of-day clock in the system.

System Action: Processing continues without a change to the local time.

Operator Response: None.

IEA900I INVALID ICS IN IEAICSxx

Explanation: System resources manager initialization processing has found an invalid parameter value in the IEAICSxx member of SYS1.PARMLIB.

System Action: All installation control specification data in this member is ignored. Message IEA906A is issued. The message requests the operator to respecify the installation control specification parameter.

Operator Response: Probable user error. Take the appropriate action as specified by the installation operating procedure. IPL/NIP processing can continue if the operator specifies another valid IEAICSxx member or enters EOB in response to message IEA906A. Report this message to the system programmer.

Programmer Response: List, check and correct the syntax of the installation control specification parameters in member IEAICSxx. The SET command can be issued to obtain more error information about the member. Ensure that the installation operating procedure tells the operator what to do if the specified member is rejected during IPL/NIP processing.

Problem Determination: Table I, items 2, 26c, 29.

IEA903A DEPRESS TOD CLOCK SECURITY SWITCH WHEN ENTERED TIME OCCURS

Explanation: The operator has responded to message IEA888A, IEA886A, or IEA887A in such a manner that a time-of-day clock requires setting.

System Action: The system waits until the operator acknowledges receipt of the message. When acknowledgement is received, the system attempts, for a 1-minute interval, to set a time-of-day clock. If the operator has not pressed the switch during that interval, the original message that the operator responded to will be reissued.

Operator Response: Reply 'U' to acknowledge your receipt of the message. (No reply text is required.) Then press the security switch at the exact instant of the time you entered in response to message IEA888A, IEA886A, or IEA887A.

IEA904I VALUE FOR WTOBFRS MUST BE BETWEEN 20 AND 9999

Explanation: The parameter for WTOBFRS must be a decimal value between 20 and 9999. The value specified contained a nonnumeric character or was not in the acceptable range.

System Action: Message IEA906A is issued.

Operator Response: Respond to message IEA906A with REPLY xx,'WTOBFRS=nnn' where nnn is a decimal value between 20 and 9999.

IEA905I VALUE FOR WTORPLY MUST BE BETWEEN 5 AND 100

Explanation: The parameter for WTORPLY must be a decimal value between 5 and 100. The value specified contained a nonnumeric character or was not within the acceptable range.

System Action: Message IEA906A is issued.

Operator Response: Respond to message IEA906A with REPLY xx,'WTORPLY=nnn' where nnn is a decimal value between 5 and 100.

IEA906A RESPECIFY prm PARM OR ENTER EOB

Explanation: Incorrect information has been entered for parameter prm. Previous messages might diagnose the specific error in the parameter specification.

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

Operator Response: Reenter the prm parameter with a corrected value, or respond with EOB. If EOB is entered, any system defaults for the parameter are used.

IEA907I UNABLE TO INITIALIZE PAGE AND/OR SEGMENT TABLE FOR SQA OR CSA

Explanation: The system cannot initialize SQA or CSA successfully.

System Action: Severe error. The system is placed in a 03D wait state following this message.

Operator Response: Take a dump of the system and notify the system programmer of this message.

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

IEA908I QUICKSTART REQUIRES PREVIOUS IPL SQA SIZE-PREVIOUS SIZE USED

Explanation: The current requested SQA size is not the same as the reclaimed size; both must be the same.

System Action: The system will default to the reclaimed SQA size and continue processing.

Operator Response: Do not specify SQA size on a quick start.

IEA909A ONLY nnnK OF
{REAL / VIRTUAL} STORAGE AVAILABLE FOR {SQA / CSA}
RESPECIFY OR ENTER EOB FOR DEFAULT REAL

Explanation: The requested area was too large.

System Action: The system waits for the corrected smaller value to be entered.

Operator Response: Reenter the parameter with a smaller value.

For SQA, the value must be a number of segments (64K blocks) that contain less than nnnK bytes.

For CSA, the value must be a number of K bytes that does not exceed the value of the next lower 4K boundary. For example, if 3532 or 3531K appears in nnnK, the reply must be 3528K or less.

Refer to *OS/VS2 MVS System Programming Library: Initialization and Tuning Guide* for the format of the response or ask system programmer.

IEA910I CCH OPERATION IMPAIRED

Explanation: The nucleus initialization program (NIP) has been unable to locate the module-dependent CCH modules which are necessary to give CCH full recovery capability. As a result, the CCH function is running impaired.

System Action: The nucleus initialization program continues processing.

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

Programmer Response: Place the missing modules in SYS1.LINKLIB, and re-IPL the system to establish full error recovery capability to the CCH function.

IEA911E {COMPLETE / PARTIAL} DUMP ON {SYS1.DUMPnn / UNIT = ddd}
FOR ASID (xx,xx,...)
[TSOID = ccccccc]
[ERRORID = SEQyyyyy CPUzz ASIDaaaa TIMEhh.mm.ss.t]

Explanation: A partial or complete SVC dump was generated to the DASD data set SYS1.DUMPnn or to the tape volume on the device with the unit address ddd. If a partial dump was generated, an I/O error might have occurred while writing to the dump data set, or the dump data set might have been filled before all the requested data was dumped.

One of the address spaces requested might not have been dumped because it was terminating, or set non-dispatchable, or the summary SVC dump was unable to obtain all of the requested data. The ASID number(s) xx in parenthesis indicate the ASID(s) of the address space(s) included in the SVC dump. The ASID number(s) are in hexadecimal format. If the SVC dump was generated on behalf of a SLIP trap that was set using TSO, TSOID indicates the ID of the TSO user who defined the trap.

In the message text, yyyyy is the sequence number portion of the error id, zz is the CPUID portion, aaaa is the ASID portion, and hh.mm.ss.t is the time portion (in hours, minutes, seconds, and tenths of seconds).

System Action: Processing continues.

Operator Response: To maintain the availability of SYS1.DUMP data sets, the following should be done: if the dump is on a tape (UNIT = ddd), rewind and unload the tape and mount another unlabeled scratch tape. If the dump is on a DASD (SYS1.DUMPnn), the dump should be copied to another installation data set by the use of the AMDPRDMP service aid for further processing.

IEA912I RECOVERY/TERMINATION DUMP FAILED [DUE TO cde]

Explanation: SNAP or SVC Dump was called by the ABDUMP phase of recovery/termination. SNAP or SVC Dump failed for one of the following reasons:

- DCB not open or invalid page referenced during validity checking.
- TCB address invalid or invalid page referenced during validity checking; or insufficient storage available.
- DCB type not correct.
- SYSMDUMP was unsuccessful. cde specifies the reason for the failure. Note: SDUMP is only called for SYSMDUMP.

If the phrase 'DUE TO cde' appears, abnormal termination with a system completion code of cde has occurred.

System Action: No dump is taken.

Programmer Response: Correct the original failure (cde) if specified.

IEA913I COMMON AREA EXCEEDS 8M BY nnnnK

Explanation: The size of the common area (SQA, LPA, and CSA) is greater than 8 megabytes, thus reducing the size of the private area by the amount specified in the message (nnnnK).

