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CRAY X-MP AND CRAY-1® COMPUTER SYSTEMS

IBM MVS STATION OPERATOR'S GUIDE

SG-0037

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A	May, 1981 - Rewrite, adding a new initialization procedure, additional messages, the HYPERchannel feature, and the following new commands: CANCEL, JINPUT, POSTPONE, and PRINT. Also with this printing are changes in the manual's organization. Miscellaneous technical and editorial changes are also included and bring the manual into agreement with version 1.11 of the station. Change bars are not used in this reprint. This printing obsoletes all previous editions.
B	July, 1982 - Rewrite. The MVS station manuals released with COS 1.11 have been reorganized to accommodate the new IBM MVS Station Internal Reference Manual, CRI publication SM-0048. In addition, technical changes in this manual include the expansion of section 2 to include station operation and new messages. Miscellaneous technical and editorial changes are also included and bring the manual into agreement with version 1.11 of the station. Change bars are not used in this rewrite. This printing obsoletes all previous editions.
C	December, 1983 - Reprint with revision. Changes are included relating to the implementation of Station Messages Subtask and front-end servicing for IOS mounted tapes. In addition, new station activation procedures are included, and a glossary and the following station commands added: END, LOGON, MESSAGE, SET, STAGE, STATCLASS, TAPE, TJOB, and TRANSFER. JINPUT command is superceded by the STAGE command.
C-01	November, 1984 - Change packet. This printing brings the manual into agreement with the 1.13 release of the station. It includes a rewrite of the SET command, implementation of the JSTAT command, addition of the FORCE parameter on the CANCEL command, and addition of new commands RSTAT and FLUSH. New operator messages have also been added.

PREFACE

This publication describes the operational features of the software that logically links an International Business Machines (IBM) or equivalent computer system to a CRAY-1 or CRAY X-MP Computer System. The software that provides the logical link is an authorized application program running under the IBM OS/VS2 Multiple Virtual Storage operating system (MVS). This software link was developed by Cray Research, Inc. (CRI) as a service to its customers.

The resulting combination of IBM-equivalent hardware and software and the CRI program is referred to as the MVS station throughout this publication. The station requires the presence of the MVS Job Entry Subsystem (JES2 or JES3) feature.

General familiarity with the characteristics of MVS and the Cray Operating System (COS) is assumed. In particular, familiarity with the following publications is required:

- COS Operational Procedures Reference Manual, CRI publication SM-0043
- Operator's Library: OS/VS2 System Commands, IBM publication GC38-0229
- IBM System/370 Principles of Operation, IBM publication GA22-7000
- OS/VS Message Library VS2 System Codes, IBM publication GC38-1008
- OS/VS Message Library VS2 System Messages, IBM publication GC38-1002

Related publications provided by Cray Research, Inc., include:

- IBM MVS Station Reference Manual, publication SR-0038
- IBM MVS Station Internal Reference Manual, publication SM-0048
- IBM MVS Station Installation and Maintenance Reference Manual, publication SM-0078

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INTRODUCTION 1

The MVS station provides the software connection between an International Business Machines System/370 Computer System or IBM-compatible front-end processor and a CRAY-1 or a CRAY X-MP Computer System. The station provides the means for:

- Job submission at Time Sharing Option (TSO) terminals, as well as at remote and local batch card readers, and
- Transfer of job and data files between MVS magnetic storage and Cray mass storage.

The Cray Computer System runs under control of the Cray Operating System (COS). The IBM or IBM-compatible computer system runs under the control of the Multiple Virtual Storage operating system (MVS) with the Job Entry Subsystem JES2 or JES3.

The Cray mainframe is connected to the IBM-compatible Central Processing Unit (CPU) by a front-end interface (FEI), provided by Cray Research, Inc., or by the HYPERchannel network interface manufactured by Network Systems Corporation.

Using the MVS station, a user can submit jobs or datasets to COS either as a Time Sharing Option (TSO) user, or from an MVS batch job submitted locally or remotely.

Communication with the MVS station and the Cray mainframe is through commands entered by an operator at an MVS station console or by a TSO user at a TSO terminal. All console commands are explained in section 3 of this publication. TSO users should refer to CRI publication SR-0038, IBM MVS Station Reference Manual, which describes the user interface to the MVS station.

The operator at an MVS station console (or a TSO user with OPERATOR authority) can query and dynamically alter the status of jobs and the MVS station. The normal TSO user can query and dynamically alter the status of only those jobs with a terminal ID (TID) equal to the user's TSO logon ID.

One station in the Cray system is designated as the master operator station at installation time. When the MVS station is designated as the master operator station, the operator has complete control of COS and can

manipulate all jobs in the system, control all mass storage, and set COS system parameters. All other stations in the system can alter only those jobs pertaining to that station.

The MVS station can be designated as the master operator station instead of the default station.

The MVS station can use a specific part of the display area on an MVS station console for some displays (for example, STATUS display). The operator can set up this display area before the MVS station is initialized using the CONTROL command described in the IBM Operator's Library: OS/VS2 System Commands, IBM form number GC38-0229 (XA version, GC28-1206). The console routing code used by the MVS station is an installation parameter that can be obtained from a Cray Research system analyst.

COMMAND AND RESPONSE CONVENTIONS

The operator commands and responses described in this manual use the following format conventions:

UPPERCASE	Indicates required data and gives the proper spelling. Data must be entered exactly as shown.
UNDERLINED UPPERCASE	Specifies the minimum number of characters for the verb or parameter to be recognized
{} Braces	Enclose stacked items when one and only one of the items must be entered
[] Brackets	Enclose optional operands. Stacked items within brackets indicate that only one of the items can be chosen
italics	Indicate variable information, usually to be specified by user

MESSAGE AND RESPONSE FORMATS

Any message issued by the MVS station appears in the following general format.

```
xx CSSnnnnt message
```

xx MVS reply identifier if the message requires a reply (if the type is A); otherwise omitted from message.

CSS Identifies the message as an MVS station message

nnnn Number of the station message

t Alpha character indicating type of message:

- A The station requests that the operator respond according to the directions in the message text.
- D Issuing task immediately terminates abnormally with abend code
- E Error message
- F Station software failure
- I Informative message
- W Warning

message Message text giving reason for message

Details of all messages issued to the operator can be found in Appendix A.

Replies by the MVS station operator to MVS station messages should be in the following format.

```
REPLY xx,response
```

xx MVS reply identifier; required if previous message from station was type A.

response One of the operator responses described in Appendix A

NOTE

The *xx* portion of the reply must be entered with each response. Also the ENTER key must be pressed to terminate each reply.

STATION OPERATION 2

The MVS station includes a system task, TSO command processors, a Cray job submission interface, and a utility program. The system task controls all transmissions to and from the Cray mainframe. The TSO command processor allows operator commands to be entered at a TSO terminal. The Cray job submission interface communicates requests for submission of jobs to the Cray mainframe between the user and the system task. A utility program initializes the control file used by the station software.

STATION ACTIVATION

The station activation process assumes that the station is defined as a subsystem to MVS and that the start procedure is a member of SYS1.PROCLIB (or a concatenated PROCLIB). This procedure defines the datasets to be used by the MVS station. As supplied by Cray Research, it is called CSS; the installation, however, can give it another name. The CSS procedure is described in more detail in the IBM MVS Station Installation and Maintenance Reference Manual, CRI publication SM-0078.

Before the station software is activated for the first time, initialize the Transfer Request File (TRF) with the supplied utility program. (This procedure is also described in the IBM MVS Station Installation and Maintenance Reference Manual, CRI publication SM-0078.)

Enter the START command to activate the station load module:

```
START procname[.identifier]
```

procname Cataloged station initialization procedure name (CSS for example). The actual procedure name is installation dependent, but must be a valid subsystem ID.

identifier
Optional station system task identifier. Can be used in subsequent modify commands instead of the name of the station cataloged procedure. This parameter is useful if the station start procedure is not called CSS.

The following message is displayed, giving the station version being initialized and its date and time of creation.

CSS108I STATION INITIALISATION STARTED-CSS *version-date time*

If a problem occurs during initialization, an error message is displayed and the station terminates (see Appendix A for error messages). Usually the station or procedure is not set up correctly. See the Cray Research system analyst.

When the station has completed initialization, the following messages are displayed, indicating the Transfer Request File (TRF) has been read and that initialization is complete.

```
CSS280I TRANSFER REQUEST QUEUE BUILT
CSS110I STATION INITIALISATION COMPLETE
```

At this point, the station is active. CRSUBMIT, SUBDS, and CRAYCMD commands can be processed, and jobs and datasets can be queued for transfer.

LOGGING ON TO COS

Before logging the station on to the Cray Computer System, the following steps must be completed:

1. Ensure that the Cray Operating System (COS) is running and the channel from the Cray mainframe is ON.

2. Ensure that the Cray interface box or the HYPERchannel is online to MVS. See Appendix B for a description of the hardware.

3. Verify the current values of the link type and maximum number of streams using the STATION command. Use the MVS station SET command to alter these values, if necessary.

Use the LOGON command to connect the station to COS.

If the station logs on successfully, the following message is displayed:

```
CSS020I ---------- STATION LOGGED ON TO COS ----------
```

Jobs and datasets are transferred between COS and MVS. Operator commands to COS can be entered. If the station fails to log on, one of the error messages in Appendix A is displayed. The station remains active but no communication with COS is possible until a successful logon is performed. Any command entered requiring communication with COS produces an error message.

LOGGING OFF FROM COS

Use the LOGOFF command to stop communications between the station and COS. Entering LOGOFF without any parameters allows all streams to become idle before halting communication.

LOGOFF,QUICK terminates communication immediately. Active transfers are halted and are automatically resubmitted the next time the station logs on to COS.

After a LOGOFF command the station is still active, but no transfer of jobs or datasets occurs. Any command entered requiring communication with COS produces an error message.

STATION DEACTIVATION

To terminate the station after logging off from the Cray Computer System, use the END command (see section 3) or the MVS STOP command.

```
STOP identifier
```

identifier
Station subsystem identifier (cataloged procedure name)

Use the MVS CANCEL command to terminate the station without logging off from COS. When the MVS CANCEL command is entered with the DUMP option, a SNAP dump of the station's Subsystem Vector Table (SSVT) is produced as well as the normal address space dump.

```
CANCEL identifier[,DUMP]
```

identifier
Station system task identifier or cataloged name procedure (usually CSS)

DUMP Specify if additional diagnostic information is needed

RESPONSE TO STATION REQUESTS

During normal operation of the station, a user program running on the Cray Computer System may request the use of datasets on the MVS system. Most requests proceed without operator intervention, but some functions, such as allocating units, mounting tapes, and handling dataset contention, must be performed by the operator.

ALLOCATING UNITS

The following messages appear if a job attempts to allocate a dataset where no unit is available:

CSS342I JOB *jobname* JSQ *jsq* WAITING FOR UNIT *unitname*
CSS340A ENTER RETRY, POSTPONE OR CANCEL

jobname Name of the job running on the Cray mainframe

jsq Job sequence number of the job running on the Cray mainframe

unitname Name of the device where the user is attempting to allocate the dataset

Decide if an appropriate device can be made available. The *unitname* may be a generic name, such as TAPE, in which case a single tape device is required. Enter one of the following replies:

RETRY Use this reply after making a device available (for example, by issuing the MVS command, VARY, to vary a device online) to cause the station to retry the dynamic allocation.

POSTPONE Use this reply if a device is not immediately available, but may become available later. The request is put to the bottom of the queue and the transfer postponed until later. If no other requests are in the queue, message CSS342I is re-issued immediately.

CANCEL Use this reply if the request is for a unit that cannot be made available or that the user program is not entitled to use. This reply causes the transfer to be canceled, and the COS job to be aborted.

MOUNTING TAPES FOR STATION USE

When a tape must be mounted on a drive allocated to the station because a COS job attempts to acquire from or dispose to a dataset on tape, the following messages appear on the operator console:

IEF233D M *ddd*, *ser*, [*labtyp*], *procname*, OR RESPOND TO IEF455D MESSAGE
IEF455D MOUNT *ser*, ON *ddd* FOR *procname* OR REPLY 'NO'

ddd Physical device address

ser Volume serial number

labtyp Label type:
SL IBM standard label
NL No label
BLP Bypass label processing

procname Name identifying the station to the system

Mount the tape. If it is not possible to mount the tape, reply NO. A NO response causes the following messages to be displayed.

CSS344I OPERATOR DISALLOWED MOUNT OF VOLUME *ser* ON UNIT *ddd* FOR JOB *jobname* JSQ *jsq*
CSS340A ENTER RETRY, POSTPONE OR CANCEL

ser Volume serial number

ddd Physical device address

jobname Name of the job running on the Cray mainframe

jsq Job sequence number

Enter one of the following replies:

RETRY Enter this reply if the volume can be mounted on the appropriate device. (Messages IEF233D and IEF455D are re-issued.)

POSTPONE Enter this reply to postpone the transfer and requeue the request.

CANCEL Enter this reply to cancel the transfer.

DATASET CONTENTION

When a job attempts to allocate a dataset already allocated to another job or user, the station issues the following messages.

CSS341I JOB *jobname* JSQ *jsq* WAITING FOR DATASET *dsn*
CSS340A ENTER RETRY, POSTPONE OR CANCEL

jobname Name of the job running on the Cray mainframe

jsq Job sequence number

dsn Dataset the job is attempting to allocate

Enter one of the following replies:

RETRY Enter this reply if the dataset can be freed immediately.

POSTPONE Enter this reply if the dataset cannot be freed until later; the request is requeued.

CANCEL Enter this reply to cancel the transfer if the dataset cannot be freed at all.

The TSO user who submitted the job also receives message CSS341I and can take action to free the dataset.

COS MESSAGES AND REQUESTS

The MVS Station processes and displays messages from COS tasks and makes requests on behalf of some tasks.

Information messages

The Station prefixes COS informational messages with an MVS Station message number as in the example below:

CSS800I *message*

message COS numbered message described in the CRAY-OS Message Manual, publication SR-0039. The operator should follow the instructions for action given there.

Action messages

The Station prefixes COS action messages with an MVS message number as in the example below:

nn CSS801A *message*

nn MVS reply identifier

message A COS numbered message which expects a reply. The message and possible replies are listed in the CRAY-OS Message Manual, publication SR-0039. Enter the correct reply in the standard MVS format:

R *nn*, *reply*

The MVS station forwards the reply to COS.

COS tape mount messages

When COS needs a tape mounted on a tape drive attached to COS through the I/O Subsystem, the MVS station issues the following message:

nn CSS802A M *device*,*ser*,{W / R},*labtype*,*jobname*,*jsq*,*dn*[,*reason*]

OR REPLY NO OR RESELECT

nn MVS reply identifier

device COS device address

ser Volume serial number

W Indicates that a write permit ring is required

R Indicates that a write permit ring is not required

labtype Indicates label type (SL, AL, NL)

jobname and *jsq* Indicate the COS job requesting the tape

dn Local dataset name in the COS job

reason Indicates the reason and appears on remount requests only.

The operator should mount the requested tape on the appropriate drive if possible. If it is not possible to mount the tape on the appropriate drive, enter one of the following replies:

NO Use this reply to cancel the mount.

RESELECT Use this reply to cause COS to use a different drive.

If the tape is mounted, COS cancels the message.

STATION COMMANDS 3

The MVS station provides communication capability for MVS console operators and TSO users. The MVS console operator can query and dynamically alter the status of jobs and the MVS station. A normal TSO user can query and dynamically alter the status of jobs with a terminal identifier (TID) equal to the user's logon identification userid.

Some commands can be entered only at the COS master operator station. The master operator station is defined at COS generation time. It can be changed temporarily, using the OPERATOR command. Some job control commands can control any job in the Cray system if entered at the master operator station. If entered at a non-master operator station, these commands can control only jobs with the same station ID as the station where the job control command is entered.

Commands can also be issued at the master operator station to control the configuration of COS and system hardware.

COMMAND SUMMARY

The station commands perform the following general functions:

- Controlling the activity of the MVS station

END	Terminates station
MESSAGE	Enters message in job logfile, station logfile, or the COS system logfile
PRINT	Prints the station logfile
SET	Sets station logon attributes and SMF recording options
TRACE	Controls station tracing

- Controlling the link to COS and transfers on the link

CANCEL	Cancels an active stream
LOGOFF	Logs station off from COS
LOGON	Logs station on to COS
POSTPONE	Postpones an active stream
STAGE	Controls job and dataset staging
STREAM	Changes stream counts
TRANSFER	Displays or controls dataset transfers

- Controlling the Cray Operating System (COS) and the Cray hardware

Hardware	
CHANNEL	Turns channel on or off
CONFIGURE	Alters COS tape or disk device configuration
DEVICE	Changes read-only status of mass storage devices
FLUSH	Backs up a volatile device to a dataset
COS	
CLASS	Turns job classes on or off
LIMIT	Limits number of jobs active
OPERATOR	Changes master operator station
RECOVER	Recovers system
SHUTDOWN	Shuts down COS

- Controlling jobs and datasets on the Cray Computer System

DROP	Drops COS job
ENTER	Changes job scheduling parameters
KILL	Kills COS job
MESSAGE	Enters message in job logfile, station logfile, or the COS system logfile
RERUN	Reruns job
RESUME	Resumes job processing
ROUTE	Changes station ID
SUSPEND	Suspends job processing
SWITCH	Manipulates job sense switches
TRANSFER	Displays or controls dataset transfers

- Displaying information about the station, the Cray Computer System, and COS jobs and datasets

DATASET	Displays COS dataset status
JOB	Displays COS job status
LINK	Displays link status
STATCLASS	Displays job class status
JSTAT	Displays COS job task status
RSTAT	Displays generic resource status
STATION	Displays MVS station status
STATUS	Displays system status
STORAGE	Displays mass storage status
TAPE	Displays tape device information
TJOB	Displays tape job status
TRANSFER	Displays or controls dataset transfers

Table 3-1 uses the following abbreviations to indicate the availability of a command to an operator or TSO user.

M	Command can be issued only from the master operator station.
T	Command can be issued by a normal TSO user.
O	Command can be issued by any MVS operator or authorized TSO user.
R	Command is recorded in the station log when issued.
L	The station must be logged on to COS to issue this command.
N	The station must not be logged on to COS to issue this command.

Table 3-1. Command availability

Command	Availability codes					
	M	T	O	R	L	N
CANCEL			X†	X	X	
CHANNEL	X			X	X	
CLASS	X			X	X	
CONFIGURE	X			X	X	
DATASET		X	X		X	
DEVICE	X			X	X	
DROP		X	X	X	X	
END			X†	X		X
ENTER			X	X	X	
FLUSH	X		X	X	X	
JOB		X	X		X	
JSTAT		X	X		X	
KILL		X	X	X	X	
LIMIT	X			X	X	
LINK			X		X	
LOGOFF			X	X	X	
LOGON			X	X		X
MESSAGE		X	X	X	X	
OPERATOR			X	X		
POSTPONE			X†	X	X	
PRINT			X	X		
RECOVER	X			X	X	
RERUN		X	X	X	X	
RESUME	X			X	X	
ROUTE	X			X	X	
RSTAT		X	X		X	
SET			X	X		††
SHUTDOWN	X			X	X	
STAGE			X	X		
STATCLASS			X		X	
STATION			X			
STATUS		X	X		X	
STORAGE			X		X	
STREAM			X	X	X	
SUSPEND	X			X	X	
SWITCH		X	X	X	X	
TAPE			X		X	
TJOB		X	X		X	
TRACE			X	X		
TRANSFER		X	X	X		

† Command is available only to the MVS operator.

†† See command description for operands of the SET command, which can be used only when the station is not logged on.

JOB CONTROL INFORMATION

A job is the unit of work described for the Cray Operating System (COS). A job enters the system via the station and is staged to the Cray mainframe as a job input dataset where it is scheduled for processing.

