LY33-9122-0
File No. S370/4300-39

Program Product

VSE/ICCF Handbook

Program Number 5666-302

Version 2 Release 1

First Edition (August 1985)

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Preface

This is a major revision of and obsoletes LY33-9096-2. The manual is provided as a VSE/ICCF, Version 2 Release 1, serviceability aid and is a summary of other VSE/ICCF Version 2 Release 1 documentation.

If there is any discrepancy between the information in this manual and the VSE/ICCF documentation, the latter is assumed to be correct.

Separate handbooks are available for related program products as follows:

VSE/AF handbook:	LY33-9121-0
VSE/POWER handbook:	LY33-9094-3

TABLE OF CONTENTS

SYSTEM COMMANDS

$ Command (see /RUN command)

/ASYNch

Allows interactive partition execution to continue while returning the terminal to command mode.

/ATten [data]

Requests communication with a program in an interactive partition.

data Data to be passed to the program.

/CANcel [ABort]

Terminates terminal activity. Valid in input, list and execution modes.

ABort Need only be specified for programs that use the /CANCEL command as an attention signal.

/COMpres [ON|OFF]

Controls whether multiple blanks are suppressed (ON) or not (OFF) in output displayed in list or execution mode.

/CONNect lib-no|OFF

Connects or disconnects a library. Valid in command mode.

/Continu [Off|nn|1|6] (6 for 3270 only)

Sets continuous output mode on or off. Valid in list and execution modes.

nn Length of pauses in seconds (1-15). The default for IBM 3270 terminals is 6, and 1 for all others.

/COUnt [CONN|COM] name

Lets you know how many records a VSE/ICCF library member consists of. Valid in command mode only.

CONN The connected library is searched for the specified member

COM The common library is searched for the specified member

name Specifies the name of the member (do not specify $$PRINT,$$PUNCH, $$LOG, and $$STACK.

If neither CONN nor COM is specified, your primary library will be searched for the specified member.

[/]CTL Command (see [/]SET command)

/CP command
/CTLP

Allows the VSE/ICCF Administrator to display and alter the status of jobs submitted to VSE/POWER.

command A VSE/POWER command. See VSE/POWER Installation and Operations Reference, SH12-5329.

/DELete

Deletes the last line entered in input mode.

/DISPC [m [n]] [name [password]]
/Display

Displays the contents of the input area, or of a library member.

m|n First and last lines to be displayed.

name Name of library member.

DISPC displays data continuously. Both commands are valid in command and input mode.

/DQ [ALL[listaddr]|HOLD|FREE|LOCAL|*abc|RJE[remid]]
queue[ALL|jobname[jobnumber]|class|...]

Displays the contents of the VSE/POWER list, punch, reader and transmission queues.

queue — VSE/POWER queue to be displayed: LST for list queue, PUN for punch queue, RDR for reader queue and XMT for transmit queue.

ALL — Gives status of all jobs in the specified queue. If 'queue' is not specified, gives the status of all jobs

FREE — Gives status of all jobs in the specified queue available for processing (i.e. in KEEP or DISPATCHABLE state).

HOLD — Gives status of all jobs in the specified queue that are not available for processing (i.e. in HOLD or LEAVE state).

jobclass — Gives status of all jobs in the specified queue with the specified class: A to Z or 0 to n, where 'n' is the partition number (input jobclass only).

jobname — 2 to 8 character job name by which the job is known to VSE/POWER.

LOCAL — Gives the status of all jobs in the specified queue that were submitted from, or routed to, your installation.

*abc — Gives status of all jobs with a name starting with 'abc'. Up to seven alphameric characters can be specified, including '/' and '.'.

The operands of the /DQ command are the same as those for the VSE/POWER PDISPLAY command. The above is only a selection of the most frequently-used operands; a complete description of all operands is contained in VSE/POWER Installation and Operations Reference, SH12-5329.

[/]ECHO message

Writes the specified message back to the terminal in any mode.

/EDit name [password]

Allows editing of a library member, or of the input area. Valid in command mode.

name — Name of library member, which must already exist. The input area is default.

/END

Terminates the current input session.

/ENDRun

Terminates the current input session and runs the job that is in the input area.

/EP queue jobname[jobnumber][PWD=password]
/ERASEP

Removes a job from a VSE/POWER queue.

queue	VSE/POWER queue in the format: reader (RDR), list (LST), punch (PUN) or transmission (XMT).
jobname	The 2 - 8 character name of the job.
jobnumber	The 1 - 5 digit job number assigned to the job by VSE/POWER.
password	The 1 to 8 alphanumeric password given to the VSE/POWER job when it was submitted.

/EXec name [password] [CLIST [param1 param2 ...]]

Executes a job or procedure from the library and passes parameters to it. Valid in command mode.

name	Name of a member containing a job stream or a procedure. The job stream may also include data. 'Name' may also be the punch area ($$PUNCH).
CLIST	Indicates that the member 'name' contains a procedure which cannot be invoked implicitly.