System Action: System processing continues.

Operator Response: If the condition is acceptable, no response is required. Otherwise, re-IPL the system and reduce the CSA size parameter by the amount specified in the message.

IEA915E SYNTAX ERROR IN IEASYSnn CONTENTS, PROMPT FOLLOWS

Explanation: Paging data set names specified in the IEASYSnn PARMLIB member do not conform to the syntax rules defined. The paging initialization routine will subsequently request the operator to respecify this information.

System Action: Paging initialization invokes the prompt routine, which will request a new set of text for the PAGE= parameter. Paging initialization continues after receipt of the new text.

Operator Response: Respond to the prompt message with appropriate text and report this message to the system programmer.

Programmer Response: To avoid this message in subsequent IPLs, correct the contents of IEASYSnn according to the syntax for specifying paging space data set names.

Problem Determination: Table I, items 2, 25c (IEASYSnn of SYS1.PARMLIB), 29.

IEA916E SYNTAX ERROR IN { PAGE= / SWAP= / DUPLEX= / PAGNUM= / NONVIO= } SYSTEM PARAMETER, PROMPT FOLLOWS

Explanation: Information specified in the indicated system parameter does not conform to the syntax defined for it. The operator will subsequently be requested to respecify that parameter.

System Action: Paging initialization invokes the prompt routine, which will request a new set of text for the indicated parameter. Paging initialization continues after receipt of the new text.

Operator Response: Respond to the prompt message with syntactically correct parameter text and notify the system programmer that this problem exists.

Programmer Response: Make sure that documentation for specification of the system parameter conforms to the syntax defined for the parameter.

Problem Determination: Table I, items 2, 29.

IEA918I { PAGE / SWAP / DUPLEX } DATA SET dsn NOT ACCEPTED

Explanation: Either data set dsn is already being used by paging initialization or addition of this name to the list of paging or swapping data sets would exceed the limit. A limited number of paging or swapping data sets may be known to the paging or swapping routines at one time.

If message IEA922D follows this message, a limit has not been reached, but the data set is already in use. Message IEA922D will offer the operator a chance to respecify a data set name.

System Action: Initialization continues.

Operator Response: If a paging or swapping data set limit has been reached, notify the system programmer.

Programmer Response: If for any reason this data set must be used and some others previously known to paging routines should be omitted, respecify the paging data sets when restarting the system with the CLPA or CVIO option.

Problem Determination: Table I, item 29.

IEA919I CHANNEL SET x SWITCHED TO PROCESSOR y

Explanation: The I/O processor on an AP system that supports channel set switching has failed or was varied offline. Channel set x is now connected to processor y. This message can also be issued on an MP system when all the channels in one of the channel sets are offline and the processor with the online channels is removed from the configuration.

System Action: System processing continues. All I/O processing is now performed by processor y.

Operator Response: None.

IEA920I { PAGE / SWAP / DUPLEX } DATA SET dsn NOT LOCATED

Explanation: A request to locate data set dsn resulted in an error. Either the data set cannot be located in the master catalog or the master catalog information does not agree with expected and necessary attributes of a page or swap data set.

System Action: If DUPLEX is specified in the message text and the DUPLEX page data set is known from a previous IPL and should be used under current IPL options, message IEA942I will follow, and paging initialization continues. If the data set was newly specified during this IPL, message IEA922D will follow this informational message, offering the operator a chance to respecify the data set name before paging initialization continues.

If PAGE is specified in the message text and the page data set is known to paging initialization routines from a previous IPL as containing VIO pages that should be used under current IPL options, message IEA930I will follow, and paging initialization will continue.

In all other cases, message IEA922D will follow this message.

Operator Response: Report this message to the system programmer.

Programmer Response: If the data set should be used in subsequent systems, prepare it according to instructions before the next IPL. Verify that the page data set or the swap data set is cataloged in the master catalog.

IEA921I PAGE DATA SET dsn INVALID

Explanation: The cataloged information about this page data set indicates some discrepancy with the requirements of a page data set. It may not be a device supported for paging or the data set is not defined as previously known to paging initialization.

System Action: If the page data set was to contain PLPA pages, message IEA935W will follow, and IPL will terminate.

If the data set specified is the DUPLEX page data set and if it is known from a previous IPL and should be used under current IPL options, message IEA942I will follow, and paging initialization continues.

If the data set specified is a page data set known to paging initialization as containing VIO pages which should be used under current IPL options, message IEA930I will follow, and paging initialization continues.

In all other cases, message IEA922D will follow, offering the operator a chance to respecify the data set name before continuing.

Operator Response: Report this message to the system programmer.

Programmer Response: Check catalog information about this data set. If necessary, redefine before the next IPL.

Problem Determination: Table I, item 29.

IEA922D REPLY 'DSN=dsn' OR 'IGNORE'

Explanation: This message provides the system operator with the opportunity to respecify a page or swap data set name, for a reason documented by a preceding message on the console sheet.

System Action: The system waits for the operator to reply. If a new data set name is provided, that data set is processed. If 'IGNORE' is specified, paging initialization either continues with the existing list of data sets or issues a wait state with a wait state code of X'3C'. The wait state will be issued if the data set being ignored is:

- The PLPA page data set.
- The common page data set.
- The duplex page data set when it is needed to complete a quick start because it contains PLPA data set pages of a previous IPL.
- The only local page data set that is available to the system.

Operator Response: To replace the data set, enter REPLY xx,'DSN=dsn' where dsn is the new data set name. To continue without the data set, enter REPLY xx,'IGNORE'. Notify the system programmer of this message.

Programmer Response: Appropriate action is described with the documentation of the message which preceded this message on the console sheet.

IEA923D VOLUME ser NEEDED FOR {PAGE / SWAP}
DATA SET WAS NOT MOUNTED;
REPLY 'GO' OR 'IGNORE'

Explanation: An open of a data set on this volume was attempted, and paging initialization was informed that the volume was not mounted. The data set does not contain any pages of PLPA or VIO that would be missed with the IPL options in effect.

System Action: The system waits for the operator to reply. If the volume is to be provided, paging initialization continues, a mount message is issued, and the data set is used. If the volume is not provided, paging initialization continues without the data set.

Operator Response: Either enter REPLY xx,'GO' and prepare to mount the requested volume, or enter REPLY xx,'IGNORE'. Notify the system programmer of this message if the volume is not made available.

Programmer Response: Review space now being used for paging or swapping, depending upon which type was ignored.The PAGEADD command may be needed to help system performance if insufficient space has resulted.

Problem Determination: Table I, item 29.

IEA924D VOLUME ser NEEDED FOR PAGE DATA SET WAS NOT MOUNTED;
{CLPA MAY BE FORCED / NEW PLPA DATA SET MAY BE REQUESTED}
REPLY 'GO' OR 'IGNORE'

Explanation: An open for a required page data set on this volume was attempted, and paging initialization was informed that the volume was not mounted. If CLPA MAY BE FORCED is specified in the message text, then the COMMON page data set is on this volume. If NEW PLPA DATA SET MAY BE REQUESTED is specified, then the PLPA page data set is on this volume.