A job input dataset begins with a set of job control statements defining the characteristics of the job and specific steps the operating system is to take while processing the job. The first control statement must be a JOB statement, providing the name of the job and specifying such values as job class, COS processing time limit, memory field size, and so on. Job control statements are described in detail in the CRAY-OS Version 1 Reference Manual, publication SR-0011.

Accompanying the control statements for the job may be one or more files containing source language decks, directives, and data to be processed. Additionally, data needed by a job can:

- Reside permanently on Cray mass storage,
- Be staged from MVS to the Cray mainframe independently of the job, or
- Be staged from MVS to the Cray mainframe during job execution on the Cray computer.

The operator identifies a job in a job control command by its job sequence number (JSQ). The JSQs are shown in the job queue status display provided by the STATUS display command.

DATASET TRANSFER CONTROL

All jobs and datasets waiting to be sent to COS, and all jobs and datasets being sent to or received from COS, are assigned a unique transfer number. This number is shown on the TRANSFER QUERY display. The transfer number can be used to cancel or postpone a transfer. Use the TRANSFER CANCEL and TRANSFER POSTPONE commands (rather than the CANCEL and POSTPONE commands) to cancel and postpone transfers. The CANCEL and POSTPONE commands manipulate streams, rather than transfers, and should be used only as a last resort.

COMMAND ENTRY

Commands are entered in one of three formats. The operator at an MVS console enters commands using the MODIFY format or the /command

character; TSO users enter commands using the CRAYCMD format. Command conventions are described in section 1. Command entry is terminated by pressing the ENTER key.

MVS CONSOLE COMMAND ENTRY

The MVS console operator uses the MODIFY command or the /command format during normal station operation.

Format:

MODIFY *identifier,command*[,*params*]	or	/*command*[,*params*]

identifier
MVS station system task identifier or catalogued procedure name; normally CSS.

command Set of characters uniquely identifying the command to the station. In most cases, the entire command need not be typed; rather, the minimum number of characters needed to recognize the singular command must be entered. The mandatory characters to be entered for a command verb are shown underlined. A comma separates the command from the first parameter.

params Parameters to be entered with the command; requirements for parameters vary with each command. These details are given with the individual command descriptions in this section. Parameters are separated by commas. A parameter having a default value may be omitted if the default is desired. The position of an omitted parameter must be indicated by the commas that would ordinarily delimit it.

TSO USER COMMAND ENTRY

TSO users communicate with the station using the TSO command, CRAYCMD. Normal TSO users can generally use only a subset of the station commands described in this manual. Commands entered at a TSO terminal are restricted to manipulating only jobs submitted by the TSO user. A TSO user with operator authority can issue most station commands. The availability of commands to the TSO user is an installation parameter option. Refer to the availability information given in the command descriptions to find TSO user commands.

Format:

```
CRAYCMD command[ 'params']
```

command Set of characters uniquely identifying the command to the station. In most cases, the entire command need not be typed; rather, the minimum number of characters needed to recognize the singular command must be entered. The mandatory characters to be entered for a command verb are shown underlined. A space separates the TSO command CRAYCMD from the station command.

params Parameters to be entered with each command; requirements for parameters vary with each command. These details are given with the individual command descriptions in this section. Parameters are entered as described with the individual command descriptions, except that they must be enclosed in quotes.

COMMAND DESCRIPTIONS

The remainder of this section contains descriptions of all commands supported by the MVS station. Command descriptions are in alphabetical order by command name. Each command has its function listed, its entry format, and the kind of console where it can be entered.

A command entered in an invalid format is rejected with a message. The command may then be reentered in the correct format. Some commands do not return a message after the request is processed. Refer to Appendix A for more information on messages.

NOTE

The parameter separator for all commands entered at an MCS console is a comma. The separator for commands entered at a TSO terminal can be a blank or a comma. For clarity, a comma is used as the separator in the following command descriptions.

CANCEL - CANCEL AN ACTIVE STREAM

FUNCTION: Abnormally terminates an active dataset transfer and causes the Cray job to be aborted. When the transfer has been terminated, one of the following messages appears on the console:

CSS301I *hh:mm:ss* JOB *jobname* SUBMISSION TO {MVS / COS} CANCELED

BY OPERATOR

CSS301I *hh:mm:ss* JOB *jobname* JSQ *jsq* {ACQUIRE OF / DISPOSE TO / SYSOUT} {*datasetname* / *datasetname*}

CANCELED BY OPERATOR

datasetname
IBM dataset name

FORMAT: CANCEL,*stream*[,FORCE]

stream Stream number; 1-8 for input streams; 9-16 for output streams. The stream number of an active transfer can be determined from the STATION command display.

FORCE Causes the task processing the stream to be abnormally terminated and the transfer cancelled. This operand should only be used for streams that cannot be cancelled by other means, such as when an MVS mount message is outstanding for a particular stream, and the volume cannot be mounted.

AVAILABILITY: Available to the operator at any MVS console when the station is logged on to COS. This command is not available to any TSO user.

NOTE

The TRANSFER CANCEL command should normally be used to terminate an active transfer. The CANCEL command manipulates streams rather than transfers and should be used only as a last resort.

CHANNEL - TURN CHANNEL ON OR OFF

FUNCTION: Enables or disables the specified channel to a station or to mass storage devices. Cray channels are defined in pairs (one input channel and one output channel) numbered from 1 through 12.

FORMAT: CHANNEL,*channel*,[*ordinal*],{ON / OFF}

channel Number of channel pair;† decimal number in the range 1 through 12. Consult a Cray Research system analyst for specific channel assignments.

ordinal Optional ordinal of channel pair; decimal number in range 0 through 255. If not specified, default is 0. Consult a Cray Research system analyst for specific channel ordinal assignments.

ON Turns on channel pair

OFF Turns off channel pair

AVAILABILITY: Available only at the master operator station when the station is logged on to COS

† 6 Mbyte channel on CRAY X-MP mainframe with number in range of 1-4

CLASS - TURN JOB CLASSES ON OR OFF

FUNCTION: Turns on or off the specified COS job class or all COS job classes. Jobs in a class that is off do not initiate until that class is turned on.

FORMAT: CLASS,{ALL / *jcl*},{ON / OFF}

ALL	Turns on or off all job classes
jcl	Name of job class to be turned on or off; 1 through 7 alphanumeric characters.
ON	Turns on job class or classes
OFF	Turns off job class or classes

NOTE

If any classes are OFF when a CLASS,ALL,OFF occurs, the next CLASS,ALL,ON turns on all but those classes.

AVAILABILITY: Available only at the master operator station when the station is logged on to COS.

CONFIGURE - ALTERS COS TAPE OR DISK DEVICE CONFIGURATION

TAPE:

FUNCTION: Alters the status of a COS tape device or channel or control unit. The CONFIG tape command has two formats. The first allows the status of a device to be changed; the second allows the status of the channel or control unit to be changed and may affect all devices connected to that channel or control unit.

FORMATS:

CONFIGURE,DVN=*dvn*[,{RDONLY / RDWRT}][,{UP / DOWN}]

CONFIGURE,ICH1=*ch*[:*cu*],[IOP=*iopid*],{ON / OFF}

DVN=*dvn* Device name; 1-8 ASCII characters.

ICH1=*ch*[:*cu*]
IOP channel number descriptor.

ch Number of the IOP channel. Must be two octal digits between 20 and 37.

cu Controller unit connected to the specified IOP channel. Must be a single hexadecimal digit 0-9 or A-F.

RDONLY Device is in read-only mode.

RDWRT Device can be written to and read from.

UP Device is logically available to system.

DOWN Device is logically unavailable to system.

IOP=*iopid* IOP identifier specifiying the IOP to which the channel is connected. *iopid* must be a single digit, 0-3; 3 (XIOP) is the default.

ON Channel (if specified alone) or control unit (if both channel and control unit are specified) is logically available to the system.

OFF Channel (if specified alone) or control unit (if both channel and control unit are

FORMATS: (continued)

specified) is logically unavailable to the system. The status of any devices connected to the channel or control unit may also be affected.

DISK:

FUNCTION: Alters the status of a disk device by changing the device characteristics as described in the Equipment Table (EQT). This command is operational only if tapes are configured in the system.

FORMAT: CONFIGURE,DVN=*dvn*[,{AVAIL / NAVAIL}][,{RDONLY / RDWRT}][,RBN={Y / N}][,SCR={Y / N}]
[,VOL=N][,CTL=N][,WDL={Y / N}]

DVN=*dvn*	Device name; 1-8 ASCII characters.
AVAIL	Device is present and can be used.
NAVAIL	Device is not present or is unusable.
RDONLY	Device is in read-only mode; no space will be allocated on this device.
RDWRT	Device is in read-write mode; space can be allocated on this device.
RBN=Y	Device is designated request by name; space is allocated on this device only if specifically requested by user.
RBN=N	Device is not request by name.
SCR=Y	Device is scratch only; no datasets can be saved on this device.
SCR=N	Device is not scratch only.
VOL=N	Device is not a volatile device.
CTL=N	Device is not a controlled device.
WDL=Y	Write device label.
WDL=N	Do not write device label.

AVAILABILITY: Available only at the master operator station, which must be logged on

DATASET - DISPLAY COS DATASET STATUS

FUNCTION: Returns the following dataset status message:

CSS480I DATASET *pdn* ID=*userid* ED=*ed* AND
CSS480I (continued) OWN=*ov* {DOES / DOES NOT} EXIST

FORMAT: DATASET,*pdn*[,*userid*] [,*ed*] [,*ov*]

pdn — Name of permanent dataset for which status is requested; 1 through 15 alphanumeric characters.

userid — User ID of permanent dataset for which status is requested; 1 through 8 alphanumeric characters. If not specified, null is used.

ed — Edition number of requested dataset; 1 through 4095. If *ed* is not specified, the status of the highest numbered edition is returned. If *ed* is nonzero, the status of the requested edition is returned.

ov — Ownership value of the requested dataset. If not supplied, the COS default ownership value is used.

AVAILABILITY: Available to the operator and to a TSO user when the station is logged on to COS.

NOTE

When entering this command at a TSO terminal with OPER privilege, the TSO format must be used. See the IBM MVS Station Reference Manual, CRI publication SR-0038 for the correct format.

DEVICE - CHANGE READ-ONLY STATUS OF MASS STORAGE DEVICE

FUNCTION: Sets or clears read-only status for any Cray mass storage device

FORMAT: DEVICE,*device*, {ON | OFF | PUBLIC† | PRIVATE†}

device	Name of device; 1 through 8 characters. Consult a Cray Research system analyst for specific device names.
ON	Designates that the mass storage device is available for read and write operations
OFF	Designates that the mass storage device is available only for read operations
PUBLIC†	Designates that the mass storage device is public or available to all users
PRIVATE†	Designates that the mass storage device is private or available only to specified users

AVAILABILITY: Available only at the master operator station when the station is logged on to COS.

† Deferred implementation

DROP - DROP COS JOB

FUNCTION: Ends processing of a job by COS but saves output dataset associated with the job. DROP causes the job to be aborted. Job execution continues with control statements encountered after the next EXIT control statement, if any.

FORMAT: DROP,*jsq*

jsq Job sequence number (JSQ) identifying job or dataset to COS; obtained through the STATUS command.

AVAILABILITY: Available to the operator and to the TSO user. At the master operator station, the operator can drop any job running in the Cray system. At other stations, the operator can drop only jobs with the same station ID as the one where the DROP command is entered. A TSO user can drop any jobs with TIDs equal to the user's log-on ID. This command is available only when the station is logged on to COS.

END - TERMINATE STATION

FUNCTION: Terminates all station activity. The station must be logged off from COS before this command is issued.

FORMAT: END

AVAILABILITY: Available to the operator at any MVS console. This command is not available to a TSO user with OPERATOR authority.

NOTE

To terminate the station and produce an MVS dump, use the MVS CANCEL command.

ENTER - CHANGE JOB SCHEDULING PARAMETERS

FUNCTION: Changes station ID, terminal ID, and scheduling parameters associated with a job or its queued datasets.

FORMAT:

ENTER,*jsq*,{TIME=*tl* | PRIORITY=*pri* | ID=*id*[,*tid*] | CLASS=*jcl*}

jsq Job sequence number (JSQ) identifying job to COS; obtained through the STATUS command.

TIME Assigns a new time limit to a job; may cause a change in priority and/or class assignment if job is in input queue.

tl New time limit; 0 through 16777215. The time limit is a decimal count of the maximum number of seconds the job will be allowed to execute on the Cray mainframe.

PRIORITY Assigns a new priority to a job or its output dataset; may cause change in class assignment if job is in input queue.

pri New priority; decimal number in the range 0 through 15.

ID Changes station and, optionally, the terminal ID for the job or output dataset. This parameter may cause a change in class assignment if the job is in the input queue.

id New station ID; 2 alphanumeric characters.

tid New terminal ID; optional; 1 through 8 alphanumeric characters. If *tid* is not specified, null is entered as the new terminal ID. At an MVS station, the terminal ID is the TSO user log-on ID or job name from a Cray batch-submitted job.

FORMAT: (continued)

CLASS — Assigns a new job class if the job is in the input queue. Changing this parameter may cause a change in priority.

jcl — New job class; 1 through 7 alphanumeric characters.

AVAILABILITY: Available to the operator. At the master operator station, the operator can change parameters for any job in the Cray system. At other stations, operators can change parameters only for jobs with the same station ID as the one where the ENTER command is entered. A normal TSO user cannot change job parameters. This command is available only when the station is logged on to COS.

EXAMPLES:

```
ENTER,1723,TIME,10
```

The job having the JSQ of 1723 will be allowed to execute a maximum of 10 seconds before the job is aborted with job time limit.

```
ENTER,1204,PRI,5
```

The priority for the job having the JSQ of 1204 is changed to 5.

FLUSH - BACK UP A VOLATILE DEVICE TO A BACKUP DATASET

FUNCTION: Backs up a volatile device to a dataset

FORMAT: FLUSH, *device*

device Name of device; 1 through 8 alphanumeric characters. Consult a Cray Research systems analyst for specific device name.

AVAILABILITY: Available only at the master operator station when the station is logged on to COS

JOB - DISPLAY JOB STATUS

FUNCTION: Displays the status of a COS job.

The job status message returned by this command has the following general form:

CSS463I JOB *jobname* JSQ *jsq* (*job status*)
CSS432I LOG (*last logfile message*)

Where *job status* reports one of the following conditions:

AWAITING CPU
AWAITING MEMORY
AWAITING TRANSFER
DOES NOT EXIST
DORMANT
EXECUTING
LOCKED BY STARTUP
LOCKED FOR MEMORY
QUEUED FOR EXECUTION
QUEUED FOR TAPE
ROLLED OUT
ROLLING IN
ROLLING OUT
SUSPENDED BY SYSTEM
SUSPENDED BY OPERATOR
SUSPENDED BY RECOVERY
TRANSFER IN PROGRESS
WAITING FOR I/O
WAITING FOR EVENT

The *last logfile message* is displayed unless the job status is DOES NOT EXIST, QUEUED FOR EXECUTION, or QUEUED FOR TAPE.

FORMAT: JOB,*jobname*[,*jsq*]

jobname Name of job for which status is requested; 1 through 7 alphanumeric characters.

jsq Job sequence number (JSQ) identifying job to COS; obtained through the STATUS command. If *jsq* is not specified, the status for the first *jobname* encountered is displayed.

AVAILABILITY: Available to the operator and the TSO user. At the master operator station, the operator can request job status for any job in the Cray system. At other stations, operators can request job status for only jobs with the same station ID as the one where the JOB command is entered. A TSO user can display job status information for jobs with TIDs equal to the user's logon ID. This command is available only when the station is logged on to COS.

JSTAT - DISPLAY STATUS OF A JOB AND ASSOCIATED TASKS

FUNCTION: Displays status of a specific job and that job's tasks

FORMAT: JSTAT, *jobname,jsq*

jobname	COS job name for which status is requested
jsq	Job sequence number (JSQ) identifying job to COS. The *jsq* of job can be obtained through the STATUS display.

AVAILABILITY: Available to the operator and the TSO user. At the master operator station, the operator can request job status for any job in the Cray system. At other stations, operators can request job status for only jobs with the same station ID as the one where the JOB command is entered. A TSO user can display job status information for jobs with TIDs equal to the user's logon ID. This command is available only when the station is logged on to COS.

KILL - KILL COS JOB

FUNCTION: Depending on the status of the COS job, either deletes its input dataset from the input queue if processing has not yet begun, terminates processing if processing has begun, or deletes the job's output dataset from the output queue if processing has completed. KILL (unlike DROP) causes the job to terminate immediately, and only the job logfile is returned.

FORMAT: KILL,*jsq*

jsq Job sequence number (JSQ) identifying the job or its output dataset to COS; obtained through the STATUS command.

AVAILABILITY: Available to the operator and the TSO user. At the master operator station, the operator can kill any job running in the Cray system. At other stations, operators can only kill jobs with the same station ID as the one where the KILL command is entered. A normal TSO user can only kill jobs with the same terminal ID as the user's log-on ID. This command is available only when the station is logged on to COS.

LIMIT - LIMIT NUMBER OF JOBS ACTIVE

FUNCTION: Sets maximum number of jobs that Cray mainframe can process at one time. If the number of jobs is being reduced, jobs currently being processed are allowed to finish.

FORMAT: LIMIT[,*n*]

n Number of jobs that can be active (multiprogrammed) in the Cray mainframe. The maximum allowed for *n* is 255. If *n* is 1, a maximum of 1 job is allowed, depending on the job class structure. If *n* is not provided, the number of jobs that can be active is determined by the job class structure in effect.

AVAILABILITY: Available only at the master operator station when the station is logged on to COS.

EXAMPLE: LIMIT,5

No more than 5 jobs can be processed concurrently.

LINK - LINK STATUS DISPLAY

FUNCTION: Provides the following information about the link between the MVS station and the Cray mainframe:

- Station ID (ID)
- Channel number (CH)
- Channel ordinal (CO)
- Number of active input streams (AI)
- Number of active output streams (AO)
- Maximum number of input streams at LOGON (MI)
- Maximum number of output streams at LOGON (MO)
- Maximum number of active streams at LOGON (MA)
- Queue count; number of datasets queued for staging to the station (OQ CT)
- Number of subsegments per message (SSG)
- Subsegment size in 64-bit words (SIZE)

FORMAT: LINK

AVAILABILITY: Available to the operator. Information about all station links is displayed at the master operator station. At other stations, only information concerning the link for that station is displayed. This command is available only when the station is logged on to COS.

EXAMPLE: LINK

```
08.41.37 CSS465I CRAY LINK STATUS
ID    CH    CO    AI    AO    MI     MO  MA    OQ CT    SSG    SIZE
JR    12     0     1     2     5      5   8       91      1     512
END OF DATA
```

LOGOFF - LOG OFF STATION

FUNCTION: Terminates communications between CSS and the Cray mainframe either immediately or when all currently active streams are finished. The following messages appear at the MVS console:

```
CSS433I STATION LOGOFF IN PROGRESS
CSS014W ABORTIVE LOGOFF STARTED (if QUICK entered)
```

When log off has completed, the following message is issued:

```
CSS021I - LOGGED OFF FROM COS
```

FORMAT: LOGOFF[,QUICK]

QUICK	All current streams are aborted and the station is logged off immediately. Transfers between MVS and COS and vice versa are interrupted and postponed; they are restarted when the station is logged on again. If QUICK is omitted, the station is logged off when all current streams have finished.

AVAILABILITY: Available to the operator. This command is available only when the station is logged on to COS.

LOGON - LOG ON STATION

FUNCTION: Establishes communication between the station and COS. The parameters used during the log-on process are the station defaults, or those set by the last SET command. (See section 2 of this manual.) To display the log-on defaults, use the STATION command.