System Action: The system waits for the operator to reply. If the volume is to be provided ('GO'), paging initialization continues, a mount message is issued, and the data set is used. In most cases, if the volume is not to be provided ('IGNORE'), a new data set name will be requested by message IEA922D. However, if a quick or warm start is in progress, the PLPA page data set overflowed to the COMMON page data set, and the unmounted volume contains this COMMON page data set, paging initialization will force a cold start (CLPA) and issue message IEA929I.

Operator Response: Either enter REPLY xx,'GO' and prepare to mount the requested volume, or, enter REPLY xx,'IGNORE' and notify the system programmer.

Programmer Response: If a permanent change is desired, update SYS1.PARMLIB to reflect the new PLPA or COMMON page data set name. Otherwise, complete the IPL, correct the problem, and re-IPL with the original data sets.

Problem Determination: Table I, item 29.

IEA925D VOLUME ser NEEDED FOR PAGE DATA SET WAS NOT MOUNTED; CVIO MAY BE FORCED; REPLY 'GO' OR 'IGNORE'

Explanation: An open of a page data set on this volume was attempted, and paging initialization was informed that the volume was not mounted. The volume contains pages of VIO data sets which may be required for recovery of one or more VIO data sets. Replying IGNORE will force the CVIO option.

System Action: The system waits for the operator to reply. If the volume is to be provided, paging initialization continues, a mount message is issued, and page data sets on that volume are used. If the volume is not provided, paging initialization continues without page data sets on that volume. In addition, the CVIO option will be in effect, causing all VIO data sets from previous IPLs to be unrecoverable.

Operator Response: Either enter REPLY xx,'GO' and prepare to mount the requested volume, or enter REPLY xx,'IGNORE'. Notify the system programmer of this message if the volume is not made available.

Programmer Response: Review paging space since CVIO option is in effect unexpectedly. Only data sets specified on this IPL will be attempted for use. The PAGEADD command may be needed.

Problem Determination: Table I, item 29.

IEA927I PLPA AND COMMON PAGE DATA SETS FULL FROM PREVIOUS IPL

Explanation: On a previous IPL, the PLPA and COMMON page data sets were filled up during the write of the pageable LPA. The CSA and the rest of the pageable LPA have no primary slots.

System Action: Paging initialization continues with the DUPLEX page data set. If there is no DUPLEX page data set, message IEA935W is issued.

Operator Response: Report this message to the system programmer.

Programmer Response: If a warm start is necessary to clean up work in the system, make sure that the previous DUPLEX page data set is usable, and re-IPL. Otherwise, redefine the PLPA and COMMON page data sets, and re-IPL with the CLPA option.

IEA928I MODULE AT LOCATION xxxxxx IN PLPA CONTAINS HOLES

Explanation: One of the following conditions occurred:

1. While building the paging information for PLPA during a cold start (CLPA IPL), paging initialization found an invalid external page table entry for a PLPA module.

2. While restoring paging information for PLPA during a warm or quick start (not a CLPA IPL), paging initialization found an external page table entry for a PLPA module that contained zero, indicating that condition 1 occurred during cold start.

These conditions indicate that the module at virtual address xxxxxx in the PLPA contains no executable code on the page referenced by the page table entry; that is, the module contains non-contiguous code or large constant areas. This condition should not occur in a PLPA module.

System Action: Paging initialization processing marks the external page table entry as invalid. IPL processing continues. Any address space that subsequently references this PLPA page will abnormally terminate with system completion code 028.

Operator Response: Notify the system programmer.

Programmer Response: Use the current LPA map to identify the module containing virtual address xxxxxx. Correct the module and re-IPL, specifying the CLPA system parameter.

Problem Determination: Table I, item 29.

IEA929I CLPA FORCED

Explanation: This message provides further information about the nature of the IPL as it changes. The paging initialization routines are unable to fulfill the ¬CLPA (not CLPA) IPL option, for the reason documented in the preceding message.

System Action: Paging initialization continues as if CLPA had been specified.

Operator Response: Report this message to the system programmer.

Programmer Response: See the documentation for the messages that preceded this message on the console sheet.

IEA930I CVIO FORCED

Explanation: This message provides further information about the nature of this IPL as it changes. The paging initialization routines are unable to fulfill the ¬CVIO (not CVIO) IPL option, for the reason documented in the preceding message.

System Action: Paging initialization continues as if CVIO had been specified.

Operator Response: Report this message to the system programmer.

Programmer Response: See the documentation for the messages that preceded this message on the console sheet.

IEA931I ESTAE REQUEST FOR GTF TRACE FORMATTING FUNCTION UNSUCCESSFUL

Explanation: GTF formatting module, IGC0F05A, was unable to establish ESTAE environment.

System Action: No GTF buffers are formatted.

Programmer Response: None.

Problem Determination: Table I, items 4, 7a, 13, 29.

IEA932I INSUFFICIENT STORAGE FOR GTF BUFFER FORMATTING

Explanation: There is insufficient SQA for GTF buffer formatting.

System Action: No GTF buffers are formatted.

Programmer Response: None.

Problem Determination: Table I, items 4, 7a, 13, 29.

IEA933I UNABLE TO LOAD FORMAT APPENDAGE xxx. FURTHER RCDS REQUIRING THIS MOD WILL BE DUMPED IN HEX

Explanation: GTF formatting module was unable to load format appendage xxx.

System Action: Formatting of the GTF buffers will continue, dumping in hexadecimal any record that requires format appendage xxx for editing.

Programmer Response: None.

Problem Determination: Table I, items 7a, 9a, 13, 29.

IEA934I INVALID RETURN CODE RECEIVED FROM mod. FURTHER RCDS REQUIRING THIS MOD WILL BE DUMPED IN HEX

Explanation: On return from module mod an invalid return code was recognized.

System Action: Formatting of the GTF buffers will continue, dumping in hexadecimal any record that requires this module for editing.

Programmer Response: None.

Problem Determination: Table I, items 7a, 9a, 13, 29.

IEA935W INSUFFICIENT PAGING RESOURCES, IPL TERMINATED

Explanation: To support minimal paging there must be a certain minimum number of paging data sets with a minimum number of system-page-sized slots in a certain distribution available to paging initialization. The paging resource initialization manager has determined that this is not available.

System Action: System initialization ceases. The system enters a wait state.

Operator Response: Report this message to the system programmer.

Programmer Response: Either 1) redefine spaces to conform with the description provided in paging planning specifications and re-IPL with the CLPA option, or 2) provide additional paging spaces and make them available to paging initialization via either the PAGE= parameter or PARMLIB during re-IPL.

Problem Determination: Table I, item 29.

IEA936I FUTURE QUICK OR WARM STARTS OF THIS IPL WILL FAIL

Explanation: On a CLPA IPL, paging initialization needed to write quick/warm start data to the first records of the PLPA page data set. However, the write failed, and none of the information will be accessible to a future IPL.

System Action: Paging initialization continues.

Operator Response: Report this message to the system programmer.

Programmer Response: When using this PLPA page data set again, perform a CLPA IPL.