FORMAT: LOGON

AVAILABILITY: Available to the operator

MESSAGE - ENTER MESSAGE IN JOB LOGFILE OR STATION OR COS SYSTEM LOG

FUNCTION: This command allows a user to enter a message into the COS logfile of a job belonging to him; or for an operator to enter a message into a COS jobs logfile or into the station or COS system log.

FORMAT:

MESSAGE, { JOB,*jobname*,*jsq* | BOTH,*jobname*,*jsq* | SYSTEM | STATION } ,'*message*'

JOB	Enters message into the job logfile
BOTH	Enters message into the job logfile and the COS system logfile
SYSTEM	Enters message into the COS system logfile
STATION	Enters message into the station log
jobname	Name of job; 1 through 7 alphanumeric characters, the first of which must be alphabetic (A-Z).
jsq	Job sequence number (JSQ) by which the job is identified. The JSQ for the job can be obtained through the STATUS display.
'*message*'	Character string to be entered into the logfile. The message is truncated to 79 characters if necessary.

AVAILABILITY: Only the STATION option is available when the station is not logged on to COS. An operator at the master operator station can enter messages for any job in the Cray system. An MVS operator may enter messages for jobs with the same station ID as the one at which the station command is entered. Normal TSO users can only enter messages into jobs where TID matches that of the user. Only the JOB and BOTH options are available to normal TSO users.

OPERATOR - CHANGE MASTER OPERATOR STATION

FUNCTION: Changes master operator station from currently designated station to another. The new master operator station is identified by station ID and terminal ID. To change the master operator station, the current password must be given in the OPERATOR command. If a new password is desired, it is included after the current password.

The default master operator station identifier is a COS installation parameter. On the CRAY-1, Models A, B, S/500, or S/1000, the Maintenance Control Unit (MCU) is specified as the master operator station; on the CRAY-1 Models S/1200 through S/4400 and on the CRAY X-MP, all models, the Master I/O Processor (MIOP) in the I/O Subsystem assumes the role by default.

FORMAT: OPERATOR,*id*,*tid*,*pw*[,*npw*]

id	Station ID of the new master operator station; 2 alphanumeric characters. Consult a Cray Research system analyst for station IDs.
tid	Terminal ID of the new master operator station; 1 through 8 alphanumeric characters. Consult a Cray Research system analyst for terminal IDs.
pw	Password; 1 through 8 alphanumeric characters. Consult a Cray Research system analyst for password.
npw	Optional; enter if a new password is to be required for subsequent OPERATOR commands; 1 through 8 alphanumeric characters.

AVAILABILITY: Available to any MVS operator who knows the master operator station terminal ID and password. This command is available only when the station is logged on to COS.

EXAMPLE: OPERATOR,CD,T3,OLDPW,NEWPW

In the example, the new master operator station is identified by ID CD and terminal ID T3. The password required to change the master operator station designation is OLDPW. The new password is NEWPW.

POSTPONE - POSTPONE AN ACTIVE STREAM

FUNCTION: Postpones an active dataset transfer by abnormally terminating it and requeueing the request. The originating COS job, if any, is not affected. One of the following messages appears at the MVS console:

CSS301I *hh:mm:ss* JOB *jobname* SUBMISSION to {COS / MVS}

POSTPONED BY OPERATOR

CSS301I *hh:mm:ss* JOB *jobname* JSQ *jsq* {ACQUIRE OF *datasetname* / DISPOSE TO *datasetname* / SYSOUT}

POSTPONED BY OPERATOR

datasetname IBM dataset name.

FORMAT: POSTPONE,*stream*

stream Stream number; 1-8 for input streams; 9-16 for output streams. The stream number of an active transfer can be determined from the STATION command.

AVAILABILITY: Available to the operator at any MVS console when the station is logged on to COS. This command is not available to any TSO user.

NOTE

The TRANSFER POSTPONE command should normally be used to postpone an active transfer. The POSTPONE command manipulates streams rather than transfers and should be used only as a last resort.

PRINT - PRINT THE STATION LOGFILE

FUNCTION: Prints the current MVS station logfile containing all messages issued by the MVS station since the last PRINT or since startup. The following messages appear at the MVS console:

```
CSS432I STATION LOG FILE QUEUED FOR PRINTING
CSS113I STATION LOGFILE PRINTED
```

FORMAT: PRINT

AVAILABILITY: Available to the operator

RECOVER - RECOVER SYSTEM

FUNCTION: Lifts the suspension from all jobs suspended by a SHUTDOWN command or a system interruption; it does not reschedule jobs suspended by a SUSPEND command. LIMIT must be reset. See SHUTDOWN command.

FORMAT: RECOVER

AVAILABILITY: Available only at the master operator station when the station is logged on to COS

RERUN - RERUN JOB

FUNCTION: Immediately ends processing of job identified by its job sequence number (JSQ). The job input dataset at the Cray mainframe is saved and all output datasets associated with the job are deleted. The job input dataset is then rescheduled so the job can be rerun. No action is taken if the job has already completed execution or if COS determines the job cannot be rerun.

FORMAT: RERUN,*jsq*

jsq Job sequence number identifying the job to COS; obtained through the STATUS command.

AVAILABILITY: Available to the operator and the TSO user. At the master operator station, operators can rerun any job running in the Cray system. At other stations, operators can only rerun jobs with the same station ID as the station where the RERUN command is entered. A TSO user can rerun a job with the same terminal ID (TID) as the user's log-on ID. This command is available only when the station is logged on to COS.

RESUME - RESUME JOB PROCESSING

FUNCTION: Reschedules a suspended job for processing. This command is normally used to reschedule a job suspended by the SUSPEND command.

RESUME can also be used to reschedule a job that has been suspended by a SHUTDOWN command or a system interruption, although this is normally done with a RECOVER. LIMIT must be reset if a job was suspended by a SUSPEND,ALL command, a SHUTDOWN command, or a system interruption. See the SUSPEND and SHUTDOWN commands.

FORMAT: RESUME,{*jsq* / ALL}

jsq Job sequence number used to reschedule a specific job that has been suspended; obtained through the STATUS command.

ALL All suspended jobs are rescheduled for processing. If RESUME, ALL is used to recover jobs suspended by a SHUTDOWN command or system interruption, all jobs, including those suspended by a SUSPEND command issued prior to the interruption or shutdown, are rescheduled for processing.

AVAILABILITY: Available only at the master operator station. The operator can reschedule any suspended job in the Cray system from the master operator station. This command is available only when the station is logged on to COS.

ROUTE - CHANGE STATION ID

FUNCTION: Reroutes datasets intended for disposition at one station to another station by changing the source ID of jobs or the destination ID of output datasets matching the old ID. This command can result in a change in class assignment for those jobs in the input queue. Consult a Cray Research system analyst for station IDs.

FORMAT: ROUTE,*oid*,*nid*

oid Station ID of station where job originated and where output datasets were to be sent; 2 alphanumeric characters.

nid Station ID where output datasets are to be sent and with which jobs will be identified; 2 alphanumeric characters.

AVAILABILITY: Available only at the master operator station. Stations for which routing is being changed need not be logged on. This command is available only when the issuing station is logged on to COS.

EXAMPLE: ROUTE,DG,GD

All jobs originating at the station identified as DG and all their output datasets are rerouted to the station having the ID of GD.

RSTAT - DISPLAY GENERIC RESOURCE STATUS

FUNCTION: To display the status of generic resources on the Cray Computer System. Status can be displayed by generic resource name, by job sequence number, or by queue type. In addition, generic resource definitions (profiles) can be displayed.

FORMAT:

RSTAT, { PROFILE | QUEUE=*queue* | GRN=*name*[,QUEUE=*queue*] | *jsq* }

PROFILE Requests generic resource profile information

QUEUE=*queue*
COS queue type: E (execute) or I (input).

GRN=*name* Generic resource name to be displayed

jsq Job sequence number (JSQ) of job whose generic resource usage is to be displayed

AVAILABILITY: Available to the operator and TSO user (although it is intended mainly for the operator). At the master operator station, the operator can request generic resource status information for any job in the Cray system. At other stations, operators can request information only for jobs with the same station ID as their own. A TSO user can display generic resource status information only for jobs with TIDs equal to the user's logon ID. This command is available only when the station is logged on to COS.

SET - SET STATION ATTRIBUTES

FUNCTION: Changes or sets station attributes used during station operation.

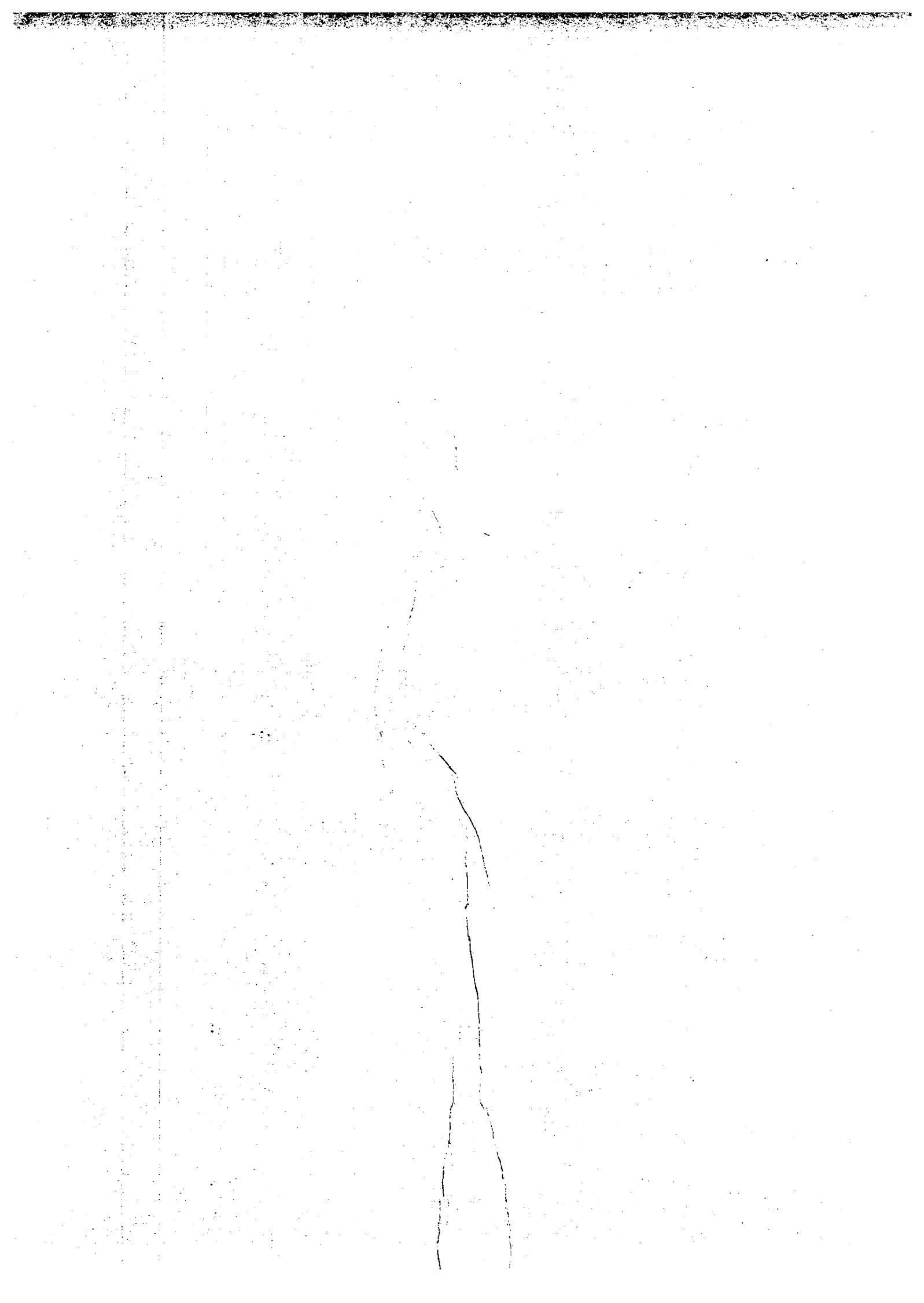
FORMAT:

$$\text{SET,}\left\{\begin{array}{l}\underline{\text{STREAM}},ni,no,na \\ \underline{\text{LINK}}\ \left\{\begin{array}{l},\underline{\text{NSC}},unit\left[,frad,toad\right] \\ ,\underline{\text{CTC}},unit\end{array}\right\} \\ \\ \underline{\text{SMF}},\left\{\begin{array}{l}\underline{\text{ON}} \\ \underline{\text{OFF}}\end{array}\right\}\left[\left\{\begin{array}{l},ltype \\ ,\text{TTR}\end{array}\right\}\right]\end{array}\right\}$$

ni	Maximum number of input streams allowed; 0 through 8.
no	Maximum number of output streams allowed; 0 through 8.
na	Maximum number of streams that can be active concurrently; 0 through 16, not less than *ni* or *no*, whichever is larger.
unit	Unit address of link device
frad	NSC adaptor 'from address'
toad	NSC adaptor 'to address'
SMF	Indicates that SMF recording options are to be changed
ON	Activates recording of SMF records or transfer timing
OFF	Deactivates recording of SMF records or transfer timing
TTR	Indicates that timing of transfers is to be activated or deactivated
ltype	Logical SMF record type; 0 through 8.

AVAILABILITY: Available to any operator. STREAM and LINK can be specified only when the station is not logged on to COS. SMF can be specified at any time.

If SMF is specified without either *ltype* for a logical record type or TTR for time transfers, the command applies globally to SMF, that is, SET, SMF, OFF, do not cause SMF records to be collected for the station.



FUNCTION: Shuts down COS.

This command is normally used to prepare for an expected system interruption. Job activity is idled down; jobs are rolled out; their memory is released; and the maximum number of jobs that can be active (LIMIT) is set to 0. Station activity is not affected. The LIMIT command must be reissued after a SHUTDOWN to allow queued jobs to be scheduled for execution. See RECOVER and RESUME.

FORMAT: SHUTDOWN

AVAILABILITY: Available only at the master operator station when the station is logged on to COS

STAGE - CONTROL DATASET STAGING

FUNCTION: Controls the staging of jobs and datasets from the MVS station to COS and datasets from COS to the station. This command can be used before or after the station is logged on to COS; but takes effect only when the station is logged on.

FORMAT:

STAGE, { ACQUIRE / DISPOSE / JOBS / SUBDS / ALL }, { ON / OFF }

ACQUIRE	Controls the staging of datasets to COS
DISPOSE	Controls the staging of datasets from COS†
JOBS	Controls the transfer of jobs to COS
SUBDS	Controls the transfer of unsolicited datasets to COS
ALL	Controls the transfer of all the above categories
ON	Enables staging
OFF	Disables staging when active streams are idle

AVAILABILITY: Available to the operator

† Deferred implementation

STATCLASS - DISPLAY JOB CLASS STATUS

FUNCTION: Displays status of defined job classes for the current job class structure. The status display returned by this command provides the following information:

- Job class structure name (CSDN)
- Number of jobs in system - both in the input and in the executing queues
- Number of active jobs in the executing queue (JXT)
- Maximum JXTs allowed by the system (LIMIT)
- Number of available pool JXTs
- Number of defined classes
- Number of classes waiting for JXTs

For each defined class, the following information is displayed:

- Job class name
- Number of active jobs in the executing queue (JXT)
- Number of jobs waiting for JXTs
- Number of reserved JXTs
- Maximum JXTs allowed by class
- Status (ON or OFF)

FORMAT: STATCLASS

AVAILABILITY: Available to the operator when the station is logged on to COS.

EXAMPLE:

```
09.54.05 CSS467I CRAY STATCLASS
                        JOB CLASS STRUCTURE = DAY05
JOBS IN SYSTEM      27      ACTIVE JOBS              18
MAX JXTS (LIMIT)    40      AVAILABLE POOL JXTS      15
DEFINED CLASSES     20      CLASSES WAITING JXTS      2
 CLASS      ACTIVE    WAITING    RESERVED    MAXIMUM    STATUS
ZZJSE            0          0           1          1        ON
ZZENG            5          0           5          7        ON
END OF DATA
```

STATION - DISPLAY MVS STATION STATUS

FUNCTION: Displays the following information about the MVS station where the command is entered.

- Station version
- Station log-on ID
- Link status, showing type and addresses
- Staging status
- Stream status, showing maximum and current numbers of streams, with the following information for each active stream:

  Stream number; 1-8 for input streams; 9-16 for output streams. (Direction is relative to MVS system.)

  Status of transfer:
  - INIT Initializing
  - XFER Transferring data
  - TERM Terminating
  - RECV Receiving
  - IDLE Stream not in use

  Transfer number

  COS job name or dataset name

  COS job sequence number

  Count of COS blocks transferred so far

  Dataset disposition code (DC)

  IBM dataset name; volume serial number for magnetic tape dataset; job or SYSOUT indicator.

FORMAT: STATION

AVAILABILITY: Available to the operator

EXAMPLE:

```
10.19.43 CSS4701 STATION ACTIVITY
STATION STATUS VERSION C112A01 09/09/83 16.37
LINK STATUS     TYPE  = NSC UNIT = 485       FRAD = 3385 TOAD  = 1100
STAGE STATUS    ACQUIRE = ON DISPOSE = OFF  JOBS = ON   SUBDS = ON
STREAM STATUS  MI = 2  MO  = 2  MA = 4      CI = 2  CO = 1  CA = 3
ST STAT TRN  JOBNAME  JSQ  BLOCK  DC  IBM DATASET
 1 XFER     1 GGTEST    399     41  ST  TEST.DATA
 2 TERM     0 MAINJOB    91      0  PR  *** SYSOUT ***
 9 INIT     0          -----     1      *** JOB TO COS ***
10 IDLE
END OF DATA
```

STATUS - DISPLAY COS SYSTEM STATUS

FUNCTION: Displays status of jobs, input datasets, and output datasets known to COS. Jobs are reported in order of their job sequence (JSQ) numbers. Status can be requested for any or all of the Cray job queues.

The following information is provided in a status display:

- Job sequence number (JSQ)
- Disposition code (DC), as follows:

  IN Dataset is a job dataset.

  MT Dataset is to be disposed to magnetic tape at the receiving station.

  PR Dataset is to be disposed to a printer at the receiving station.

  PT Dataset is to be disposed to a plotter at the receiving station.

  PU Dataset is to be disposed to punched cards at the receiving station.

  ST Dataset is to be made a permanent dataset at the receiving station (or at the Cray mainframe if the dataset is being sent to the Cray mainframe because of a SUBDS or CRSUBMIT station command or an ACQUIRE control statement).

- Job name when submitted at originating station
- Job class name
- Job or dataset status:

S-CPU	Awaiting CPU
S-RECV	Recovery suspended
L-SYS	Locked by startup
DELAY	Dormant, waiting for event
S-EVENT	Waiting for event
L-MEM	Locked for memory
S-I/O	Waiting for I/O
R-IN	Rolling in
S-MEM	Awaiting memory
S-OP	Suspended by operator
Q-TAPE	Queued for tape

FUNCTION: (continued)

Q-EXEC	Queued for execution
ROLLED	Rolled out
S-SYS	Suspended
XFERING	Transfer in progress
R-OUT	Rolling out
S-XFER	Awaiting transfer
EXECUTING	Executing

- Job priority: initial priority is determined by the JOB control statement class, or operator assigned priority and JOB control statement time and memory specifications. Subsequent job scheduler adjustments are not displayed. Output dataset priority is determined by dataset size.

- Time used in seconds and time limit in seconds (decimal). If job time used or time limit exceeds the display area, the corresponding entry contains *****. If time used or time limit is not applicable for the dataset, the corresponding entry contains -----.

- Field length of job specified as decimal count of 512-word blocks. If field length is not applicable, the entry contains -----.

- Station ID associated with job or dataset

- Terminal ID (TID) associated with job or dataset

The display header line lists the queues being displayed.

FORMAT: STATUS,[*queue*$_1$*queue*$_2$...*queue*$_n$]

queue One or more of the following designators, each specifying a queue for which status is requested. If *queue* is omitted, the status of all of the queues is displayed. When more than one designator is specified, they must be consecutive without blank spaces or commas separating them.

Designator	Description
E	Execution queue
I	Input queue
O	Output queue
R	Cray mainframe receiving queue
S	Cray mainframe sending queue

AVAILABILITY: Available to the operator and the TSO user. At the master operator station, all entries in the queue are displayed. At other stations, normally only entries matching the station ID are displayed. (If the COS I@ALLSDT installation parameter is enabled, all entries in the queue are displayed.) A TSO user can display the status of all jobs with the same terminal ID (TID) as the user's log-on ID. This command is available only when the station is logged on to COS.

EXAMPLE: 12.51.02 CSS461I CRAY STATUS

```
                              JOB CLASS STRUCTURE = DAY05        STATUS EIORS
  JSQ  DC DATASET  CLASS      STATUS      PRTY CPUIM LIMIT    FLEN ID  TID
  739  IN TEST05   C7         ROLLED       7.9     1    10     101 JR CSSXSM
   52  IN FREDJOB  BFNM       S-CPU        5.9     0     2     101 JR CSSXSM
  612  PR XSMT888             XFERING     13.9 ----- -----      0 JR CSSXSM
END OF DATA
```

STORAGE - DISPLAY MASS STORAGE STATUS

FUNCTION: Initiates Cray mass storage status display, providing the operator with the following information:

- The flags column, giving special information about each device:

  M Master device
  R Read only
  D Device down
  P Private; device can be requested by name only
  S Scratch device; only local files allowed
  C Resource controlled device; allocation controlled by the RESERVE statement
  V Volatile; data can be saved on a permanent storage device using the FLUSH command

  The D entry also implies an R entry. They always occur together on the display when a device is down.

  The S entry also implies a P entry.

  The C entry also implies an S entry and a P entry

- Device name as it is known to COS
- Percentage of space free (available) and permanent (in use for permanent datasets) on each device. Space not accounted for by these two categories is allocated to local or system datasets and flaws.
- Number of recovered and unrecovered errors on each device
- Location of last error (in octal); gives cylinder, head, and sector location.

FORMAT: STORAGE

AVAILABILITY: Available to the operator when the station is logged on to COS.

EXAMPLE:

```
18.26.13 CSS466I CRAY MASS STORAGE
 FLAGS      DEVICE      FREE    PERM   RECOV  UNREC  LAST ERROR
MR          DD-A1-20    91%      8%      0      0   0000 00 00
            DD-A1-21    34%     63%      0      0   0000 00 00
 R          DD-A1-23    49%     50%      0      0   0000 00 00
END OF DATA
```

FUNCTION: Changes the activity on the link by changing the total number of input streams and output streams defined for a link and by changing the number of streams that can be active at one time.

Here, the term *stream* refers to the flow of the pieces of information comprising a dataset being staged. The maximum number of input streams and output streams is defined for the station when a station is assembled. (Refer to the COS Operational Procedures Reference Manual, publication SM-0043.) The link control commands allow the operator to change this number but not to exceed the maximum at any time.

Note that streams are defined from the perspective of the Cray mainframe. Thus, an output stream refers to a data path to the station from the Cray mainframe and an input stream refers to a data path from the station to the Cray mainframe.

The input stream count defines the maximum number of datasets that can be staged in at any one time. The output stream count defines the maximum number of datasets that can be staged out at any one time. The active stream count defines the maximum number of datasets that can be handled at one time on the link and includes both directions of data flow. For example, if two input streams, one output stream, and three active streams are defined, staging in occurs with two datasets interleaved and staging out occurs one dataset at a time. However, if three input streams, two output streams, and three active streams are defined, the station can stage a maximum of three datasets at a time. The maximum number of three can consist of three input streams with no output stream, two input streams and one output stream, or one or no input stream and two output streams.

FORMAT: STREAM,*id*,*ni*,*no*,*na*

id Station ID of station whose stream count is to be changed

ni Number of input streams allowed; 0 through 8.

FORMAT: (continued)

no Number of output streams allowed; 0 through 8.

na Number of streams on which data can be sent concurrently, that is, active streams; 0 through 16.

AVAILABILITY: Available to the operator at any MVS console. At the master operator station, operators can change the stream count for any station in the Cray system. At other stations, operators can change only the stream count with the same station ID as the one where the STREAM command is entered. This command is available only when the station is logged on to COS.

EXAMPLE: STREAM,VS,1,2,3

This example shows that station VS can have only one input stream, two output streams, and that three streams can be active concurrently.

SUSPEND - SUSPEND JOB PROCESSING

FUNCTION: Suspends processing of a job identified by its job sequence number (JSQ) or all jobs. The jobs are rolled out and their memory is released. For SUSPEND, ALL, the maximum number of jobs that can be active (LIMIT) is set to 0. See RESUME.

FORMAT: SUSPEND,{*jsq* / ALL}

jsq Job sequence number (JSQ) identifying a specific job to be suspended; obtained through the STATUS command.

ALL Suspends all jobs in the system

AVAILABILITY: Available only at the master operator station. The operator can suspend any job in the Cray system from the master operator station. This command is available only when the station is logged on to COS.

SWITCH - MANIPULATE JOB SENSE SWITCHES

FUNCTION: Sets or clears a job sense switch

FORMAT: SWITCH,*jsq*,*ssw*,{ON / OFF}

jsq	Job sequence number (JSQ) identifying the job to COS; displayed with the STATUS command.
ssw	Sense switch number; 1 through 6.
ON	Sets the switch designated by *ssw*
OFF	Clears the switch designated by *ssw*

AVAILABILITY: Available to the operator and the TSO user. At the master operator station, operators can set or clear job sense switches for any job in the Cray system. At other stations, operators can change only job sense switches for jobs with the same station ID as the one where the SWITCH command is entered. A TSO user can change only job sense switches for jobs with the same terminal ID as the user's log-on ID. This command is available only when the station is logged on to COS.

TAPE - DISPLAY TAPE DEVICE INFORMATION

FUNCTION: Displays configuration information for each tape device. The information provided is as follows:

- Device number
- Associated job sequence number (JSQ), if any assigned
- All access paths
- Device status

Status	Description
IDLE	Available for use
RD/WT	Currently assigned to a job; write enabled.
DOWN	Device is down; not available for use.
OP - DOWN	Downed by the operator; not available for use.
READ	Currently assigned to a job; write disabled.
MAINT.	Maintenance mode; not available for use.
SYS - DOWN	Downed by the system; not available for use.
OFFLINE	Offline; not available for use.

- Assigned volume serial number
- File block count
- Servicing front end ID

FORMAT: TAPE

AVAILABILITY: Available to the operator when the station is logged on to COS.

EXAMPLE:

```
14.04.59 CSS468I CRAY TAPE DEVICES
DEVICE       JSQ IOP CH/CU           STATUS  VOLSER  BKLCNT  ID
100              20-0 21-1 22-2 23-3 OP-DOWN
101              20-0 21-1 22-2 23-3 OP-DOWN
102              20-0 21-1 22-2 23-3 OP-DOWN
103          935 20-0 21-1 22-2 23-3 RD/WT    TAPE99     154  JR
END OF DATA
```

TJOB - DISPLAY TAPE JOB STATUS

FUNCTION: Displays the following job status information for jobs requiring tape devices.

- Job sequence number (JSQ)
- Job name
- Job status

Status	Description
DELAY	Waiting for time event
EXCTNG	Executing
LK-SYS	Locked by system
LK-MEM	Locked for memory
Q-EXEC	Queued for execution
Q-TAPE	Queued for tape
R-IN	Rolling in
ROLLED	Rolled out
R-OUT	Rolling out
S-CPU	Waiting for CPU
S-EVENT	Waiting for event
S-I/O	Waiting for I/O
S-MEM	Waiting for memory
S-OP	Operator suspended
S-RECV	Recovery suspended (SHUTDOWN)
S-SYS	System suspended
S-XFER	Waiting for transfer
XFERING	Transfer in progress

- Job priority. Initial job priority is determined by the job control statement, class, or operator-assigned priority and job control statement time and memory specifications. (Subsequent job scheduler adjustments are not displayed.) Output dataset priority is determined by dataset size.
- Time used in seconds and time limit in seconds (decimal). If the job's time used or time limit exceeds the display area, the corresponding entry contains *****. If time used or time limit is not applicable for the dataset, the corresponding entry contains -----.
- Field length of job specified as decimal count of 512-word blocks. If field length is not applicable, the entry contains -----.

FUNCTION: (continued)

- Station ID associated with job
- Number of tape devices as specified in tape resources parameter on JOB parameter†
- Number of tape devices in use†
- Job rerun status (YES or NO) indicating whether a job can be rerun

FORMAT: TJOB

AVAILABILITY: Available to the operator and the TSO user. If the command is issued at the master operator station, all entries are displayed. If the station is not the master operator station, only entries matching the station ID are displayed. If the COS I@ALLSDT installation parameter is enabled, all entries are displayed. (See the COS Operational Procedures Reference Manual, CRI publication SM-0043.)

If the command is issued by a normal TSO user, only information for jobs whose TID matches the user's is returned. This command is available only when the station is logged on to COS.

EXAMPLE:

```
11.28.17. CSS469I CRAY TAPE JOBS
 JSQ  DATASET STATUS PRI TIMEUSD TIMELIM  FLDLN  ID  DR  DU  RR
 7374 LPSDMP  DELAY  9.9       0       8   100  JR   1   0 YES
END OF DATA
```

† If the CRI SSD is installed as a generic resource, jobs using the SSD appear in the TJOB display.

TRACE - CONTROL STATION TRACING

FUNCTION: Causes the station to start or stop tracing activities on streams, recording execution paths, tracing I/O to COS, and writing collected trace records to the generalized tracing facility (GTF) dataset for analysis. The following message appears at the MVS console:

CSS434I STATION TRACE OPTION MODIFIED

Stream and global trace data is recorded on circular buffers within the MVS station, which can be seen in a station dump. If GTF is specified, the trace data is also written (in blocks of 256 bytes to the GTF file) using the GTRACE macro. This data can later be formatted and printed using the standard IBM utility AMDPRDMP. SCB and LCPH tracing goes to the Station log (messages CSS090I, CSS091I).

FORMAT: TRACE,{ON / OFF} [,STREAMS] [,GLOBAL] [,SCB] [,LCPH] [,GTF] [,SMSG]

ON	Activates tracing
OFF	Deactivates tracing
STREAMS	Tracing for streams
GLOBAL	Tracing of executing paths in each task and the station as a whole
LCPH	Tracing of link control package header fields sent to and from COS
SCB	Tracing of stream control bytes sent to and received from COS in each LCP
GTF	Traced records are written to the MVS generalized trace facility (GTF). If GTF has not been started, a message is sent to the MVS console operator as a reminder.
SMSG	Tracing of station messages received from COS and station responses to be sent to COS

AVAILABILITY: Available to the operator

TRANSFER - DISPLAY OR CONTROL DATASET TRANSFERS

FUNCTION: Displays or controls active transfers between the station and COS and transfers waiting to be sent to COS.

FORMAT:

$$\underline{\text{TRANSFER}}, \left[\begin{array}{l} \underline{\text{CANCEL}}, trn \\ \underline{\text{POSTPONE}}, trn \\ \underline{\text{QUERY}}, \left[\begin{array}{l} type \\ trn \end{array}\right] \end{array}\right]$$

trn — Transfer number; a unique number used to identify a transfer.

CANCEL — Cancels an active or queueing transfer

POSTPONE — Postpones an active transfer

QUERY — Displays the status of the active and queuing transfers known to the station

type — Transfer type; any combination of the following:

A	ACQUIRES
D	DISPOSES
J	JOBS
S	SUBDS

If TRANSFER is entered without a parameter, the default is QUERY, ADJS.

AVAILABILITY: This command is available to all operators and TSO users. An operator can display and control all transfers known to the station. TSO users can only display and cancel transfers with terminal IDs equal to their logon IDs. A TSO user cannot postpone a transfer.

NOTE

TRANSFER CANCEL and TRANSFER POSTPONE should be used to terminate transfers rather than the CANCEL and POSTPONE commands which manipulate streams.

EXAMPLE: 09.57.34 CSS475I TRANSFER STATUS

JOBNAME	JSQ	DATASETNAME	TR#	TYPE	STATUS	TID
TEST1	.....	.....	10	JOB	WAITING	CSSXPG
TEST2	.....	.....	11	JOB	XFERING	CSSXSM
COMPILE	1870	FORTRANDATA	9	ACQUIRE	WAITING	ANALYST
.....	.....	WINNIETHEPOOH	12	SUBDS	XFERING	RABBIT
BADJOB4	.....	.....	156	JOB	CANCELLED	EEYORE

END OF DATA

APPENDIX SECTION

OPERATOR MESSAGES A

MVS station messages have the format:

```
CSSnnnnt text
```

nnnn A number in one of the following ranges indicating the issuer of the message:

001-099	Link I/O
100-199	Initialization and common routines
200-299	Job submission and transfer queueing
300-399	Dataset staging
400-499	Command processing
500-599	Utilities
600-699	RACF/ACF2
700-799	UCC-1 TMS messages
800-899	Station messages subtask
900-999	For use by installations
1000-1999	Initialization and common routines

t A letter indicating the action and effect as follows:

- A The station requests that the operator respond according to the directions in the message text.
- D Issuing task immediately terminates abnormally with abend code
- E Error message
- F Station software failure
- I Informative message
- W Warning

text Message text

In the message description, DESTINATION defines where the message is sent, using the following abbreviations:

- O Operator
- L MVS station log
- T TSO user
- J Cray mainframe job log

The operator (O) messages and MVS station log messages (L) are included in this manual. The TSO user (T) and Cray mainframe job log (J) messages are included in the IBM MVS Station Reference Manual, CRI publication SR-0038. All (O, L, T, J) are included in the IBM MVS Station Installation and Maintenance Reference Manual, CRI publication SM-0078.

CSS006E - RESTART RECEIVED FROM CRAY

DESTINATION: OL

CAUSE: An LCP with the message code indicating restart was received by the station following a CRAY-1 or CRAY X-MP mainframe failure and subsequent restart. The station begins an abortive log off.

ACTION: Restart the station.

SOURCE: CRMLINK

CSS008E - MESSAGE ERROR *nnn* RECEIVED FROM COS

DESTINATION: OL

CAUSE: An LCP with a message code indicating the message error is received by the station, and the message subcode is not stream-related. The station begins an abortive log off.

ACTION: Record the error code, which probably represents a COS error, and report the problem to the Cray Research site analyst.

SOURCE: CRMLINK

CSS009E - TRANSFER ON STREAM *xx* WILL BE CANCELLED

DESTINATION: OL

CAUSE: An LCP with a message code indicating a stream-related error is received from COS mainframe for stream *xx*. The file transferring on the stream is cancelled.

ACTION: Resubmit the job that failed; report the problem to the Cray Research site analyst.

SOURCE: CRMLINK

CSS014W - ABORTIVE LOGOFF STARTED

DESTINATION: OL

CAUSE: The operator entered a LOGOFF, QUICK command; or an abortive log off commenced for another reason. The station is logged off immediately; transfers currently in progress are cancelled; the station terminates.

ACTION: Restart the station and rerun any transfers.

SOURCE: CRMLINK

CSS020I - ---------- STATION LOGGED ON TO COS ----------
CSS020I(CONT.) TYPE = *ttt*, UNIT = *uuu*, FRAD = *ffff*, TOAD = *tttt*,
CSS020I(CONT.) LOGON ID = *ll*, CRAY ID = *cc*,
CSS020I(CONT.) MI = *ii*, MO = *oo*, MA = *aa*
CSS020I(CONT.) -------- *dddddddd* ---- (*dddddddd*) ----------

DESTINATION: OL

CAUSE: Informational message detailing logon variables used

ACTION: None

SOURCE: CRMLGON

CSS021I - ---------- LOGGED OFF FROM COS ----------

DESTINATION: OL

CAUSE: Informational message received upon successful log off

ACTION: None

SOURCE: CRMLINK

CSS031E - UNABLE TO GET MEMORY FOR LINK CONTROL BLOCK - LOGON FAILED

DESTINATION: OL

CAUSE: GETMAIN for LCB in subpool 0 failed.

ACTION: Rerun station in larger region.

SOURCE: CRMLGON

CSS032E - LINK OPTIONS TABLE NOT PRESENT - LOGON NOT POSSIBLE

DESTINATION: OL

CAUSE: Link Options Table (LOT) was not present in station load library at station initialization time.

ACTION: Generate LOT and restart station.

SOURCE: CRMLGON

CSS033E - UNABLE TO GET LINK TRANSFER BUFFERS - LOGON FAILED

DESTINATION: OL

CAUSE: Station could not obtain segment buffers at logon time.

ACTION: Check buffer pool definition and restart station.

SOURCE: CRMLGON

CSS034E - UNABLE TO ISSUE LOGON REQUEST TO COS - LOGON FAILED

DESTINATION: OL

CAUSE: I/O operation to link at logon time failed.

ACTION: Check link device is powered up, online and functioning correctly.

SOURCE: CRMLGON

CSS035E - LOGON REQUEST DENIED BY COS - LOGON FAILED
CSS035E(CONT.) MC = *mm*, MSC = *ss*

DESTINATION: OL

CAUSE: Reply from COS to LOGON segment was message code X*mm*, subcode X*ss*.

ACTION: Be sure the LOT contains logon options which are compatible with COS generation. Turn Cray link device channel pair OFF, then ON, before retrying log on. See also message CSS037E in station log.

SOURCE: CRMLGON

CSS036E - COS REPLY TO STATION LOGON WAS INVALID - LOGON FAILED

DESTINATION: OL

CAUSE: START segment received from COS contained invalid data.

ACTION: Check LOT contains logon options which are compatible with COS generation. Turn Cray link device channel pair OFF, then ON, before retrying log on. See also message CSS037E in station log.

SOURCE: CRMLGON

CSS037I UNSUCCESSFUL LOGON EXCHANGE DATA FOLLOWS -
CSS037I(CONT.) *hhhhhhhhhhhhhhhh hhhhhhhhhhhhhhhh* TX LCP
CSS037I(CONT.) *hhhhhhhhhhhhhhhh hhhhhhhhhhhhhhhh*
CSS037I(CONT.) *hhhhhhhhhhhhhhhh hhhhhhhhhhhhhhhh*
CSS037I(CONT.) *hhhhhhhhhhhhhhhh hhhhhhhhhhhhhhhh* TX SEG
CSS037I(CONT.) *hhhhhhhhhhhhhhhh hhhhhhhhhhhhhhhh*
CSS037I(CONT.) *hhhhhhhhhhhhhhhh hhhhhhhhhhhhhhhh*
CSS037I(CONT.) *hhhhhhhhhhhhhhhh hhhhhhhhhhhhhhhh* RX LCP
CSS037I(CONT.) *hhhhhhhhhhhhhhhh hhhhhhhhhhhhhhhh*
CSS037I(CONT.) *hhhhhhhhhhhhhhhh hhhhhhhhhhhhhhhh*
CSS037I(CONT.) *hhhhhhhhhhhhhhhh hhhhhhhhhhhhhhhh* RX SEG
CSS037I(CONT.) *hhhhhhhhhhhhhhhh hhhhhhhhhhhhhhhh*
CSS037I(CONT.) *hhhhhhhhhhhhhhhh hhhhhhhhhhhhhhhh*

DESTINATION: L

CAUSE: Log on I/O exchange to COS was performed correctly, but data received from COS means log on did not succeed.