Problem Determination: Table I, item 29.

IEA937I COMMON PAGE DATA SET TIME STAMP FAILURE

Explanation: When this message is followed by message IEA935W, paging initialization was unable to read or write the time stamp record in the COMMON page data set. The time stamp is written on CLPA IPLs; it is read on ¬CLPA (not CLPA) IPLs if part of the PLPA was written to the COMMON page data set.

When this message is followed by message IEA929I, paging initialization read the time stamp in the COMMON page data set, but the time stamp failed to match the time stamp of the PLPA slot information.

System Action: If unable to access the COMMON page data set, the system enters a wait state. If the wrong level of the COMMON page data set is accessed, system operation continues with the CLPA IPL forced.

Operator Response: Report this message to the system programmer.

Programmer Response: If a wait state occurred, correct or replace the COMMON page data set, and re-IPL with the CLPA option.

If a wait state did not occur, and a warm start is necessary, stop the IPL, make the correct level COMMON page data set available, and re-IPL.

IEA938W NO STORAGE AVAILABLE, PAGING INITIALIZATION TERMINATED

Explanation: A request for additional storage failed during paging initialization. The resource initialization managers are unable to continue. A probable reason is that the system queue area (SQA) maximum amount specified has been exceeded.

System Action: System initialization ceases. The system enters a wait state.

Operator Response: Report this message to the system programmer.

Programmer Response: Make sure that SQA assignment is as recommended. If not, increase SQA maximum size to that recommended in generating a new system. Otherwise, the system configuration may be too small, or there may be a problem with at least one resource initialization manager.

Problem Determination: Table I, items 2, 11, 17, 29.

IEA939D QUICK AND WARM START DATA IS INVALID, RE-IPL OR REPLY 'GO' FOR COLD START

Explanation: A ¬CLPA (not CLPA) IPL was attempted, and information on the PLPA paging data set was inaccessible:

- The PLPA paging data set specified on this IPL must be the same as that used on the previous successful CLPA IPL.
- If the same data set was being used, then the needed information is not able to be read.

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

Operator Response: Either enter REPLY xx,'GO' if a cold start (CLPA) is desired, or re-IPL with a different data set specified for PLPA paging. Report this message to the system programmer.

Programmer Response: Verify that the correct SYS1.PARMLIB is being used. Also, verify the previous use of the PLPA paging data set.

Problem Determination: Table I, item 29.

IEA940I THE FOLLOWING PAGE DATA SETS ARE IN USE
PLPA ... dsn
COMMON . dsn
[DUPLEX . dsn]
LOCAL .. dsn
.
.
.

Explanation: This message is issued if L is specified on the PAGE= system parameter, or if paging initialization has been forced to change the list of page data sets originally specified. The list of data sets should help the operator verify which paging volumes are in use, especially after a warm start where data sets used on the previous IPL were not specified on this IPL.

System Action: Initialization continues.

Operator Response: None.

IEA941D VOLUME ser NEEDED FOR DUPLEX DATA SET NOT MOUNTED; DUPLEXING MAY BE STOPPED, REPLY 'GO' OR 'IGNORE'

Explanation: An open on volume ser was attempted, but paging initialization was informed that the volume was not mounted. If duplexing is desired for this IPL, the volume must be mounted.

System Action: The system waits for the operator to reply. If the volume is to be provided, paging initialization continues, a mount message is issued, and the data set is used. If the volume is not provided, paging initialization continues without duplexing.

Operator Response: Either enter REPLY xx,'GO' and prepare to mount the requested volume, or enter REPLY xx,'IGNORE'.

IEA942I DUPLEXING INACTIVE, { NO DATA SET / BAD TIME STAMP }

Explanation: A DUPLEX page data set and the CLPA option were specified either on the current IPL or on the CLPA IPL for which the current IPL is based. While attempting to use the DUPLEX page data set, a problem was detected:

- If NO DATA SET is specified in the message text, the reason for the problem is documented in the preceding message.
- If BAD TIME STAMP is specified in the message text, and if the CLPA option was specified or forced, the attempt to write a time stamp to the first record of the data set failed. If the CLPA option was not used, the attempt to read the time stamp failed or the time stamp no longer matched that of the PLPA slot information.

System Action: Paging initialization continues without duplexing.

Operator Response: To restore duplexing, perform a CLPA IPL with the DUPLEX page data set specified. If necessary, replace or correct the DUPLEX page data set.

IEA943W FAILURE DURING REBUILD OF PLPA

Explanation: For a ¬CLPA (not CLPA) IPL, paging initialization attempted to restore paging information for the PLPA data set into the page tables representing the PLPA. However, the page table could not be found or PLPA slot information was invalid.

For a CLPA IPL, paging initialization attempted to save paging information found in page tables representing the PLPA. However, a page table could not be found.

System Action: Paging initialization terminates with a wait state code of X'061'.

Operator Response: Report this message to the system programmer. Re-IPL with the CLPA option specified.

Problem Determination: Table I, item 29.

IEA944I QUICK OR WARM STARTS FROM THIS IPL WILL HAVE RANDOM RESULTS

Explanation: On a quick or warm start, an attempt to write page data set information to the PLPA page data set has failed. The failure might have destroyed previous information or might have just left the information down level. Further use of the information would therefore cause unpredictable results.

System Action: The present IPL continues processing.

Operator Response: Report this message to the system programmer. Be sure that the device containing the PLPA page data set is not in READ ONLY status. If the present IPL status is either specified or forced CVIO, and it is desired to do ¬CVIO (warm start) on the next IPL, then stop the current IPL. If the present IPL status is ¬CVIO (warm start), continue with the current IPL only to clear up previous VIO-related jobs. Re-IPL according to the system programmer's instructions.

Programmer Response: Evaluate the PLPA page data set, and replace or redefine, as necessary. Then, re-IPL with this PLPA page data set and the CLPA option specified.

Problem Determination: Table I, item 29.

IEA945W UNABLE TO USE CLOCK FOR TIME STAMP

Explanation: On an IPL in which CLPA or CVIO was specified or forced, paging initialization needs a unique number (time stamp) to mark corresponding information and data sets. An attempt to use the STCK instruction to obtain this number failed with a condition code of 2 or 3.

System Action: IPL is terminated with a wait state code of X'061'.

Operator Response: Repeat the IPL. If the problem persists, the clock is not even able to be set.

Problem Determination: Table I, item 30.

IEA946W NO {VIRTUAL / REAL} STORAGE AVAILABLE FOR SQA

Explanation: During a GETMAIN or a FREEMAIN it was necessary to obtain storage in the system queue area (SQA) for an internal control block. No virtual or real space was available.

System Action: The system was placed in a wait state with a wait state code of 101 (virtual) or 102 (real).

Operator Response: Restart the system. If the message occurs frequently with the VIRTUAL option, installation action is needed to increase the space allowed for the system queue area; more space should be specified at system generation time or in response to message IEA101A during system IPL. If the message occurs frequently with the REAL option, installation action is required to decrease the fixed real storage requirements of the system.

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

IEA947A REPLY U TO CONTINUE, OR RE IPL.

Explanation: A system volume, specified in message IEA866I, is not mounted on the device type specified in the VATLST entry.

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

Operator Response: If the wrong volume was mounted at IPL, mount the correct volume. If the correct volume is mounted, reply 'U' to continue, and notify the system programmer of the VATLST entry error. If you reply 'U', the system will ignore the attributes of the volume and they will remain P/R-Public.

IEA948I [V]xxx NOW UNLOADED.

Explanation: The system has unloaded the volume on device xxx. If V is present in the message, the volume is a Mass Storage System (MSS) volume.

System Action: The volume is unloaded.

Operator Response: Respond as indicated by the operator response for preceding message (either message IEA854I or IEA866I).

IEA949I I/O ERROR READING VATLSTxx.

IEA949A REPLY YES FOR LIST OF ENTRIES THAT WILL BE PROCESSED, OR U FOR NO LIST.

Explanation: The system detected an uncorrectable input/output error while reading VATLSTxx, a member of SYS1.PARMLIB containing a volume attribute list. If message IEA949A does not appear, then no VATLST entries had been encountered before the error occurred.

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

Operator Response: If message IEA959A appears, then reply 'YES' for a list of entries (encountered before the error occurred) that will be processed. If no listing is desired, reply 'U'.

IEA950I MODULE mod NOT FOUND; MC ROUTING INACTIVE

Explanation: Module mod was not found in LPA. This module is required for use with the MONITOR CALL routine facility; any of the following users of this facility will be unable to initialize:

GTF

System Action: Processing continues.

Programmer Response: If any of the above functions are desired, the following modules must be present in LPA:

AHLSETEV
AHLSETD
AHLMCER

After updating the necessary libraries with these modules, re-IPL the system to initialize the desired function.

Problem Determination: Table I, items 2, 13, 7c, 29.

IEA951I IPC FAILURE ON CPU x, {STATUS= stat / CODE= rc}

Explanation: During execution of the nucleus initialization program for a multiprocessor configuration, a SIGP instruction for either initial program reset (IPR) or restart was executed by the interprocessor communications (IPC) function to CPU x.

STATUS=stat

The SIGP instruction resulted in condition code 1 (SIGP function unsuccessful) and status information stat being stored. The IPC function returned a code of 8 to its caller.

Code=rc

The IPC function returned the undefined return code rc to its caller. The status of the SIGP function is unknown.

System Action: The signaled CPU is treated as offline; no initialization is performed for it. Processing continues for the other CPUs in the configuration.

Operator Response: Probable hardware error. If the subject CPU is required to be online, analyze the status information and adjust the switches on the CPU and either restart the system or execute a VARY CPU ONLINE to that CPU.

Problem Determination: Table I, items 2, 29, or 30. Also have the recorded switch settings on the subject CPU available.

IEA952I IPC FAILURE ON CPU(S) aa,bb,...,pp

Explanation: During execution of the nucleus initialization program (NIP) for a multiprocessor configuration, a SIGP instruction for either initial program reset (IPR) or restart was executed by the interprocessor communication (IPC) function to CPU(s) aa,bb,...,pp. The SIGP instruction resulted in condition code 2 (SIGP function not completed because the access path to the addressed CPU was busy or the addressed CPU could not accept or respond to the function code.) The IPC function returned a code of 4 to its caller.

System Action: The signaled CPUs are treated as offline and no initialization is performed for them. Processing continues for the other CPUs in the configuration.

Operator Response: Probable hardware error. If the subject CPUs are required to be online, make sure that no other CPU is signaling them and that the SIGP instruction is installed on them and either re-IPL the system or execute a VARY CPU ONLINE to them.

Problem Determination: Table I, items 2, 30.

IEA953I UNABLE TO INITIALIZE CPU(S) aa,bb,...,pp

Explanation: During execution of the nucleus initialization program (NIP) for a multiprocessing configuration, CPUs aa,bb,...,pp did not successfully complete their initialization.

System Action: Any storage areas allocated to the CPUs are freed and the CPUs are treated as offline.

Operator Response: Probable hardware error. If the subject CPUs are required to be online, either restart the system or execute a VARY CPU ONLINE to them.

Problem Determination: Table I, items 2, 30.

IEA954I MALFUNCTION ALERT GENERATED BY CPU(S) aa,bb,...,pp

Explanation: During execution of the nucleus initialization program (NIP) for a multiprocessor configuration, CPUs aa,bb,...,pp generated malfunction alerts. Malfunction alerts are generated by a CPU when a machine check condition arises but machine checks are disabled in the CPU's PSW and the 'hard stop' bit is on in the CPU's machine control register 14.

System Action: If the malfunction alert occurred before the CPU was initialized, no attempt is made to initialize it. If the malfunction alert occurred during or after the initialization of the CPUs, any storage areas allocated to the CPUs are freed and the CPUs are marked offline.

Operator Response: Probable hardware error. If the subject CPUs are required to be online, either restart the system or execute a VARY CPU ONLINE to them.

Problem Determination: Table I, items 2, 30.

IEA955I nnnK OF ONLINE REAL STORAGE, MAY BE INSUFFICIENT

Explanation: During execution of the nucleus initialization program (NIP), nnnK (K = 1024) of real storage was found online. This is less than the minimum of 768K required to execute OS/VS2 release 2.

System Action: System initialization attempts to continue. NIP reduces the sizes of certain permanent system cell pools to their minimum to use as little real storage as possible.

Operator Response: None.

IEA956I TOP OF NIP V=R REGION IS TOO {HIGH / LOW}

Explanation: The installation-specified value for the top of the nucleus initialization program's (NIP) V=R region is not acceptable. The installation specifies this value by running a superzap against field 'NVTNVRSZ' in the IEAVNIP0 CSECT of the nucleus. If HIGH appears in the message text, the value specified will not allow:

- The V=R region to fit below the low end of the master scheduler's LSQA.
- The V=R region to fit below the low unavailable address.
- Sufficient real storage for the minimum number of reserved frames.

If LOW appears in the message text, the value specified will not allow sufficient real storage for the minimum V=R region for NIP.

System Action: The installation-specified value is ignored and the default maximum of 2 megabytes (2,097,152 bytes) is used in determining the top of NIP's V=R region.

IEA957I RESTART RESOURCE WORD CONTAINED wd

Explanation: During execution of the nucleus initialization program (NIP) for a multiprocessor configuration, the restart resource word 'CVTRSTWD' contained wd when the IEAVNIP0 CSECT of NIP required the restart resource. At the time IEAVNIP0 executes, the word should contain zeros.

System Action: IEAVNIP0 treats the situation as an error and appropriates the restart resource by putting NIP's ID in the word and using the resource.

Programmer Response: Probable user error. Make sure that no superzaps have been applied to the field 'CVTRSTWD' in the nucleus. If they have, resuperzap the field to zero.

Problem Determination: Table I, items 2, 29.