ACTION: Be sure the LOT contains logon options which are compatible with COS generation. Turn Cray link device channel pair OFF, then ON, before retrying log on. Message CSS035E or CSS036E is also issued.

SOURCE: CRMLGON

CSS038E - PREVIOUS LOGOFF DID NOT COMPLETE CORRECTLY - LOGON FAILED

DESTINATION: OL

CAUSE: Logon processing detected that the LCB already existed, but did not reuse it because it was marked LIVE, indicating that no successful link device driver termination call was made.

ACTION: Restart station and retry log on.

SOURCE: CRMLGON

CSS050E - LINK ALLOCATION FAILED - RC = *rr*, EC = *eeee*, IC = *iiii*

DESTINATION: OL

CAUSE: Logon processing was unable to allocate the link device to the station.

ACTION: Check that the link device is correctly specified in the Link Options Table (LOT).

SOURCE: CRLIOCC and CRLIONS

CSS051E - LINK DCB WOULD NOT OPEN

DESTINATION: OL

CAUSE: Logon processing was unable to open the link device.

ACTION: Check that the link device is correctly specified in the Link Options Table (LOT).

SOURCE: CRLIOCC and CRLIONS

CSS052E - LINK DCB WOULD NOT CLOSE

DESTINATION: OL

CAUSE: Link device driver termination processing was unable to close the link device.

ACTION: Take an address space dump and call CRI for support.

SOURCE: CRLIOCC and CRLIONS

CSS053E - LINK UNALLOCATION FAILED - RC = *rr*, EC = *eeee*, IC = *iiii*

DESTINATION: OL

CAUSE: Link device driver termination processing was unable to unallocate the link device.

ACTION: Take an address space dump and call CRI for support.

SOURCE: CRLIOCC and CRLIONS

CSS080E - LINK ERROR RETRY THRESHOLD EXCEEDED - LINK IS BROKEN

DESTINATION: OL

CAUSE: The link error or timeout retry counter reached the limit specified in the Link Options Table.

ACTION: Either increase limits in LOT or take steps to reduce number of errors occurring.

SOURCE: CRLIOCC and CRLIONS

CSS081I - LINK I/O ERROR - SIOCC = *ii*, ECBCC = *ee*,
CSS081I(CONT.) CSW = *cccccccccccccc*, LAST CMD = *oo*,
CSS081I(CONT.) SENSE = *ssssssssssssssss*, RETRY COUNT = *rr*

DESTINATION: L

CAUSE: A link I/O error occurred.

ACTION: None; the I/O is retried until the threshold specified in the LOT is reached.

SOURCE: CRLIOCC and CRLIONS

CSS082I - LINK TIMEOUT - RETRY COUNT = *rr*

DESTINATION: L

CAUSE: **NSC link:** A message was received with the associated data bit set on. The I/O terminated with unit exception set, indicating that the associated data had not arrived in time. **CTC link:** The front-end interface returned status indicating that a command did not complete within the timeout period set in the interface hardware.

ACTION: None; the I/O is retried until the threshold specified in the LOT is reached.

SOURCE: CRLIOCC and CRLIONS

CSS090I - LINK I/O *dd* NSG = *gg*, MN = *nn*, MC = *cc*, MSC = *ss*, R/S = *tt*, SGN = *eeeeee*, SBC = *bbbbbbbb*

DESTINATION: L

CAUSE: Informational message produced because I/O logging was requested in the LOT.

ACTION: None

SOURCE: CRLIOCC and CRLIONS

CSS091I - LINK I/O *dd* ISCBS = *ss ss ss ss ss ss ss ss*, OSCBS = *ss ss ss ss ss ss ss*

DESTINATION: L

CAUSE: Informational message produced because I/O logging was requested in the LOT.

ACTION: None

SOURCE: CRLIOCC and CRLIONS

CSS101D - INSUFFICIENT STORAGE FOR BUFFERS

DESTINATION: OL

CAUSE: A GETMAIN request for buffer storage failed during station initialization. The station abends U101.

ACTION: Increase the region size and rerun the station.

SOURCE: CRMINIT

CSS102E - TRANSFER REQUEST FILE OPEN FAILED

DESTINATION: OL

CAUSE: The Transfer Request File could not be opened during station initialization. The station abends U102. The DDNAME and CSSTRF may have been omitted from the station start procedure.

ACTION: Ensure that CSSTRF refers to a valid Transfer Request File dataset and restart the station.

SOURCE: CRMINIT

CSS107D - OPEN FAILED FOR STATION LOGFILE

DESTINATION: O

CAUSE: The station initialization could not open the station logfile because the DD statement CSSLOG was not included in the CSS procedure. The station abends U107.

ACTION: Make sure there is a CSSLOG DD statement in the CSS procedure and rerun.

SOURCE: CRMINIT

CSS108I - STATION INITIALISATION STARTED-CSS*nnn-date time*

DESTINATION: OL

CAUSE: The station started is version *nnn*, which was link edited on *date* at *time*.

ACTION: None

SOURCE: CRMINIT

CSS109D - STATION HAS NO JOBNAME IN ASCB

DESTINATION: OL

CAUSE: The station's address space control block does not point to a valid name. The station abends U109.

ACTION: MVS system error. Report the problem to the Cray Research site analyst, giving the dump.

SOURCE: CRMINIT

CSS110I - STATION INITIALIZATION COMPLETE

DESTINATION: OL

CAUSE: The station has finished its initialization and is ready to transfer data across the link to the Cray mainframe.

ACTION: None

SOURCE: CRMINIT

CSS111D - MASTER ESTAE FAILED

DESTINATION: OL

CAUSE: The station initialization is unable to issue ESTAE to set up an asynchronous error exit routine. The station abends U111.

ACTION: Report the problem to the Cray Research site analyst, giving the U111 dump. Try rerunning the station with a larger region size.

SOURCE: CRMINIT

CSS114A - CRAY STATION LOGOFF COMPLETED

DESTINATION: O

CAUSE: The station logged off from the CRAY-1 or CRAY X-MP mainframe successfully and can be logged on again if required. Message CSS141I is displayed and remains on the console.

ACTION: Enter END to terminate the station or LOGON to log on again.

SOURCE: CRMINIT

CSS115E - INVALID REPLY

DESTINATION: O

CAUSE: The reply to a previous message was incorrect. The message will be re-issued.

ACTION: Enter the correct reply to the new message.

SOURCE: CRSMTMM

CSS119I - *entry point name* SUBTASK STARTED

DESTINATION: L

CAUSE: The specified task has been successfully attached by CRMIATT.

ACTION: None

SOURCE: CRMIATT

CSS120D - *entry point name* SUBTASK ENDED

DESTINATION: L

CAUSE: The specified task has been successfully detached by CRMIDET.

ACTION: None

SOURCE: CRMIDET

CSS121E - *entry point name* SUBTASK ABENDED *Snnn/Unnn*

DESTINATION: OL

CAUSE: The specified task abnormally terminated with the error code indicated in the message; a dump may have been taken. The task has been detached.

ACTION: If a dump was taken and the code appears in the list of abend codes, take the appropriate action. Otherwise, contact the Cray Research site analyst.

SOURCE: CRMIDET

CSS122D - INVALID TCB

DESTINATION: OL

CAUSE: CRMIDET was entered with an invalid address in register 1. If it does not point to a Task Control Block, or the TCB is in error, a U122 dump is taken.

ACTION: Report the problem to the Cray Research site analyst, including the U122 dump.

SOURCE: CRMIDET

CSS125D - MISSING TASK TABLE ENTRY

DESTINATION: OL

CAUSE: On entry to CRMIATT, register was 0. A U125 dump is taken.

ACTION: Report the problem to the Cray Research site analyst, including the U125 dump.

SOURCE: CRMIATT

CSS126D - INVALID TASK TABLE ENTRY

DESTINATION: OL

CAUSE: The Task Table entry passed to CRMIATT is invalid. A U126 dump is taken.

ACTION: Report the problem to the Cray Research site analyst, including the U126 dump.

SOURCE: CRMIATT

CSS127D - *entry point name*: IDENTIFY FAILED

DESTINATION: OL

CAUSE: The specified entry point name was not able to be processed by IDENTIFY during station initialization. A U127 dump is taken.

ACTION: Report the problem to the Cray Research site analyst, including the U127 dump.

SOURCE: CRMIATT

CSS128D - *entry-point name*: ATTACH FAILED

DESTINATION: OL

CAUSE: The subtask identified by the entry point name was not attached during station initialization. The station abends U128.

ACTION: Report the problem to the Cray Research site analyst, including the U128 dump.

SOURCE: CRMIATT

CSS140D - INVALID POST CODE FOR CRMINIT

DESTINATION: OL

CAUSE: The CRMINIT ECP was posted with an unexpected code. A U140 dump is taken.

ACTION: Report the problem to the Cray Research site analyst, including the U140 dump.

SOURCE: CRMINIT

CSS141I - STATION NOT LOGGED ON TO COS

DESTINATION: OL

CAUSE: The station is active and can process operator commands and job submission requests. The message remains on the screen until END or LOGON is entered.

ACTION: To log on to COS, enter the LOGON command. To end the station, enter the END command.

SOURCE: CRMINIT

CSS142D - STATION BUFFER ERROR AT LOGOFF

DESTINATION: OL

CAUSE: One or more buffers were left allocated to tasks which terminated when the station logged off. A U142 dump is taken.

ACTION: Report the problem to the Cray Research site analyst, including the U142 dump.

SOURCE: CRMINIT

CSS150I - STATION *station name* IS NOT AN MVS SUBSYSTEM-STATION WILL END

DESTINATION: OL

CAUSE: The station that has just been started is not defined to MVS as a subsystem. It cannot be initialized.

ACTION: Make sure the station name was entered correctly when the station was started. Ensure that the station name has been correctly identified to MVS as a subsystem.

SOURCE: CRSSINIT

CSS151I - STATION COULD NOT GET STORAGE FOR SSVT-STATION WILL TERMINATE

DESTINATION: OL

CAUSE: A GETMAIN for subpool 241 storage has failed. The station cannot be initialized.

ACTION: Report the problem to the Cray Research site analyst.

SOURCE: CRSSINIT

CSS152I - STATION *station-name* COULD NOT START - SUBSYSTEM INTERFACE IS NOT DORMANT

DESTINATION: OL

CAUSE: The station could not be started, since it was found to be already active.

ACTION: Check to see if the station is already active. Duplicate versions of the same station are not allowed.

SOURCE: CRSSINIT

CSS153I - STATION COULD NOT LOCATE SUBSYSTEM SUPPORT MODULE *module* - STATION WILL END

DESTINATION: OL

CAUSE: The station subsystem support module CRAYSSSM is not present in the MVS system.

ACTION: Ensure that the station subsystem support module is present in the Pageable Link Pack Area (PLPA).

SOURCE: CRSSINIT

CSS154I - STATION SUBSYSTEM SUPPORT MODULE *module* IS NOT IN COMMON STORAGE - STATION WILL END

DESTINATION: OL

CAUSE: The station has loaded a private copy of the subsystem support module CRAYSSSM.

ACTION: Ensure that the station subsystem support module is in the Pageable Link Pack Area (PLPA).

SOURCE: CRSSINIT

CSS155I - STATION SUBSYSTEM SUPPORT MODULE *module* HAS INVALID ENTRY POINTS - STATION WILL END.

DESTINATION: OL

CAUSE: The station has been initialized with an invalid version of the subsystem support module CRAYSSSM.

ACTION: Ensure that the correct version of the subsystem support module is present in the system. The function supported in that module must match those defined in the SSVT.

SOURCE: CRSSINIT

CSS156I - STATION *station name* - SUBSYSTEM INTERFACE ACTIVE

DESTINATION: OL

CAUSE: The subsystem interface has been initialized. Other MVS components may now communicate with it.

ACTION: None

SOURCE: CRSSINIT

CSS160I - STATION *station name* SUBSYSTEM INTERFACE-TERMINATION ERROR - STILL ACTIVE

DESTINATION: OL

CAUSE: Station termination has been entered prematurely.

ACTION: Report the problem to the Cray Research site analyst.

SOURCE: CRSSTERM

CSS161I - STATION *station name* SUBSYSTEM INTERFACE DORMANT

DESTINATION: OL

CAUSE: The subsystem interface has been terminated. The subsystem is not accessible to other MVS components.

ACTION: None

SOURCE: CRSSTERM

CSS162I - STATION *station name* SUBSYSTEM INTERFACE-TERMINATION ERROR - NO SSCT

DESTINATION: OL

CAUSE: Internal error in station termination

ACTION: Report the problem to the Cray Research site analyst.

SOURCE: CRSSTERM

CSS163I - STATION *station name* SUBSYSTEM INTERFACE-TERMINATION ERROR - NO SSVT

DESTINATION: OL

CAUSE: Internal error in station termination

ACTION: Report the problem to the Cray Research site analyst.

SOURCE: CRSSTERM

CSS170I - MASTER ESTAE FAILURE - *reason*

DESTINATION: OL

CAUSE: An internal error has been encountered in master ESTAE processing. Termination will not be complete. Refer to the reason for more information.

ACTION: Report the problem to the Cray Research site analyst.

SOURCE: CRMSTAE

CSS171I - MASTER ESTAE RECURSIVE ENTRY - TERMINATION MAY FAIL

DESTINATION: OL

CAUSE: The master ESTAE has been entered more than once. Termination may fail.

ACTION: Report the problem to the Cray Research site analyst.

SOURCE: CRMSTAE

CSS247E - TRANSFER REQUEST FILE FULL - REQUEST NOT QUEUED

DESTINATION: TJO

CAUSE: The dataset holding requests for transfers to COS is too full. No more job or dataset submission requests can be made.

ACTION: Wait until the station has been logged on to COS and resubmit the request. If the problem is common, the dataset size should be increased.

SOURCE: CRSBQTF

CSS248E - TRANSFER REQUEST FILE CORRUPTED - REQUEST NOT QUEUED

DESTINATION: TJO

CAUSE: The dataset which holds requests for transfers to COS is full. No more job or dataset submission requests may be made.

ACTION: (1) Wait until the station has been logged on to COS, then resubmit the request. (2) Run INITTRF to initialize the Transfer Request File and restart the station.

SOURCE: CRSBQTF

CSS271I - DTR *nnnnn* QUEUED FOR JOB *jjjjjjj* JSQ *mmmmm* DN *ddddd*

DESTINATION: L

CAUSE: A request to transfer a dataset for job *jjjjjjj* with JSQ *mmmmm* has been received and given the transfer sequence number *nnnnn*.

ACTION: None

SOURCE: CRDTREQ

CSS272I - DTR *nnnnn* QUEUED FOR DATASET *ddddd*

DESTINATION: L

CAUSE: A request to transfer dataset *ddddd* to COS has been received and given transfer sequence number *nnnnn*.

ACTION: None

SOURCE: CRDTREQ

CSS273E - TRANSFER REQUEST FILE FULL - REQUEST LOST

DESTINATION: OL

CAUSE: The dataset which holds requests for transfers to COS is full. No more jobs or datasets can be submitted. The current request is lost.

ACTION: Initiate staging to COS using the STAGE command.

SOURCE: CRDTREQ

CSS274E - TRANSFER REQUEST FILE CORRUPTED - REQUEST LOST

DESTINATION: OL

CAUSE: The dataset which holds request for transfers to COS is corrupt. No more jobs or datasets can be submitted. The current request is lost.

ACTION: Stop the station and reinitialize the Transfer Request File using INITTRF.

SOURCE: CRDTREQ

CSS276D - DATASET TRANSFER REQUEST TASK ABENDED S*nnn*/U*nnn* - RESTART ATTEMPTED

DESTINATION: OL

CAUSE: The CRDTREQ task terminated abnormally and the ESTAE routine was unable to recover.

ACTION: Stop the station and restart it. Give the dump to the Cray Research site analyst.

SOURCE: CRDTSTA

CSS277D - DATASET TRANSFER REQUEST TASK ABENDED S*nnn*/U*nnn* AGAIN

DESTINATION: OL

CAUSE: The CRDTREQ task terminated abnormally and the ESTAE routine was unable to recover.

ACTION: Stop the station and restart it. Give the dump to the Cray Research site analyst.

SOURCE: CRDTSTA

CSS280I - TRANSFER REQUEST QUEUE BUILT

DESTINATION: OL

CAUSE: During station initialization, the TRQ has been constructed from the TRF dataset.

ACTION: None

SOURCE: CRTRQIN

CSS281I - *nnnnn* JOBS WAITING FOR TRANSFER

DESTINATION: OL

CAUSE: When the TRQ was constructed, there were *nnnnn* jobs waiting for transfer to COS.

ACTION: None

SOURCE: CRTRQIN

CSS282I - *nnnnn* DATASETS WAITING FOR TRANSFER

DESTINATION: OL

CAUSE: When the TRQ was constructed, there were *nnnnn* unsolicited datasets waiting transfer to COS.

ACTION: None

SOURCE: CRTRQIN

CSS283E - BAD RECORD ON TRANSFER REQUEST FILE IGNORED

DESTINATION: OL

CAUSE: During construction of the TRQ from the TRF, an invalid record was encountered. A free queue entry is constructed.

ACTION: Reinitialize the TRF at a convenient time.

SOURCE: CRTRQIN

CSS285E - TRANSFER REQUEST FILE NOT OPEN

DESTINATION: OL

CAUSE: The Transfer Request File was not open when CRTRQIN was called. The DD statement may have been omitted from the start procedure.

ACTION: Report the problem to the Cray Research site analyst.

SOURCE: CRTRQIN, CRTRSEL

CSS286D - TRANSFER REQUEST FILE HAS NO EXTENTS

DESTINATION: OL

CAUSE: An error occurred in the definition of the Transfer Request File.

ACTION: Check that the TRF has been correctly defined and initialized. Report the problem to the Cray Research site analyst if it persists.

SOURCE: CRTRQIN

CSS287D - INVALID BLOCKSIZE FOR TRF

DESTINATION: OL

CAUSE: The block size defined for the Transfer Request File differs from that expected by the station.

ACTION: Check the block size, if correct; reinitialize the TRF.

SOURCE: CRTRQIN

CSS288E - COS HAS JUST POSTPONED 10 SUCCESSIVE TRANSFERS

DESTINATION: OL

CAUSE: The last 10 requests selected from the Transfer Request Queue were marked postponed by COS.

ACTION: Deactivate job and dataset submission using the STAGE command; investigate why COS is postponing requests (for example, insufficient disk space).

SOURCE: CRTRSEL

CSS289D - INVALID STATUS IN TRANSFER REQUEST ENTRY

DESTINATION: OL

CAUSE: During selection of requests, an invalid Transfer Request Queue entry was found.

ACTION: Stop the station and report the problem to the Cray Research site analyst.

SOURCE: CRTRSEL

CSS290E - TRANSFER REQUEST QUEUE MAY BE CORRUPTED
- RESTART THE STATION AS SOON AS POSSIBLE

DESTINATION: OL

CAUSE: A station task terminated abnormally while it was processing the Transfer Request Queue, which might now be corrupted.

ACTION: Log the station off and restart it.

SOURCE: CRTRQSTA

CSS302E - INVALID UNIT *unitname* IMPLIED OR SPECIFIED

DESTINATION: TLJ

CAUSE: The unit name implied or specified in the UNIT= parameter in the TEXT field of the dataset header received from the CRAY-1 or CRAY X-MP mainframe is not generated in the MVS system or does not imply a disk or tape device. The transfer is cancelled.

ACTION: Ensure that the dataset to be accessed resides on or is to exist on a supported device; alter the TEXT field; and resubmit the job.

SOURCE: CRDSTAG

CSS303E - VOLUME OPERAND NOT SPECIFIED AND DATASET NOT CATALOGUED

DESTINATION: TLJ

CAUSE: A VOL= parameter was not found in the TEXT field of the dataset header received from the CRAY-1 or CRAY X-MP mainframe for a magnetic tape or for an existing dataset where UNIT= was specified and the dataset could not be located in the system catalog. The transfer is cancelled.

ACTION: Add a VOL= parameter to the TEXT field in the COS JCL and resubmit the job.

SOURCE: CRDSTAG

CSS304E - DSNAME OPERAND NOT SPECIFIED

DESTINATION: TLJ

CAUSE: A dataset name was not found in the TEXT field of the dataset header received from the CRAY-1 or CRAY X-MP mainframe for a disk or magnetic tape transfer. The transfer is cancelled.

ACTION: Add a DSN= parameter to the TEXT field of the COS JCL and resubmit the job.

SOURCE: CRDSTAG

CSS305E - DATASET *datasetname* NOT FOUND IN CATALOG

DESTINATION: TLJ

CAUSE: The dataset specified was not found in the catalog implied by the text in the dataset header received from the CRAY-1 or CRAY X-MP mainframe. The transfer is cancelled.

ACTION: Check the spelling of dataset name and the existence of the dataset and resubmit the job after making any changes.

SOURCE: CRDSTAG

CSS306E - OPEN FAILED FOR DATASET *datasetname*

DESTINATION: TLJ

CAUSE: The dataset specified in the TEXT field of the dataset header received from the CRAY-1 or CRAY X-MP mainframe has been allocated but could not be opened. The transfer is cancelled.

ACTION: Determine why the dataset could not be opened (there may be an accompanying message), and resubmit the job.

SOURCE: CRDSTAG

CSS307E - INSUFFICIENT SPACE FOR DATASET *datasetname*

DESTINATION: TLJ

CAUSE: The dataset specified in the TEXT field of the dataset header received from the CRAY-1 or CRAY X-MP mainframe has no extents. The transfer is cancelled.

ACTION: Reallocate the dataset and resubmit the job.

SOURCE: CRDSTAG

CSS308E - INVALID DATASET ORGANISATION

DESTINATION: TLJ

CAUSE: The dataset allocated for a transfer request is not partitioned or sequential. The transfer is cancelled.

ACTION: None; other dataset organizations are not supported.

SOURCE: CRDSTAG

CSS309E - JCL ERROR IN TEXT FIELD NEAR POSITION *nnn*, *reason*

DESTINATION: TLJ

CAUSE: The JCL analyzer detected a JCL error in the TEXT field for the ACQUIRE or DISPOSE at position *nnn*. *reason* describes the type of error. The transfer is cancelled. The TEXT field is displayed in message CSS313E which accompanies this message.

ACTION: Correct the COS JCL and resubmit the job.

SOURCE: CRDSTAG

CSS310E - INVALID DISPOSITION CODE, DC=*aa*

DESTINATION: TLJ

CAUSE: The disposition code in the dataset header received from CRAY-1 or CRAY X-MP mainframe is not one of IN, ST, MT, PR, PU, or PT. The transfer is cancelled.

ACTION: Change the DC= setting in the COS control statement and resubmit the job.

SOURCE: CRDSTAG

CSS311E - UNIT OPERAND NOT SPECIFIED

DESTINATION: TLJ

CAUSE: The TEXT field in the dataset header received from the CRAY-1 or CRAY X-MP mainframe either specifies DISP=NEW and UNIT is not specified or specifies DISP=OLD and VOL= with UNIT not being specified. The transfer is cancelled.

ACTION: Add a UNIT= parameter to the TEXT field in the COS JCL and resubmit the job.

SOURCE: CRDSTAG

CSS312E - MISSING OR INVALID DISP PARAMETER

DESTINATION: TLJ

CAUSE: The TEXT field in the dataset transfer request received from the CRAY-1 or CRAY X-MP mainframe specifies or defaults to DISP=NEW which is invalid for an ACQUIRE. The transfer is cancelled.

ACTION: Specify DISP=OLD or DISP=SHR in the TEXT field of the ACQUIRE statement and resubmit the job.

SOURCE: CRDSTAG

CSS313I - TEXT = TEXT

DESTINATION: TL

CAUSE: This message accompanies CSS309E and displays a TEXT field.

ACTION: See message CSS309E for correct action.

SOURCE: CRDSTAG

CSS314E - MEMBER NOT SPECIFIED FOR OUTPUT PARTITIONED DATASET - TEMPNAME USED

DESTINATION: TLJ

CAUSE: A DISPOSE control statement specified a partitioned dataset, but did not specify a member name. A member name of TEMPNAME is used.

ACTION: Use an IBM utility to rename the member to the required name.

SOURCE: CRDSTAG

CSS315E - DISPOSE TO SYSOUT INVALID WITH DC=ST

DESTINATION: TLJ

CAUSE: A dispose was attempted with DC=ST, but the TEXT field of the DISPOSE control statement specified SYSOUT. The transfer is cancelled.

ACTION: Either change the disposition code to PR, or specify a dataset in the TEXT field of the COS JCL.

SOURCE: CRDSTAG

CSS320E - ABEND { S / U } *nnn-mm* { JOB / DATASET / SYSOUT } TRANSFER { POSTPONED / CANCELLED }

DESTINATION: TLJO

CAUSE: A recoverable abend occurred on the stream; the stream will be restarted. The transfer is cancelled or postponed as shown.

ACTION: No action for postpones; for cancels, report the problem to the Cray Research site analyst, unless an accompanying message explains the reason for the cancel.

SOURCE: CRDSTAE

CSS322E - COS DC=*xx* DATASET RECORD LENGTH *nnnnn* TOO LONG FOR IBM RECFM=*xxx*,LRECL=*xxxxx* DATASET

DESTINATION: TLJ

CAUSE: The length of a record in the block received from the CRAY-1 or CRAY X-MP mainframe exceeded the IBM dataset block size. The transfer is cancelled.

ACTION: Respecify the IBM dataset block size and resubmit the request.

SOURCE: CRBLDFB, CRBLDVB

CSS323E - ESTIMATED LINES EXCEEDED [:SYSOUT DATASET TRUNCATED]

DESTINATION: TLJ

CAUSE: The number of lines written to a SYSOUT dataset reached the limit specified in the OUTLIM parameter in the TEXT field in the COS JCL or in the system default. The transfer is cancelled.

ACTION: Increase the value of the OUTLIM parameter in the TEXT field of the COS JCL and rerun the job.

SOURCE: CRBLDFB, CRBLDVB

CSS324E - INVALID FORMAT FOR BLOCKED DATA FROM COS, BLOCK *nnnnn*, WORD *nnn*

DESTINATION: TLJ

CAUSE: The specified module detected an error in the format of the blocked data received from the CRAY-1 or CRAY X-MP mainframe. The transfer is cancelled.

ACTION: Report the problem to the Cray Research site analyst, giving the dumps.

SOURCE: CRCBVB, CRBLDVB, CRCBFB, CRCBVBS

CSS329E - UNSUPPORTED TRANSFER COMBINATION

DESTINATION: TLJ

CAUSE: Dataset staging selection detected an unsupported combination of valid Cray and IBM dataset formats. The transfer is cancelled.

ACTION: Refer to the IBM MVS Station Reference Manual, CRI publication SR-0038, for details of supported Cray and IBM dataset formats. Change the COS control statement and resubmit the job.

SOURCE: CRDTSTG

CSS331D - UNEXPECTED MESSAGE QUEUE ELEMENT

DESTINATION: OLJ

CAUSE: An invalid or unexpected type of MQE was found in the input event queue during processing of the specified module. The stream abends U331 and recovers; the transfer is cancelled.

ACTION: Report the problem to the Cray Research site analyst, giving the dump.

SOURCE: CRDSTAG, all dataset staging mainbody modules

CSS332D - LOCAL I/O COUNT ERROR

DESTINATION: OLJ

CAUSE: The number of entries in the local I/O queue went negative during processing of the specified module. The stream abends U332 and recovers; the transfer is cancelled.

ACTION: Report the problem to the Cray Research site analyst, giving the dump.

SOURCE: CRFTOCD

CSS340A - ENTER RETRY, POSTPONE OR CANCEL

DESTINATION: OLJ

CAUSE: This message is used with CSS341I, CSS342I, CSS343I, CSS344I, CSS346I, or CSS347I, all of which describe the status of dynamic allocation request for a job. The stream waits for the operator to issue a reply to the message. Other allocations can take place.

ACTION: The appropriate action is described under the associated message.

SOURCE: CRDSTAG

CSS341I - JOB *jobname* JSQ *jsq* WAITING FOR DATASET *datasetname*

DESTINATION: TLJO

CAUSE: Dynamic allocation returned an error reason code X'0210', meaning that the dataset was allocated to a TSO user or another job. The stream issues message CSS340A to the operator and waits for a reply.

ACTION: **TSO User:** If the dataset is allocated to you, free it and inform the operator so the request can be retried.

Operator: If the dataset in question can be freed, release it and reply RETRY to message CSS340A. If it cannot be freed immediately, reply POSTPONE. If it cannot be freed at all, reply CANCEL.

SOURCE: CRDSTAG

CSS342I - JOB *jobname* JSQ *jsq* WAITING FOR UNIT *unitname*

DESTINATION: OLJ

CAUSE: Dynamic allocation returned an error reason code X'0214', which means that the unit requested or implied by the TEXT field of the dataset header was allocated to another job. The stream waits for the operator to issue a reply to message CSS340A. Other allocations can take place.

ACTION: If the unit specified can be made available, free it and reply RETRY to message CSS340A. If it cannot be freed immediately, reply POSTPONE. If it cannot be made available at all, reply CANCEL.

SOURCE: CRDSTAG

CSS343I - JOB *jobname* JSQ *jsq* VOLUME *volser* NOT MOUNTED ON UNIT *unitname*

DESTINATION: OLJ

CAUSE: Dynamic allocation returned an error reason code X'0218', which means that the volume requested was not mounted on a suitable unit. The stream waits for the operator to issue a reply to message CSS340A. Other allocations can take place.

ACTION: If the volume can be mounted, mount it on a suitable unit and reply RETRY to message CSS340A. If it cannot be mounted immediately, reply POSTPONE, otherwise reply CANCEL.

SOURCE: CRDSTAG

CSS344I - OPERATOR DISALLOWED MOUNT OF VOLUME *volser* ON UNIT *unitname* FOR JOB *jobname* JSQ *jsq*

DESTINATION: OLJ

CAUSE: Dynamic allocation returned an error reason code X'0484', meaning that the operator replied NO to a mount request for the specified volume and unit. The stream waits for the operator to issue a reply to message CSS340A. Other allocations can take place.

ACTION: See action for CSS343I.

SOURCE: CRDSTAG

CSS345I - INVALID DESTINATION SPECIFIED - DEFAULT TAKEN

DESTINATION: TLJ

CAUSE: The destination specified or implied for the SYSOUT dataset is not defined to the Job Entry Subsystem. The destination is changed to the default and the request is retried.

ACTION: Retrieve the output from the new destination.

SOURCE: CRDSTAG

CSS346I - STAGING DEVICE NOT AVAILABLE

DESTINATION: OL

CAUSE: Dynamic allocation returned an error reason code X'049C', meaning that the requested virtual volume is not in the Inventory Table. The stream waits for the operator to reply to message CSS340A. Other allocations can take place.

ACTION: None; the operator must reply.

SOURCE: CRDSTAG

CSS347I - VOLUME *volser* UNAVAILABLE FOR JOB *jobname* JSQ *jsq*

DESTINATION: OL

CAUSE: Dynamic allocation returned an error reason code X'0220', meaning that the requested volume is not available, usually because another MVS job has exclusive control of it. The stream waits for the operator to reply to message CSS340A. Other allocations can take place.

ACTION: None; the operator must reply.

SOURCE: CRDSTAG

CSS351D - UNEXPECTED CONDITION COORDINATING EOF

DESTINATION: OL

CAUSE: Sending END status to the CRAY-1 or CRAY X-MP mainframe following a transfer failed and an MQE was not returned to CRDSTRM. The effect is to abend 351; the stream recovers and restarts.

ACTION: Report the problem to the Cray Research site analyst, giving the dump from the U351 abend.

SOURCE: CRDSTRM

CSS355D - NO EVENT RECEIVED AFTER WAIT

DESTINATION: OL

CAUSE: The stream was posted to indicate an event had taken place but no element was placed in the input event queue. The effect is to abend 355; the stream recovers and restarts.

ACTION: Report the problem to the Cray Research site analyst, giving the U355 dump.

SOURCE: CRDSTRM

CSS357D - LOCAL I/O NOT FLUSHED ON GOOD COMPLETION

DESTINATION: OL

CAUSE: Although the completion code indicated successful transfer, an event was outstanding on the local I/O queue when termination was entered. The effect is to abend 357; the stream recovers and restarts.

ACTION: Report the problem to the Cray Research site analyst, giving the U357 dump.

SOURCE: CRDSTRM

CSS360I - TAPE VOLUME *vsn* MOUNTED AS VOLUME *nn* OF DATASET *dsn*

DESTINATION: TLJ

CAUSE: The station received a tape transfer from the CRAY-1 or CRAY X-MP mainframe that required a write to tape.

vsn Tape volume serial number
nn Volume sequence number
dsn Data set name

ACTION: None

SOURCE: CRPTOPN AND CRDSEOV

CSS370I - [B E C P M] [J S A D I J] *jobname jsq tid dn* [IN PR PU PL ST MT] [TR CB BB] [F V U] [B] [A S] *crayblks*

ibmblks ibm-datasetname

DESTINATION: L

CAUSE: Transfer has been initiated or terminated. Message records details of the transfer.

ACTION: None

SOURCE: CRLGXFR

CSS380I - ERROR DETECTED DURING RECALL OF DATASET - SEE HSM MESSAGE

DESTINATION: OTJ

CAUSE: HSM returned a bad return code to a recall request for a migrated dataset.

ACTION: Refer to the associated HSM message (ARC*nnn*I) for a complete description of the error.

SOURCE: CRDSHSM

CSS395D - IKJEFF18 PARAMETER LIST ERROR

DESTINATION: OT

CAUSE: Bad parameter list

ACTION: Resubmit

SOURCE: CRDFAIL

CSS401E - COMMAND REJECTED - NO COMMAND SPECIFIED

DESTINATION: TO

CAUSE: Null command entered

ACTION: Refer to the command descriptions section in the IBM MVS Station Reference Manual, CRI publication SR-0038, for valid command formats.

SOURCE: CRCINIT

CSS402E - COMMAND REJECTED - COMMAND CONTAINS ILLEGAL CHARACTER

DESTINATION: TO

CAUSE: The command name entered contains an illegal character.

ACTION: Refer to the command descriptions section in the IBM MVS Station Reference Manual, CRI publication SR-0038, for a list of valid commands.

SOURCE: CRCINIT

CSS403E - COMMAND REJECTED - INVALID COMMAND NAME

DESTINATION: TO

CAUSE: The command name entered is not a valid command.

ACTION: Refer to the command descriptions section in the IBM MVS Station Reference Manual, CRI publication SR-0038, for valid command formats.

SOURCE: CRCINIT

CSS404E - COMMAND REJECTED - STATION INITIALIZATION IN PROGRESS

DESTINATION: TO

CAUSE: A command has been entered before the station has completed initialization.

ACTION: Wait for station initialization to complete, then re-issue command.

SOURCE: CRCINIT

CSS405E - COMMAND - *command* NOT AVAILABLE TO TSO USER

DESTINATION: TO

CAUSE: The command issued is not valid when used by an ordinary TSO user.

ACTION: Refer to the CRAYCMD descriptions section in the IBM MVS Station Reference Manual, CRI publication SR-0038, for valid command formats.

SOURCE: CRCINIT

CSS406E - COMMAND - *command* NOT AVAILABLE TO AUTHORISED TSO USER

DESTINATION: TO

CAUSE: The command issued is not valid when used by an authorized TSO user.

ACTION: Refer to the command descriptions section in the IBM MVS Station Reference Manual, CRI publication SR-0038, for valid command formats.

SOURCE: CRCINIT

CSS407E - COMMAND - *command* NOT AVAILABLE WHEN STATION LOGGED ON

DESTINATION: TO

CAUSE: The command issued is not valid if the station is logged on.

ACTION: Reenter the command when the station has logged off.

SOURCE: CRCINIT

CSS408E - COMMAND - *command* NOT AVAILABLE WHEN STATION NOT LOGGED ON

DESTINATION: TO

CAUSE: The command issued is not valid if the station is logged off.

ACTION: Reenter the command when the station has logged off.

SOURCE: CRCINIT

CSS409E - COMMAND - *command* NOT YET SUPPORTED

DESTINATION: TO

CAUSE: The station recognizes the syntax of the command and any operands entered, but the routine to execute the command is not yet available in the MVS station software.

ACTION: None

SOURCE: CRCINIT

CSS410E - COMMAND *command operand* NOT SPECIFIED

DESTINATION: TO

CAUSE: The operand referred to by the identifier has not been specified, but is required.

ACTION: Reenter the command with the required operand.

SOURCE: CRCINIT

CSS411E - COMMAND *command operand* CONTAINS ILLEGAL CHARACTER

DESTINATION: TO

CAUSE: A character in the alphanumeric operand referred to by the identifier does not fall within the further restriction defined for the operand beyond the general character validity check. For example, the operand may require an alphabetic first character.

ACTION: Check the validity of all characters in the operand and reenter the command.

SOURCE: CRCINIT

CSS412E - COMMAND *command operand* TOO LONG OR TOO SHORT

DESTINATION: TO

CAUSE: A length of a non-numeric operand was outside the permitted range of lengths.

ACTION: Reenter the command with the correct operand.

SOURCE: CRCINIT

CSS413E - COMMAND *command operand* OUT OF RANGE

DESTINATION: TO

CAUSE: A numeric operand was outside the permitted range of values.

ACTION: Reenter the command with the correct operand.

SOURCE: CRCINIT

CSS414E - COMMAND *command operand* NOT NUMERIC

DESTINATION: TO

CAUSE: The operand referred to by the identifier should be numeric.

ACTION: Reenter the command with the operand in the correct format.

SOURCE: CRCINIT

CSS415E - COMMAND *command operand* {KEYWORD / LITERAL} MISSING

DESTINATION: TO

CAUSE: The operand referred to by the identifier has not been entered, but is required.

ACTION: Reenter the command with the required operand.

SOURCE: CRCINIT

CSS416E - COMMAND *command operand* MISSING OR INVALID

DESTINATION: TO

CAUSE: The operand referred to by the identifier is missing from or has been incorrectly entered on the command.

ACTION: Reenter the command with the correct operand.

SOURCE: CRCINIT

CSS417E - COMMAND *command operand* MISSING EQUALS

DESTINATION: TO

CAUSE: The keyword operand referred to by the identifier is not terminated by an equal sign and the value of the operand.

ACTION: Reenter the command in the correct format.

SOURCE: CRCINIT

CSS418E - COMMAND *command operand* UNEXPECTED OPERAND

DESTINATION: TO

CAUSE: A character string, which may be intended to be an operand, was entered following the last delimiter normally recognized for this command; command is terminated even though preceeding data may be valid.

ACTION: Reenter the command in the correct format.

SOURCE: CRCINIT

CSS419I - *message*

DESTINATION: L

CAUSE: Message in the station log recording that issued a command

ACTION: None

SOURCE: CRCINIT

CSS420E - COMMAND *command operand* MUST BE IN QUOTES

DESTINATION: TO

CAUSE: The operand referred to by the identifier must be entered in quotation marks.

ACTION: Reenter the command with the operand in quotes.

SOURCE: CRCINIT

CSS421I - *message*

DESTINATION: L

CAUSE: Message on the station log recording the output of commands.

ACTION: None

SOURCE: CRCOUT

CSS430I - STATION LOGON SUCCESSFUL

DESTINATION: O

CAUSE: A LOGON command has completed successfully.