IEA958I EXCP APPENDAGE NAME TABLE NOT BUILT

Explanation: During nucleus initialization, the IEAAPP00 member of SYS1.PARMLIB was accessed to build a table of valid module ids which may be loaded as EXCP appendages. Due to an I/O error or to a syntax error in IEAAPP00 the constructing of this table was not completed.

System Action: No user-supplied appendages will be loaded for a DCB where MACRF=(E) unless the user is operating in system key 0-7 or authorized under APF. If an OPEN is attempted against a DCB with appendage IDS to be loaded and either of these conditions is met, a 913 ABEND with a return code 20 will result.

Operator Response: Report this message to the system programmer. IEAAPP00 must be rebuilt prior to the next IPL for jobs which require unauthorized EXCP appendage routines.

IEA959I ERROR CAUSED ACTIVE LPA TO BE TRUNCATED, MODULE CONTROL MAY BE LOST.

Explanation: Recovery from a system error required the active link pack area to be truncated. This means that modules in the LPA may no longer be invokable and attempts to use them may cause abnormal termination or unpredictable results.

System Action: The system continues processing; a record indicating the error is written to SYS1.LOGREC.

Operator Response: Report this message to the system programmer. If frequent abnormal terminations occur, re-IPL may be necessary.

Problem Determination: Table I, items 2, 29. Dump the SYS1.LOGREC data set and save the output.

IEA960I ENQ/DEQ CONTROL QUEUES WERE DAMAGED. RESTORATION ATTEMPTED.

Explanation: The ENQ/DEQ control blocks contained invalid data which caused the current ENQ or DEQ request to function incorrectly.

System Action: If the error was considered correctable, the correction was made. The task from which the error was detected was terminated.

If the error was considered uncorrectable, the control queues were corrected, only to allow dequeues relating to the damaged area. All enqueues relating to the damaged area will be terminated with a 838 ABEND completion code. The task from which the error was detected is terminated.

Operator Response: Notify the system programmer.

Note: Related information can be found in SYS1.LOGREC.

Problem Determination: Table I, items 2, 3, 4, 13, 16, 18, 29.

IEA961I RESOURCE NAMED xxx, yyy MAY BE DAMAGED

Explanation: This message follows message IEA801I. It indicates a task or an address space that abnormally terminated while in 'step must complete' status, while holding the resource named xxx (ENQ q-name), yyy (ENQ r-name).

System Action: The indicated resource was dequeued and the 'must complete' status reset. Processing continues.

Operator Response: Notify the system programmer.

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

IEA962A MESSAGE FOR INACTIVE CONSOLE nn. REPLY { SEND, / DELETE, } OR OK.

Explanation: A message has been enqueued to the inactive console whose console id is nn.

System Action: The message remains enqueued to the inactive console until a reply is given.

If the console has been activated before the reply is issued, the reply is ignored. If the message issuer terminated or has issued a DOM for the message, the reply is ignored and the message is deleted.

Operator Response: Enter one of the following replies:

- REPLY xx,SEND; the message will be rerouted to the master console and deleted from the inactive console's queue. This reply is not valid for multiple-line messages.
- REPLY xx,DELETE; the message will be deleted from the inactive console's queue.
- REPLY xx,OK; the message will remain enqueued to the inactive console.

IEA963A INVALID REPLY TO MESSAGE IEA962A. REPLY { SEND, / DELETE, } OR OK.

Explanation: The reply given to message IEA962A was invalid.

System Action: The message remains enqueued to the inactive console until a correct reply is given.

Operator Response: Enter one of the following replies:

- REPLY xx,SEND; the message will be rerouted to the master console and deleted from the inactive console's queue. This reply is not valid for multiple-line messages.
- REPLY xx,DELETE; the message will be deleted from the inactive console's queue.
- REPLY xx,OK; the message will remain enqueued to the inactive console.

IEA964I HARDCOPY SUSPENDED, REASON=xxxx NO HARDCOPY DEVICE AVAILABLE

Explanation: The device which had been receiving hardcopy or which was scheduled to receive hardcopy has become unusable. Hardcopy is required either because of the console configuration or because the HARDCPY parameter was specified at IPL time. The hardcopy output cannot be switched to the SYSLOG data set or to an appropriate console since neither of these is available.

The REASON = xxxx field shows why the hardcopy device became unusable:

xxxx	Explanation
HCSW	The hardcopy function was switched from SYSLOG.
EXT	The external interrupt key was pressed.
IOER	An I/O error occurred on the failing console.
SWER	A software error occurred for the failing console.
VMST	A VARY MSTCONS command was issued.
OPER	An open failure occurred for the console.
ACR	Alternate CPU recovery forced the console switch.
VCHN	A VARY CH command was issued.
VCPU	A VARY CPU command was issued.

System Action: Processing continues. Messages processed during the suspended period will not be saved for hardcopy later.

Operator Response: Hardcopy may be restarted by varying a hardcopy console online (that is, a console with paper output), or by starting the system log and varying hardcopy to SYSLOG.

IEA967W UNSUCCESSFUL RECOVERY ATTEMPT BY SUPERVISOR CONTROL

Explanation: Supervisor control has suffered a double recursive ABEND in supervisor control buffer FRR.

System Action: The system enters a disabled wait state.

Operator Response: Re-IPL.

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

IEA968I xxxxxK REAL STORAGE FOUND NOT USABLE; yyyyyK FOUND USABLE

Explanation: IPL and NIP test the status of each possible frame of real storage up to 16M. This message is issued when a defective frame is found. In the message text, xxxxxK is the number of bytes that are not usable because of defects; yyyyyK is the number of bytes that are usable. The storage that makes up the hardware system area (HSA) is not included in these totals.

System Action: Processing continues.

Operator Response: If message IEA340I follows this message, notify the system programmer. Otherwise, none.

Programmer Response: If message IEA340I follows this message, the location of one or more defective frames might have made it impossible for NIP to obtain sufficient contiguous storage for the nucleus buffer. Respond as indicated for message IEA340I.

IEA969A - WARNING - SIGP IPR FAILED DURING ALTERNATE CPU RECOVERY PROCESSING

Explanation: An attempt by module IECVRSTI to reset the dead processor and its I/O devices by means of a SIGP instruction has failed.

System Action: Processing continues; however, since the I/O devices on the dead processor have not been reset, any device which had an I/O operation outstanding for the dead processor might be inaccessible to the live processor.

Operator Response: Probable hardware error.

Caution: Since the dead processor has not been reset; START, RESTART, or RESET should not be attempted on the dead processor until the dead processor has been reconfigured to uniprocessor mode. After the dead processor has been reconfigured, and only after this has been done, the dead processor should be RESET to free the I/O devices.

This is a hardware malfunction which might cause gradual loss of I/O function to the system.

Problem Determination: Table I, item 30.

IEA970I CHANNEL RECONFIGURATION HARDWARE ACTIVATED

Explanation: Under system control, channel reconfiguration hardware (CRH) or channel set switching (CHS) enables the operative processor to access the channels on the inoperative or offline processor. CRH or CHS is now being used because one of the following has occurred.

- A hardware failure on one processor caused the alternate CPU recovery (ACR) function to take the failing processor offline and activate CRH.
- The operator has issued a VARY channel command that brought a channel online; this particular channel is the first channel varied online that is contained in a channel set attached to an inoperative or offline processor.

System Action: System processing continues.

Operator Response: Notify system programmer.

Caution: CRH and CHS are intended only for temporary use to service the I/O devices contained in the channel set attached to the offline processor until all critical jobs can complete processing. The operator should then vary offline all channels contained in the channel set attached to the inoperative processor as soon as possible. When all channels on the inoperative processor are offline, CRH or CHS is automatically deactivated.

Since CRH or CHS relies in part on the hardware contained in the failing or offline processor, certain portions of that processor cannot be powered off while CRH or CHS is active. The inoperative or offline processor must be in stopped state to prevent selection of any channels being accessed by CRH or CHS. The System Mode switch used when configuring to a uniprocessor or multiprocessor must be left in MP mode.

IEA971I UNABLE TO ACTIVATE CHANNEL RECONFIGURATION HARDWARE

Explanation: An error occurred while activating channel reconfiguration hardware (CRH) or channel set switching (CHS). See message IEA970I.

System Action: If CRH or CHS was invoked by alternate CPU recovery (ACR), ACR processing continues as if CRH or CHS were not available.

If CRH or CHS was invoked due to a VARY channel command, the channel is not brought online.

Operator Response: Notify your IBM representative.

Problem Determination: Print SYS1.LOGREC.

IEA972I CHANNEL RECONFIGURATION HARDWARE DEACTIVATED

Explanation: Channel reconfiguration hardware (CRH) or channel set switching (CHS) is no longer being used (see message IEA970I) because of one of the following actions:

- The operator issued a VARY CPU command that brought the offline processor back online.
- The operator issued a VARY channel command that varied offline the last channel contained in a channel set attached to the offline processor.

System Action: System processing continues.

Operator Response: None, because the operator has caused the system action.

IEA973I MSC AT dd DOES NOT INITIALIZE, RC=xxx

Explanation: During system initialization, the alternate MSC at the unit address shown is online. But it does not respond properly to an initialize order. It returned the reason code shown.

System Action: System initialization continues, as does MSSC Initialization. MSC backup is not available.

Operator Response: Probable 3850 hardware error. The 3850 can be used without backup if this is acceptable.

Problem Determination: Table I, Item 2.

IEA974I NO 3850. MODULE xxxxxxxx NOT FOUND

Explanation: During system initialization, the search for the module name shown was unsuccessful.

System Action: The 3850 is not available. The message IEA981I follows.

Operator Response: Inform the system programmer.

Programmer Response: Ensure that all MSSC modules have been included in the appropriate libraries.

Problem Determination: Table I, items 2, 17a and 17b.

IEA975I MSS INOPERATIVE. NO MSC ONLINE

Explanation: During system initialization an MSC is not online; therefore the 3850 cannot be used.

System Action: Processing continues with the Mass Storage System inoperative.

Operator Response: Contact the system programmer.

Problem Determination: Table I, item 2.

IEA976I MSC AT ddd NOT ONLINE

Explanation: The alternate MSC, for the 3850 at unit address ddd, is not online.

System Action: The 3850 initialization and other system initialization continues without the backup capability of the alternate MSC.

Operator Response: If the alternate MSC is desired vary it online.

Problem Determination: None.

IEA977I MSS INOPERATIVE. NO MSC INITIALIZES. MSC ddd REASCODE = xxx AND MSC ddd REAS CODE = xxx

Explanation: During system initialization, no Mass Storage Control returned a satisfactory response for attempts to initialize this host processor interface to the Mass Storage Control. Return codes from the Mass Storage Control(s) are shown in the message with the corresponding unit address.

System Action: Processing continues with the Mass Storage System inoperative.

Operator Response: Follow the action recommended for the specified Mass Storage System Communicator reason codes. Mass Storage System Communicator reason codes are found in *Mass Storage System (MSS) Messages*. Once the necessary repairs are made, vary online the repaired Mass Storage Control to restore Mass Storage System operation. While the Mass Storage System is inoperative, jobs calling for mass storage volumes will fail.Under these conditions, jobs that require the Mass Storage System should not be started.

Problem Determination: Table I, items 2, 17, 30.

IEA978I PURGE 3850 AT SYSTEM INITIALIZATION TIME FAILED, RC=xxx

Explanation: The MSC returned the 3850 code, shown upon the request for purge (taken from system parameters), during system initialization.

System Action: System initialization continues, as does the 3850 initialization.

Operator Response: Inform the system programmer, who will investigate the meaning of the return code.

Problem Determination: Table I, item 2.

IEA979I MSS INOPERATIVE ASSOCIATE FAILED, REAS CODE = xx

Explanation: During system initialization for a tightly-coupled MP host pair, attempts to inform the Mass Storage Controller (MSC) of the association failed. The reason code xx in the message indicates the reason for the failure.

System Action: Processing continues with the Mass Storage System inoperative.

Operator Response: Follow the action recommended for the specified Mass Storage System Communicator reason code. Mass Storage System Communicator reason codes are found in *Mass Storage System (MSS) Messages*. Once necessary repairs are made, vary online the repaired Mass Storage Control to restore Mass Storage System operation. While the Mass Storage System is inoperative, jobs calling for mass storage volumes will fail. Under these conditions, jobs that require the Mass Storage System should not be started.

Problem Determination: Table I, item 2, 17, and 30.

IEA980I MSS INOPERATIVE. DISASSOCIATE FAILED, REAS CODE = xxx

Explanation: During system initialization, the DISASSOCIATE CPU command to the Mass Storage System failed. The reason code (xxx) in the message specified the reason for failure.

System Action: Processing continues with the Mass Storage System inoperative.

Operator Response: Follow the action recommended for the specified Mass Storage System Communicator reason code.Mass Storage System Communicator reason codes are found in *Mass Storage System (MSS) Messages*. Once necessary repairs are made, vary online the repaired Mass Storage Control to restore Mass Storage System operation. While the Mass Storage System is inoperative, jobs calling for mass storage volumes will fail. Under these conditions, jobs that require the Mass Storage System should not be started.

Problem Determination: Table I, item 2, 17, and 30.

IEA981I NO 3850. REPLY U TO CONTINUE WITHOUT 3850 OR RE-IPL

Explanation: For the reason described in the preceding message (Either IEA974I, IEA975I, IEA977I, IEA979I, or IEA980I), the 3850 cannot be used during this IPL.

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

Operator Response: If the IPL cannot continue without the 3850, correct the condition specified in the preceding message and re-IPL. If the IPL can continue without the 3850, reply 'U'. The IPL will continue with any system resources obtained for the 3850 programming support freed

Problem Determination: Refer to the problem determination of the preceding message on the operator console.

IEA982I INVALID REPLY TO IEA981I. REPLY U OR RE-IPL

Explanation: The reply to IEA981 is invalid. The system expects a 'U'.

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

To continue this IPL without the 3850, reply 'U'. Otherwise, make the 3850 available and re-IPL.

Problem Determination: None.