ACTION: None

SOURCE: CRCSTAT

CSS431I - STATION LOGON FAILED

DESTINATION: O

CAUSE: A LOGON command has failed.

ACTION: Check for other messages which give information about the failure.

SOURCE: CRCSTAT

CSS432I - STATION LOG FILE QUEUED FOR PRINTING

DESTINATION: O

CAUSE: The station log up to the present time will be printed. New data will be collected in a new dataset.

ACTION: None

SOURCE: CRCSTAT

CSS433I - STATION LOGOFF IN PROGRESS

DESTINATION: O

CAUSE: Issued on acceptance of a LOGOFF command

ACTION: None

SOURCE: CRCSTAT

CSS434I - STATION TRACE OPTIONS MODIFIED

DESTINATION: O

CAUSE: Response to a successful TRACE command

ACTION: None

SOURCE: CRCSTAT

CSS435E - SPECIFIED STREAM NOT ACTIVE

DESTINATION: O

CAUSE: Issued if a CANCEL or POSTPONE command specifies an inactive stream

ACTION: Re-issue command with valid stream specified.

SOURCE: CRCSTAT

CSS436E - LINK OPTIONS TABLE NOT PRESENT - SET NOT POSSIBLE

DESTINATION: O

CAUSE: Issued if a SET command finds that the station was started up without a LOT

ACTION: None

SOURCE: CRCSTAT

CSS437E - INVALID MAX I/P OR O/P STREAM VALUE ON SET COMMAND - COMMAND TERMINATED

DESTINATION: O

CAUSE: The maximum number of streams specified on a SET command is less than either or both of the maximum numbers for I/P and O/P streams.

ACTION: Re-issue the SET command with the correct operands.

SOURCE: CRCSTAT

CSS438I - STATION LOGON DEFAULTS RESET BY SET COMMAND

DESTINATION: O

CAUSE: Response to a successful SET command

ACTION: None

SOURCE: CRCSTAT

CSS439E - LINK OPTIONS TABLE NOT PRESENT - TRACE OPTIONS NOT AVAILABLE

DESTINATION: O

CAUSE: The SCB and/or LCPH operands have been specified on a TRACE command, and the station was started up without a LOT.

ACTION: None

SOURCE: CRCSTAT

CSS450E - OPERATOR FUNCTION ERROR OCTAL *code reason*

DESTINATION: O

CAUSE: An error occurred during the processing of an operator function command. The cause is provided with the error code. The requested operation is not performed.

code Error code and cause of error

reason Meaning of the error code:

010 REQUEST DENIED - The requester does not have the necessary authority to issue this request.
200 SEGMENT DATA ERROR
201 FUNCTION NOT AVAILABLE
203 FUNCTION RESTRICTED
204 EXECUTIVE ERROR
205 UNDEFINED STATION ID - Station error
206 UNDEFINED CHANNEL
207 ILLEGAL FOR MCU CHANNEL
210 UNDEFINED DEVICE
223 NO JXT OFFSET IN SDT
224 BAD SDT POINTER IN JXT
226 REQUEST INCONSISTENT - The values entered as operands might be syntactically correct, but the particular name cannot exist on the system.

ACTION: None

SOURCE: CRCMODC or CRCMODJ

CSS451I - REQUESTED OPERATOR FUNCTION COMPLETED

DESTINATION: TO

CAUSE: The requested operator function command was completed by the CRAY-1 or CRAY X-MP mainframe.

ACTION: None

SOURCE: CRCMODC or CRCMODJ

CSS452I - *message*

DESTINATION: L

CAUSE: A MESSAGE command sent *message* to the station log.

ACTION: None

SOURCE: CRCMODJ

CSS455E - LINK FAILURE - *command* COMMAND PROCESSING TERMINATED

DESTINATION: OT

CAUSE: The indicated command has failed because of a link I/O failure.

ACTION: Check for other messages giving more details about why the link failed.

SOURCE: CRCDISP

CSS460E - STATUS COMMAND - INVALID QUEUE SPECIFIED

DESTINATION: OT

CAUSE: A queue other than E, I, O, R, or S has been specified as an operand on a STATUS command.

ACTION: Reenter the STATUS command with the correct operand.

SOURCE: CRCDISP

CSS461I - CRAY STATUS

DESTINATION: OT

CAUSE: Appears as heading of the STATUS display indicating the current status of jobs in COS. See section 3 of this manual for the actual message text that follows.

ACTION: None

SOURCE: CRCDISP

CSS462I - DATASET *pdn* WITH ID = *id*, ED = *n* AND
CSS462I(CONT.) OWN = *ow* { DOES EXIST / DOES NOT EXIST }

DESTINATION: OT

CAUSE: Response to a successful DATASET command (2 messages)

ACTION: None

SOURCE: CRCDISP

CSS463 - JOB *jobname* JSQ *seqno status*

DESTINATION: OT

CAUSE: Response to a successful JOB command; the job with the specified job name and job sequence number has a status which is one of:

AWAITING CPU
SUSPENDED BY RECOVERY
LOCKED BY STARTUP
DORMANT
WAITING FOR EVENT
DOES NOT EXIST
LOCKED FOR MEMORY
WAITING FOR I/O
ROLLING IN
AWAITING MEMORY
SUSPENDED BY OPERATOR
QUEUED FOR TAPE
QUEUED FOR EXECUTION
ROLLED OUT
SUSPENDED BY SYSTEM
TRANSFER IN PROGRESS
ROLLING OUT
AWAITING TRANSFER
EXECUTING

ACTION: None

SOURCE: CRCDISP

CSS464I - LOG *message*

DESTINATION: OT

CAUSE: Response to successful JOB command; *message* gives the log message received from COS.

ACTION: None

SOURCE: CRCDISP

CSS465I - CRAY LINK STATUS

DESTINATION: O

CAUSE: Appears as heading of the LINK display indicating the current status of links. See section 3 of this manual for the actual message text that follows.

ACTION: None

SOURCE: CRCDISP

CSS466I - CRAY MASS STORAGE

DESTINATION: O

CAUSE: Appears as heading of the STORAGE display giving the current status of COS mass storage devices. See section 3 of this manual for the actual message text that follows.

ACTION: None

SOURCE: CRCDISP

CSS467I - CRAY STATCLASS

DESTINATION: O

CAUSE: Appears as heading of the STATCLASS display giving the current status of COS job classes. See section 3 of this manual for the actual message text that follows.

ACTION: None

SOURCE: CRCDISP

CSS468I - CRAY TAPE DEVICES

DESTINATION: O

CAUSE: Appears as heading of the TAPE display giving the current status of COS tape drives. See section 3 of this manual for the actual message text that follows.

ACTION: None

SOURCE: CRCDISP

CSS469I - CRAY TAPE JOBS

DESTINATION: OT

CAUSE: Appears as heading of the TJOB display giving the current status of COS tape jobs. See section 3 of this manual for the actual message text that follows.

ACTION: None

SOURCE: CRCDISP

CSS470I - STATION ACTIVITY

DESTINATION: O

CAUSE: Appears at heading of the STATION display indicating the current status of activities in the MVS station. See section 3 of this manual for the actual message text that follows.

ACTION: None

SOURCE: CRCSTAT

CSS471I - STATION STAGING OPTIONS MODIFIED

DESTINATION: O

CAUSE: Response to a successful STAGE command

ACTION: None

SOURCE: CRCSTAT

CSS475I - *hh.mm.ss* TRANSFER STATUS

DESTINATION: TOL

CAUSE: Displayed in response to the TRANSFER, QUEUE command

ACTION: None

SOURCE: CRCTRAN

CSS476I - TRANSFER MARKED TO BE {CANCELLED / POSTPONED}

DESTINATION: TOL

CAUSE: The station has successfully marked a transfer request to be cancelled or postponed.

ACTION: None

SOURCE: CRCTRAN

CSS477E - TRANSFER CANNOT BE {CANCELLED / POSTPONED}

DESTINATION: TOL

CAUSE: The transfer requested cannot be cancelled or postponed because successful completion has already been indicated to COS.

ACTION: None

SOURCE: CRCTRAN

CSS478E - TRANSFER SEQUENCE NUMBER *nnnnn* NOT FOUND

DESTINATION: TOL

CAUSE: A transfer with the specified sequence number was not found on the station's queues by the TRANSFER command processor.

ACTION: Reenter the command with a valid transfer sequence number.

SOURCE: CRCTRAN

CSS479E - INSUFFICIENT STORAGE TO FORMAT QUEUE ENTRIES

DESTINATION: TOL

CAUSE: The TRANSFER, QUEUE command was unable to obtain sufficient storage to copy the selected TRQ entries.

ACTION: Rerun the station in a larger region.

SOURCE: CRCTRAN

CSS490I - STATION LOGFILE CLOSED

DESTINATION: OL

CAUSE: F CSS,PRINT command was entered.

ACTION: None

SOURCE: CRWTO

CSS491I - STATION LOGFILE REOPENED

DESTINATION: OL

CAUSE: F CSS,PRINT command was entered.

ACTION: None

SOURCE: CRWTO

CSS492D - STATION LOGFILE ALLOCATION FAILED

DESTINATION: O

CAUSE: Dynamic allocation request failed for the log.

ACTION: Restart the station after a dump, and contact the Cray Research site analyst.

SOURCE: CRWTO

CSS493D - STATION LOGFILE NOT OPENED

DESTINATION: O

CAUSE: Reopen failed

ACTION: Restart station.

SOURCE: CRWTO

CSS501I - TRF CONTAINS *nnnn* ENTRIES

DESTINATION: OJ

CAUSE: During initialization of the Transfer Request File, *nnnn* entries were created to hold a similar number of requests.

ACTION: None

SOURCE: CRTRFIN

CSS502D - TRANSFER REQUEST FILE SIZE ERROR

DESTINATION: OJ

CAUSE: In calculating the size of the TRF, an error occurred. The TRF is not initialized.

ACTION: Report the problem to the Cray Research site analyst, including the U502 dump.

SOURCE: CRTRFIN

CSS503E - TRANSFER REQUEST FILE NOT OPEN

DESTINATION: OL

CAUSE: The SYSUT1 DD statement was not present when INITTRF was run.

ACTION: Allocate a TRF and include a SYSUT1 DD statement in the INITTRF procedure.

SOURCE: CRTRFIN

CSS600F - *module-name* INVALID PARAMETER LIST

DESTINATION: OTJ

CAUSE: The module named in the message was passed a parameter list out of an invalid format or context. The transfer abends with code U600.

ACTION: Pass the dump (U600), job log, SYSLOG, and other relevant information to the Cray Research site analyst.

SOURCE: *module-name*

CSS601F - RACF INACTIVE

DESTINATION: OTJ

CAUSE: RACF support has been selected in the station generation, but is not active in the currently IPLed system. The transfer is cancelled so it does not compromise the installation's security.

ACTION: Make RACF active or do not select the RACF option in the station generation.

SOURCE: CRRINIT

CSS602F - USER NOT DEFINED TO RACF

DESTINATION: OTJ

CAUSE: RACF has no profile for the userid extracted from the address space name of the originator of the transfer; the user is not authorized to perform the transfer. The transfer is cancelled.

ACTION: Contact your RACF administrator.

SOURCE: CRRINIT

CSS603F - INVALID OR MISSING PASSWORD

DESTINATION: OTJ

CAUSE: The password provided to RACINIT was not authorized. The transfer is cancelled.

ACTION: Correct the password and rerun or contact your RACF adminstrator for the correct information.

SOURCE: CRRINIT

CSS604F - PASSWORD EXPIRED

DESTINATION: OTJ

CAUSE: The password provided has been expired by RACF. The transfer is cancelled.

ACTION: Contact your RACF adminstrator for the correct password.

SOURCE: CRRINIT

CSS605F - INVALID GROUP

DESTINATION: OTJ

CAUSE: The user is not defined to this group or the group specified is invalid. The transfer is cancelled.

ACTION: Contact your RACF adminstrator for the correct information.

SOURCE: CRRINIT

CSS606F - USER ACCESS DENIED BY INSTALLATION

DESTINATION: OTJ

CAUSE: Local additions to RACF processing have rejected your userid. The transfer is cancelled.

ACTION: Contact your RACF administrator.

SOURCE: CRRINIT

CSS607F - USER ACCESS HAS BEEN REVOKED

DESTINATION: OTJ

CAUSE: RACF has revoked user status. The transfer is cancelled.

ACTION: Contact your RACF administrator.

SOURCE: CRRINIT

CSS610F - USER *userid* NOT AUTHORISED TO { CONTROL / ALTER / UPDATE / READ } { *dataset name* / *volume serial* }

DESTINATION: OTJ

CAUSE: RACF has failed an authorization check against the stated userid for the given resource. The following table identifies the required authorization for the requested function.

Authorization	Function
CONTROL	Read, write, and catalog non-VSAM datasets (VSAM is not supported)
ALTER	Total control including create, delete, and uncatalog
UPDATE	Read, write, and catalog non-VSAM datasets
READ	Read only

The transfer is cancelled if the failure occurred during dataset allocation; a disposition of KEEP is forced if during deallocation.

ACTION: Correct the JCL and rerun or ask your RACF administrator for the proper authority.

SOURCE: CRRCHCK

CSS611F - ALL PARTS OF A MULTIVOLUME DATASET NOT SIMILARLY DEFINED TO RACF

DESTINATION: OTJ

CAUSE: Conflicting parameters passed to or defined in RACF for a multivolume dataset. The transfer is cancelled.

ACTION: Resolve the conflict and rerun.

SOURCE: CRRCHCK

CSS612F - *module name* INVALID PARAMETER LIST

DESTINATION: OTJ

CAUSE: Invalid function request made to RACF

ACTION: Resolve request and rerun.

SOURCE: Refer to message.

CSS613F - DATASET PREVIOUSLY DEFINED - *dataset name*

DESTINATION: OTJ

CAUSE: The dataset identified in the message which was requested as NEW already exists as a RACF DATASET entity. The transfer is cancelled.

ACTION: Determine why the current entity exists and take appropriate action.

SOURCE: CRRDEF

CSS614F - VOLUME PREVIOUSLY DEFINED - *volume serial*

DESTINATION: OTJ

CAUSE: The volume identified in the message which was requested as NEW already exists as a RACF TAPEVOL entity. The transfer is cancelled.

ACTION: Determine why the current entity exists and take appropriate action.

SOURCE: CRRDEF

CSS617F - USER *userid* NOT AUTHORISED to {DEFINE / DELETE} DATASET *datasetname*

DESTINATION: OTJ

CAUSE: RACF failed to grant an update request because of an invalid userid. The transfer is cancelled.

ACTION: Correct the JCL and rerun, or ask your RACF administrator for the relevant authority.

SOURCE: CRRDEF

CSS618F - USER *userid* NOT AUTHORISED TO {DEFINE / DELETE} VOLUME *volume serial*

DESTINATION: OTJ

CAUSE: RACF failed to grant an update request because of an invalid userid. The transfer is cancelled.

ACTION: Correct the JCL and rerun, or ask your RACF administrator for the relevant authority.

SOURCE: CRRDEF

CSS619F - DELETE FAILED, DATASET NOT PREVIOUSLY DEFINED TO RACF - *datasetname*

DESTINATION: OTJ

CAUSE: A DELETE request was made to RACF for a resource that does not have a RACF profile. The transfer is cancelled.

ACTION: Correct the JCL and rerun, or contact your RACF administrator.

SOURCE: CRRDEF

CSS620F - DELETE FAILED, VOLUME NOT PREVIOUSLY DEFINED TO RACF - *volume serial*

DESTINATION: OTJ

CAUSE: A DELETE request was made to RACF for a resource that does not have a RACF profile. The transfer is cancelled.

ACTION: Correct the JCL and rerun, or contact your RACF administrator.

SOURCE: CRRDEF

CSS621F - ADDVOL FAILED, OLD VOLUME NOT PREVIOUSLY DEFINED TO RACF - *old volume serial*

DESTINATION: OTJ

CAUSE: The specified volume is unknown to RACF; RACF is unable to extend a multivolume dataset definition. The transfer is cancelled.

ACTION: Notify your Cray Research site analyst. This situation indicates a RACF and/or station problem.

SOURCE: CRRDEF

CSS655F - *module name* - INVALID SCT FORMAT

DESTINATION: OTJ

CAUSE: The module named in the message was passed a Stream Control Table (SCT) containing invalid data. The transfer abends code U655.

ACTION: Pass the dump (U655), job log, SYSLOG, and other relevant information to your system programmer. If unable to resolve, contact the Cray Research site analyst.

SOURCE: Refer to message.

CSS656F - *module name* - INVALID RACF SCT FORMAT

DESTINATION: OTJ

CAUSE: The module named in the message was passed a RACF Stream Control Table (RSCT) containing invalid data. The transfer abends with code U656.

ACTION: Pass the dump (U656), job log, SYSLOG, and other relevant information to your system programmer. If unable to resolve, contact the Cray Research site analyst.

SOURCE: Refer to message.

CSS660F - *module name* - ZERO VOLUME COUNT

DESTINATION: OTJ

CAUSE: There are no volumes associated with a dataset. This is an illogical condition. The transfer abends with code U660.

ACTION: Pass the dump (U660), job log, SYSLOG, and other relevant information to your system programmer. If unable to resolve, contact the Cray Research site analyst.

SOURCE: Refer to message.

CSS666F - ADDVOL RETURN CODE = 4, MEANING NOT DEFINED IN IBM SUPERVISOR SERVICES SPL

DESTINATION: OTJ

CAUSE: Unknown

ACTION: Pass the dump (U666), job log, SYSLOG, and other relevant information to your system programmer.

SOURCE: CRRDEF

CSS700A - TMS INACTIVE, REPLY CONTINUE, RETRY OR ABORT

DESTINATION: O

CAUSE: During station initialization, module CRTMINT found that UCC-1 TMS was not active in the system.

ACTION: Reply CONTINUE to proceed with TMS processing disabled; ABORT to cancel station initialization; or RETRY after starting TMS, if TMS processing is required.

SOURCE: CRTMINT

CSS751A - *ddddddd,vvvvvv*, VERIFY TAPE FROM OUTSIDE LIBRARY

DESTINATION: O

CAUSE: A duplicate VSN in the UCC-1 TMC range is being opened for output and XPDT = 98000 has been specified.

ACTION: Reply M if the tape is not to be used or U if it can be used.

SOURCE: CRTMSM1

CSS752E - *ddddddd, vvvvvv* IS NOT SCRATCH (*xx*)

DESTINATION: OJ

CAUSE: Tape volume *vvvvvv* mounted on device *ddddddd* is unacceptable as a scratch tape to UCC-1. *xx* is the UCC-1 reject code.

ACTION: See message CSS771I or UCC-1 message IECTMS3.

SOURCE: CRTMSM1

CSS753A - *ddddddd,vvvvvv* IS UNEXPIRED

DESTINATION: O

CAUSE: The expiration date of a non-UCC-1 controlled tape has not been reached.

ACTION: Reply M to dismount the tape or U to override the expiration date and reuse the tape.

SOURCE: CRTMSM1

CSS756I - *ddddddd,vvvvvv, jobname, dn,* EXPDT, *dsname*

DESTINATION: O

CAUSE: A tape file has been opened for output.

ACTION: None

SOURCE: CRTMSM2

CSS757I - *ddddddd,vvvvvv,* ** WORK TAPE **

DESTINATION: O

CAUSE: A dataset on a work tape file has closed.

ACTION: None

SOURCE: CRTMSM3

CSS778D - ERROR ISSUING PUTTMC

DESTINATION: O

CAUSE: An error occurred while trying to write back an updated TMC record to the TMS catalog.

ACTION: Report the problem to the Cray Research site analyst.

SOURCE: CRTMSM2, CRTMSM3

CSS780D - UNKNOWN FUNCTION CODE IN CRTMSM0

DESTINATION: O

CAUSE: CRTMSM0 was entered with a function code other than 300_8 or 302_8. This is an internal station message processing error.