IEA983I MSS INOPERATIVE. IEAVNP02 LOAD FAILED, ABEND CODE = xxx

Explanation: Module IEAVNP02 (DASD UCB Initialization) load failed. The abend code returned by the load attempt is specified in the abend code xxx.

System Action: Processing continues with the Mass Storage System inoperative.

Operator Response: Notify your system programmer.

Programmer Response: Correct the conditions that caused the load failure. If the abend condition can be corrected, and when the conditions are corrected, notify the system operator to vary online the Mass Storage Control to restore Mass Storage System operation.

Problem Determination: Table I, items 2, 17a and 17b.

IEA984E TAPE DUMP DATA SET FULL, MOUNT NEW NON-LABELED TAPE ON UNIT = xxx

Explanation: The SYS1.DUMP data set on unit xxx is full. No dumps can be taken to the data set until a new tape is mounted.

System Action: The system has unloaded the tape.

Operator Response: To maintain the availability of SYS1.DUMP data sets, mount a new, non-labeled tape on unit xxx.

IEA985I UNABLE TO UNLOAD MSS VOLUME ser FROM Vxxx - RC=ret.

Explanation: Due to a previous error (see messages IEA866I, IEA854I, and IEA986I), the system attempted to unload MSS volume ser from device xxx. The unload failed; ret represents the failure reason code. See *Mass Storage System (MSS) Messages* for an explanation of the reason code.

System Action: The VATLSTxx entry specifying that particular volume is ignored. Processing continues with the remaining VATLSTxx entries.

Operator Response: None.

Programmer Response: Use the return code to determine the problem with 3850 Mass Storage System (MSS).

IEA986I MSS VOLUME ser REQUIRED ON Vxxx.

Explanation: A VATLSTxx entry specified that an MSS volume ser was to be mounted on device xxx. A volume with a different volume serial number was found on xxx.

System Action: The system unloads the volume presently on xxx and mounts ser on xxx.

Operator Response: None.

IEA987I UNABLE TO MOUNT MSS VOLUME ser ON Vxxx - RC=ret.

Explanation: An attempt to mount an MSS volume ser on device xxx failed, with the MSSC (mass storage system communicator) code ret from 3850 Mass Storage System (MSS).

System Action: The VATLSTxx entry specifying that particular volume is ignored. Processing continues with the remaining VATLSTxx entries.

Operator Response: None.

Programmer Action: Determine the cause of the problem. See *Mass Storage System (MSS) Messages* for an explanation of the MSSC (mass storage system communicator) code.

IEA988I PREFERRED AREA HAS EXPANDED. RECONFIGURABILITY MAY BE IMPAIRED.

Explanation: Real Storage Management assigned a page of SQA, nonswappable LSQA, or a nonswappable long-term fixed page to a real frame in the nonpreferred area. A storage unit encompassing all or part of the non-preferred area may not reconfigure successfully. The Display Matrix command can be used to determine the remaining non-preferred area.

System Action: The storage unit is designated as preferred storage, and thus eligible for additional long-term resident pages.

IEA992I SLIP TRAP ID=xxxx MATCHED

Explanation: All conditions defined by the SLIP trap identified by xxxx were met. For a PER trap, this message is issued only when the conditions of the trap are met for the first time. The action requested has been taken.

System Action: Processing continues. (Note: Because timing circumstances within the system, this message may precede a 01B wait state; ordinarily, the wait state will precede this message.)

Operator Response: Report this message to the system programmer.

IEA993I SYSMDUMP TAKEN TO dsn

Explanation: A SYSMDUMP was taken to the data set specified on the SYSMDUMP DD card. The dump is a complete dump.

System Action: Processing continues.

Operator Response: None.

Programmer Response: None.

IEA994A ALL DUMP DATA SETS ARE FULL AND NO SVC DUMPS CAN BE TAKEN

Explanation: Before processing an SVC Dump request, SVC Dump processing found that all of the allocated SYS1.DUMP data sets are full. SVC Dump information has been lost for at least one requested dump. This message is not be issued if any of the dump data sets reside on tape. Tape dump data sets are always considered empty and available.

System Action: Processing continues. However, no additional SVC Dumps are taken until at least one of the dump data sets is emptied.

Operator Response: Notify the system programmer.

Programmer Response: Use the AMDPRDMP service aid to copy the dumps from the full dump data sets to other installation data sets. This action will mark the dump data sets empty and allow any later SVC Dump requests to be processed.

IEA994E ALL ALLOCATED SYS1.DUMP DATA SETS ARE FULL

Explanation: SVC Dump has found, after processing a dump, that it has filled the last allocated dump data set. This message is a warning that no further SVC DUMP information can be saved until one of the allocated dump data sets is emptied. This message will not be issued if any of the dump data sets reside on tape. Tape dump data sets are always considered empty and available.

Operator Response: Notify your system programmer.

Programmer Response: Use the AMDPRDMP service aid to copy the dumps from the full dump data sets to other installation data sets. This action will mark the dump data sets empty and allow further SVC Dump processing to continue.

IEA996I READ FOR JFCB/JFCBE FAILED, STANDARD DUMP FORMAT ASSUMED.

Explanation: During ABEND processing, modules IEAVTABD and IEAVAD01 issued the QMNGRIO macro instruction to determine the requested format of the dump. However, a failure was encountered while attempting to read the JFCB or JFCBE.

System Action: Module IEAVTABD will initialize the dump DCB to dump in the standard format of 120 characters per line, and module IEAVAD01 will use the DCB set up by IEAVTABD for the dump. Processing continues.

Programmer Response: None.

Problem Determination: Table I, items 1, 13, 15.

IEA997I READ FOR JFCB/JFCBE FAILED, DUMP CANCELLED.

Explanation: Module IEAVAD01 issued the QMNGRIO macro instruction to determine the requested format of the SNAP or ABEND dump. However, the routine called by IEAVAD01 failed while attempting to read the JFCB or JFCBE.

System Action: The dump is canceled, and a return code of X'08' is returned to the caller.

Programmer Response: Rerun the job.

Problem Determination: Table I, items 1, 13, 15.

IEA998I PARTIAL SYSMDUMP TAKEN TO dsname

Explanation: A partial SYSMDUMP was generated to the DASD data set described by SYSMDUMP DD statement. An I/O error might have occurred while writing to the dump dataset or the dump dataset might have been filled before all requested data was dumped.

System Action: Processing continues.

Programmer Response: Increase the size of the dataset the SYSMDUMP DD statement points to or print the SYSMDUMP dataset to determine, whether enough data was dumped to solve the problem that caused the dump.

IEA999W ADDRESS TRANSLATION ERROR IN MASTER MEMORY

Explanation: The program check first level interrupt handler (FLIH) has encountered recursive addressing translation exceptions. There is a possibility that the segment table (SGTE) or common page tables (PGTE) for the master scheduler's address space have been initialized incorrectly or have been overlaid.

System Action: All processors are placed in a wait state.

Operator Response: Probable software error. Take a stand-alone dump. ReIPL the system and execute the EREP service aid program to obtain a listing of LOGREC.

Problem Determination: Table I, items 11, 18, 29.

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