ACTION: Report the problem to the Cray Research site analyst.

SOURCE: CRTMSM0

CSS800I - *COS text*

DESTINATION: O

CAUSE: The message contains the text of a message produced by COS.

ACTION: See CRAY-OS Message Manual, publication SR-0039, for actions.

SOURCE: CRSMTY0

CSS801A - *COS text*

DESTINATION: O

CAUSE: The message contains the text of a message produced by COS requiring a reply or other action.

ACTION: See CRAY-OS Message Manual, publication SR-0039, for action.

SOURCE: CRSMTY1, CRSMTMM

CSS802A - M *ddd,ser* $\left\{\begin{matrix}\text{W,}\\\text{R,}\end{matrix}\right\}$ *labtype,jobname,jsq,dn*[*,reason*]

OR REPLY NO OR RESELECT

DESTINATION: O

CAUSE: TQM requests that a tape be mounted on device *ddd*.

ser	A 6-digit serial number
W	Indicates that a write permit ring should be inserted
R	Indicates that a write permit ring should be removed
labtype	Indicates one of the following label types to appear on the tape: SL, NL, AL.
jobname and *jsq*	Identify the COS job calling for the tape volume

CAUSE: (continued)

dn Identifies the local dataset name by which the COS job refers to the tape dataset

reason Indicates the reason for the remount request being issued (appears on remount requests only). Possible reasons are as follows:

WRONG VOLSER	Tape mounted has incorrect volume serial number.
WRONG LABEL TYPE	Tape mounted has the wrong label type.
LABEL DATA ERROR	A tape label I/O error occurred during read.
CHANGE RING STATUS	The job requires writing on the tape and a write permit ring is required; or the job is not permitted to write on the tape and the write permit ring must be removed.
NOT SCRATCH TAPE	A scratch tape was requested, but the tape mounted is not scratch.

ACTION: Mount the volume on the device and ready the device. If this is not possible, reply NO if the request is to be denied or RESELECT if tape is to be mounted on another device. The message is cancelled if the tape is mounted.

SOURCE: CRSMTMM

CSS804I - TMS INACTIVE, TAPE ACCESS PROCEEDS WITH NO TMC UPDATE

DESTINATION: OJ

CAUSE: The station message subtask found that TMS is not active.

ACTION: None

SOURCE: CRTMSM0

CSS840D - {CRSMCAT / CRSMSEC} GOT CALLED WITH A BAD PARAMETER LIST

DESTINATION: O

CAUSE: An internal error occurred in the station message subtask processing.

ACTION: Report the problem to the Cray Research site analyst.

SOURCE: CRSMCAT, CRSMSEC

CSS841D - {CRSMCAT / CRSMSEC} WAS NOT GIVEN A TYPE 3 MESSAGE

DESTINATION: O

CAUSE: An internal error occurred in the station message subtask processing.

ACTION: Report the problem to the Cray Research site analyst.

SOURCE: CRSMCAT, CRSMSEC

CSS842D - CRSMCAT WAS GIVEN A TYPE 3 MESSAGE BUT THE DUXFC WAS NOT 0, 1, 2 or 3

DESTINATION: O

CAUSE: An internal error occurred in the station message subtask processing.

ACTION: Report the problem to the Cray Research site analyst.

SOURCE: CRSMCAT

CSS843F - CRSMCAT ABENDED BECAUSE THE LDT HDR1 OFFSET WAS ZERO

DESTINATION: O

CAUSE: An internal error occurred in the station message subtask processing.

ACTION: Report the problem to the Cray Research site analyst.

SOURCE: CRSMCAT

CSS846F - CRSMCAT ABENDED BECAUSE THE LDTVOL1 OFFSET WAS ZERO

DESTINATION: O

CAUSE: An internal error occurred in the station message subtask processing.

ACTION: Report the problem to the Cray Research site analyst.

SOURCE: CRSMCAT

CSS847F - THE TABLE TO MAP COS DEVICE TYPES ONTO MVS GENERIC UNIT NAMES IS WRONG

DESTINATION: O

CAUSE: No entry for the specified device type was found in the DEVTMAP table while trying to map a COS supplied device type onto an equivalent MVS generic unit name.

ACTION: Report the problem to the Cray Research site analyst.

SOURCE: CRSMCAT, CRSMSEC

CSS848F - CRSMCAT UNABLE TO FIND A CTGVL SIZE FOR A SUPERLOCATE REQUEST

DESTINATION: O

CAUSE: The first superlocate failed with RC = 40. A second was issued using a CTGVL size that was returned from catalog management, but that too failed with RC = 40.

ACTION: Report the problem to the Cray Research site analyst.

SOURCE: CRSMCAT

CSS850D - UNABLE TO SET UP ESTAE

DESTINATION: O

CAUSE: During initialization, the station message processing task CRSMPRC was unable to set up its ESTAE routine.

ACTION: The station message processing subtask abends with a dump.

Try to restart the station. If restarting fails, take the dump to the Cray Research site analyst.

SOURCE: CRSMPRC

CSS851D - NO REPLY ROUTINE FOR OMB

DESTINATION: O

CAUSE: An error occurred processing an operator reply to a station message.

ACTION: The station message processing subtask abends with a dump.

Try to restart the station. If restarting fails, take the dump to the Cray Research site analyst.

SOURCE: CRSMPRC

CSS852D - INVALID MESSAGE TYPE IN OMB

DESTINATION: O

CAUSE: An error occurred processing an operator reply to a station message.

ACTION: The station message processing subtask abends with a dump.

Try to restart the station. If restarting fails, take the dump to the Cray Research site analyst.

SOURCE: CRSMPRC

CSS853D - INVALID RETURN CODE FROM REPLY ROUTINE

DESTINATION: O

CAUSE: An error occurred processing an operator reply to a station message.

ACTION: The station message processing subtask abends with a dump.

Try to restart the station. If restarting fails, take the dump to the Cray Research site analyst.

SOURCE: CRSMPRC, CRSMTQM

CSS854D - INVALID FUNCTION CODE IN OMB

DESTINATION: O

CAUSE: An error occurred processing an operator reply to a station message.

ACTION: The station message processing subtask abends with a dump.

Try to restart the station. If restarting fails, take the dump to the Cray Research site analyst.

SOURCE: CRSMTQM

CSS855D - STATION MESSAGE SUBTASK HAS ABENDED AND IS DISABLED

DESTINATION: O

CAUSE: An irrecoverable abend occurred during the processing of a station message.

ACTION: The station message subtask is now disabled. To re-enable the station message subtask, the station must be reinitialized.

SOURCE: CRSMSTA

CSS1011F - FREE SCT ERROR

DESTINATION: OL

CAUSE: The SCT for the stream that completed a transfer was not found in the active SCT list when it was to be removed. The stream abends U111. Other transfers are not affected. The stream recovers.

ACTION: Report the problem to the Cray Research site analyst, giving the U111 dump. The station should be logged off and restarted as soon as possible.

SOURCE: CRMCVEC

CSS1013F - MQE FREE CHAIN CORRUPTION

DESTINATION: OL

CAUSE: A message queue element on the free queue was not marked free or with an F, or it had an owning SCT. The stream abends U113 and recovers. The transfer is cancelled.

ACTION: Report the problem to the Cray Research site analyst, including the U113 dump.

SOURCE: CRMCVEC

CSS1014F - BUFFER FREE CHAIN CORRUPTION

DESTINATION: OL

CAUSE: A buffer MQE on the free queue was not marked free or with a B, or it had an owning SCT. The stream abends U114 and recovers. The transfer is cancelled.

ACTION: Report the problem to the Cray Research site analyst, including the U114 dump.

SOURCE: CRMCVEC

CSS1015F - INVALID MQE/BUFFER ADDRESS TO FREE

DESTINATION: OL

CAUSE: A buffer or MQE to be freed either did not belong to one of the station's subpools, it was already freed, or the address was 0. The stream abends U115 and recovers. The transfer is cancelled.

ACTION: Report the problem to the Cray Research site analyst, including the U115 dump.

SOURCE: CRMCVEC

DESTINATION: OL

CAUSE: On entry to a Station Vector Routine, the number of nested calls to vectors exceeded the capacity of the SCT vector stack (four calls). The stream abends U117 and recovers. The transfer is cancelled.

ACTION: Report the problem to the Cray Research site analyst, including the U117 dump.

SOURCE: CRMCVEC

CSS1019I - START GTF IF TRACE RECORD REQUIRED

DESTINATION: O

CAUSE: GTF recording was requested, but GTF is not active on this system.

ACTION: Start GTF.

SOURCE: CRVECTR

CSS1021F - ILLEGAL INPUT STREAM REQUESTED

DESTINATION: OL

CAUSE: A specific request for an input stream defined a number greater than eight (output streams). The stream abends U121 and recovers. The transfer is cancelled.

ACTION: Report the problem to the Cray Research site analyst, including the U121 dump.

SOURCE: CRMCVEC

CSS1022F - ILLEGAL VECTOR CODE

DESTINATION: OL

CAUSE: On entry to a Station Vector Routine, the code specified was invalid. The stream abends U122 and recovers. The transfer is cancelled.

ACTION: Report the problem to the Cray Research site analyst, including the U122 dump.

SOURCE: CRMCVEC

CSS1023F - BUFFER SIZE REQUESTED GREATER THAN MAX

DESTINATION: OL

CAUSE: A request for the buffer specified was a size greater than the maximum generated in the station. The transfer is cancelled.

ACTION: Regenerate the station with a pool of larger buffers and rerun the transfer.

SOURCE: CRMCVEC

CSS1024F - MQE ADDRESS ZERO ON ENTRY TO ADDQ

DESTINATION: OL

CAUSE: The address of a Message Queue Element (MQE) was 0 when a PUTEVT or ADDQ vector was called to add it to a queue. The stream abends U124 and recovers. The transfer is cancelled.

ACTION: Report the problem to the Cray Research site analyst, including the U124 dump.

SOURCE: CRMCVEC

CSS1025F - MQE ALLOCATION FAILURE

DESTINATION: OL

CAUSE: There were no free MQE's when a request was made for one. The stream abends U125 and recovers. The transfer is cancelled.

ACTION: Report the problem to the Cray Research site analyst, including the U125 dump.

SOURCE: CRMCVEC

HARDWARE SUPPORT B

HARDWARE DESCRIPTION

The CRAY/IBM front-end interface provided by Cray Research, Inc., operates in a mode similar to a channel-to-channel adapter. The device has two panels of interest: the front panel and the back panel.

The front panel is shown in figure B-1. The ONLINE/OFFLINE switch must be depressed to change the availability of the interface. If the OFFLINE light is on, the device is unavailable for use by the system.

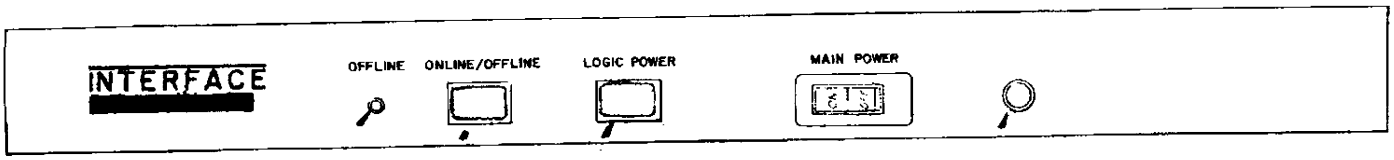


Figure B-1. Cray/IBM front-end interface front panel

The back panel of the front-end interface is shown in figure B-2. The RESET switch can be depressed to clear a busy condition in the interface detected during station startup.

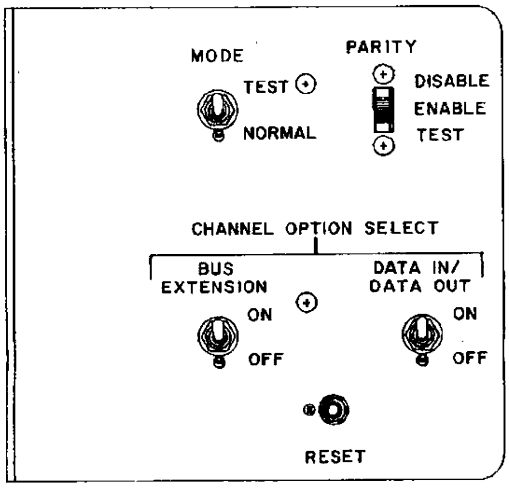


Figure B-2. Cray/IBM front-end interface back panel

HARDWARE ERROR PROCESSING

The station performs no error recovery above that performed by the operating system. If the link communication subtask fails, the station is aborted and must be reinitialized. If the hardware problem continues, notify a Cray Research engineer.

POWER OFF

When the Cray Research channel-to-channel interface is being used, use this procedure before the Cray mainframe is powered on or off.

1. Log off the station using the station deactivation procedure.

2. At the MVS console, enter:

```
VARY unit address,OFFLINE
```

unit address
Device address of Cray channel interface box

3. The following message is displayed:

   DEVICE *address* OFFLINE

   Set the interface box to OFFLINE.

The interface should also be offline to manually master clear the interface, otherwise, the front-end experiences channel errors.

SYSOUT PROCESSING C

The station produces print, punch, and plot datasets from jobs run on the Cray mainframe. A JES job number is allocated for each output dataset. The job name is set to the COS job name; that is, the banner page contains the COS job name and the output may be controlled using the jobname and the JES job number. If the COS job name sent to the MVS station is blank, the station processes the output with a job name of NONAME.

Output may also be routed to remote job entry (RJE) terminals or held on the spool for the TSO user.

If a COS job is submitted from an RJE terminal, its output is returned by default to the same RJE terminal, and the RJE console operator can manipulate that output using JES commands.

The MVS station uses a JES2/3 Subsystem Interface Request to allocate the JES job number for the print output. The normal JES2 or JES3 messages appear when the output is printed or punched. For example, the JES2 messages are:

$HASP000 JOB *nnn jobname* ON PRINTER*x* *mmmm* LINES

$HASP000 JOB *nnn jobname* PURGED

nnn	JES job number
jobname	COS job name
x	Local printer
mmmm	Number of lines in the output dataset

GLOSSARY

GLOSSARY

The following terms are defined as they are used in this manual. If you do not find the term you are looking for, refer to the INDEX, or to the IBM Data Processing Glossary, IBM publication number GC20-1699, or the glossary of the Cray-OS Version 1 Reference Manual, publication SR-0011.

A

Allocation - The linking of a dataset to a program which then treats it as a file. In MVS JCL the Data Definition (DD) statement performs this function for a job step. Datasets for transfer to/from COS are allocated to the MVS station while the transfer takes place.

ASCII - American Standard Code for Information Interchange - a code for representing characters as 7-bit patterns, used for character data by COS.

B

Blank Compression - A technique whereby strings of consecutive space characters are replaced by a blank insertion character and a count of spaces; used by COS character blocked datasets.

BLKSIZE - The maximum size of the physical records in a MVS dataset, specified as sub parameter of the DCB parameter in MVS JCL. (Equivalent to MBS in a COS ACCESS statement.)

C

COS - The Cray Operating System

D

Dataset - The major unit of data storage and retrieval in the operating system, consisting of a collection of data in one of several prescribed arrangements, and described by control information to which the system has access. Under COS a dataset may be subdivided into one or more files.

Destination - The name of a remote work station or connected system which is known to MVS (in particular the Job Entry Subsystem) and to which output from MVS and COS jobs may be sent.

DSORG - The organization of a MVS dataset specified as a subparameter of the DCB parameter in MVS JCL.

Dynamic Allocation - The linking of a dataset to a program during execution instead of when it is loaded into storage. The MVS station dynamically allocates datasets during transfers.

E

EBCDIC - Extended Binary Coded Decimal Interchange Code - a code for representing characters as 8-bit patterns, used in IBM/MVS systems.

END OF JOB (/EOJ) - Statement - MVS Station control statement placed in a dataset containing COS job control statements which indicates to the MVS station that following statements are to be treated as another job.

F

F (fixed) - As in RECFM=F indicates that all records both logical and physical in a MVS dataset are the same length.

FBA - As in RECFM=FBA is equivalent to RECFM=FB except that the first character of each logical record is treated as an ANSI printer control character.

FB (Fixed Blocked) - As in RECFM=FB indicates that the logical records in an MVS dataset are the same length, and that an integral number of records are contained in a physical record.

File - (1) In MVS terminology, a dataset as known by a program to which it is allocated. (2) In CRI terminology, a collection of records in a dataset. One or more files comprise a dataset.

Free - To break the link between a dataset and a program formed by allocation.

L

Library - See Partitioned Dataset

Log off - To break the link established by LOGON.

Log on - (1) To establish a link between the MVS Station and COS so that datasets may be transferred between MVS and COS according to the rules of the CRAY Frontend Protocol. (2) To establish a link between a terminal user and the MVS Time Sharing Option (TSO); the command used for this operation.

LRECL - The maximum size of the logical records in a blocked MVS dataset specified as a subparameter of the DCB parameter in MVS JCL. For fixed format records BLKSIZE must be a multiple of LRECL. For Variable format unspanned records BLKSIZE must be at least LRECL+4.

M

MVS station - The set of programs provided by CRI which provide MVS users with the general facilities of Job and Dataset Submission to COS, dataset transfer between MVS and COS and control and monitoring facilities.

MVS - Multiple Virtual Storage operating system, provided by IBM and running on the IBM computer or equivalent that is the front end to the Cray system.

P

Partitioned Dataset (PDS) - A MVS dataset in which the data is divided into separate logical groups called members. The dataset contains a directory used by the control program to locate particular members. Also known as a library.

PDS - See Partitioned Dataset

PO (Partitioned Organization) - As in DSORG=PO indicates the dataset is partitioned and hence contains a directory and members (see PDS).

PS (Physical Sequential) - As in DSORG=PS indicates that in a dataset the records are organized on the basis of their successive physical positions, such as on magnetic tape.

Q

Queue - A queue of jobs or datasets awaiting transfer or being transferred from MVS to COS, or vice versa. The MVS station queues jobs and datasets by entries in a dataset called the Transfer Request File (TRF).

R

RECFM - The format of the records in a MVS dataset, specified as a subparameter of the DCB parameter in MVS JCL.

S

SYSIN - System Input dataset - a dataset normally containing control statements or directives, forming part of an MVS job, or allocated to a TSO user session, referred to by the DDNAME SYSIN. With the MVS Station, contains directives for the CRAY batch program.

SYSOUT - A term used to define to MVS that output from a program is to be processed by the Job Entry Subsystem and not written directly to the physical device.

T

Transfer Request File (TRF) - An MVS station queue of jobs and datasets awaiting transfer or being transferred from MVS to COS, or vice versa.

TSO user - User of a terminal connected to the MVS Time Sharing Option. For the purposes of this publication, the TSO user has access to the TSO commands which are part of the MVS station.

U

U (undefined) - As in RECFM=U indicates that each physical record in a MVS dataset is equivalent to a logical record. The record lengths may be different and the actual length of a record is determined at the time of the Input or Output operation.

userid - The identifier of a MVS TSO user.

V

V (variable) - As in RECFM=V indicates that each physical record in a MVS dataset represents a logical record and the actual length is contained in a block descriptor word in the first four bytes of the record.

VBA - As in RECFM=VBA is equivalent to RECFM=VB except that the first character of each logical record is treated as an ANSI printer control character.

VBS (Variable Blocked Spanned) - As in RECFM=VBS is similar to RECFM=VB except that the logical record may span more than one physical record. This structure is similar to the COS blocked format.

VB (Variable Blocked) - As in RECFM=VB indicates that each physical record in a MVS dataset contains one or more logical records. The actual length of each logical record is contained in a record descriptor word in the first four bytes of the record. The actual length of the physical record, or block, is contained in a block descriptor word in the first four bytes.

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