/GRoup CReate name [password] [n]
UNgroup name [password]
REGroup name [password]

Creates, ungroups or regroups a generation member group. Valid in command mode.

n	A decimal number from 2 to 10 indicating the number of entries to be created in the group. The default is 3.

[/]HARdcpy devicename
queuename
ON
OFF
*
START d q

Places the IBM 3270 terminal into or out of hardcopy mode and directs terminal output to a hardcopy printer, or to a private destination queue. Valid in all modes except edit mode.

devicename Address of hardcopy printer.
queuename Private destination queue.
* Sets continuous display mode (3275 only).
START directs print output to a printer only. ('d'='devicename' and 'q'='queuename').

Note: Before attempting to enter commands, press the CLEAR key to enter command mode.

/INPut [PRompt|NOprompt [INClude|OFF|nn]]

Switches the terminal from command to input mode and places all input (except system commands) in the input area. Valid in command mode.

PRompt|NOprompt Controls line prompting. 'NOprompt' and 'OFF' both eliminate any type of prompting, even if your user profile indicates automatic prompting.
INClude Inserts the prompt number into the line being entered.
nn Prompt increment (1-32767).

/INSert name [password] [m [n]]

Copies all or part of a library member, or of the print, punch or log area, into the input area. Valid in input mode.

name Name of library member. $$PUNCH, $$PRINT and $$LOG may also be specified.
m|n Starting and ending lines of the data to be inserted. If 'm' is not specified, 1 is assumed. If 'n' is not specified, end-of-file is assumed.

[/]LIBrary [CONn|COMmon] [FULL|*xxx [ALL]]
/LIBC

Displays the names of members within your main library, in any connected library, or in the common library.

FULL	Displays one line of information for each library member that your have created.
ALL	Displays one line of information for all members, regardless of who created them.
xxx	Displays one line of information for all members that you have created whose names begin with the characters 'xxx' (up to 7 characters).
/LIBC	Displays the above information in continuous display mode. (The /CONTINU command is not required).

/List [*|m [n]] [name [password]]
/LISTC
/LISTX

Displays the contents of the input, print, punch or log area, or of a library member. Valid in command and input modes.

name	Name of the library member. $$PRINT, $$PUNCH or $$LOG may also be specified. The input area is default.
m|n	First and last lines of the data to be displayed. If 'm' is omitted, 1 is assumed. If 'n' is omitted, end-of-file is assumed.
*	Displays the last ten lines from your current position.
LISTC	Displays the data in continuous display mode.
LISTX	Displays both hexadecimal and character data.

/LISTP jobname[jobnumber][jobclass][PWD=password]
/LP

Displays print output from a job submitted to VSE/POWER. Valid in command mode.

jobname	Name of a job submitted to VSE/POWER whose output is in the VSE/POWER list queue. If omitted, this name is assumed to be the 8 character name formed by the user-id and the terminal-id.
jobnumber	The 1-5 digit job number assigned to the job by VSE/POWER.

jobclass A single alphabetic character specifying the output class associated with the job. Only needed for jobs with non-standard output classes.

password The 1 to 8 character alphanumeric password assigned to the VSE/POWER list output.

The following commands may be used during the display: /SKIP, /LOCP, /CONTINU, /HARDCPY and /CANCEL.

/LOCP string|/string/

Locates the specified character string in a VSE/POWER list output file.

/LOGOFF

Ends a terminal session and causes all accounting statistics to be updated. Valid in input and command mode.

/LOGON userid

Starts a terminal session. Valid only after 'ICCF' has been entered.

userid A four character user identification.

/MAil

Displays messages from either the system operator or the ICCF administrator at your terminal. Valid in command mode.

[/]MSG

Displays messages that arrive at your user-id while the terminal is set to non-automatic mode (see /SET MSGAUTO). /MSG is valid in command and execution mode. MSG is valid in edit mode.

/PASswrd new password

Specifies a new password. Valid in command mode.

New password A three to six character word, used as logon password.

/PFnn [data]

Invokes the function that has been associated with this key in the currently valid PF key set.

nn Number of PF key with which the function is to be associated.

data Characters or variable to be appended to the PF function.

/PROmpt [OFF|INClude|nn]

Turns line number prompting on or off. Valid in input mode.

INClude|nn Starts inclusion prompting with an increment of 'nn' (maximum 32767). The increments appear in columns 1 to 5 of the input data.

/PROTect name [oldpass] PRIV|PUBL
DATE
FLAG|OFFL
USER newid
newpass
CPRS
UPIP
NOPASS

Controls attributes for the specified member name. Valid in command mode.

PRIV|PUBL Indicates that the member is to be saved as private (PRIV) or public (PUBL) data.

DATE Replaces the date of entry with the current date.

FLAG|OFFL Sets automatic flagging on or off.

USER newid Sets a new four character user-id.

newpass Applies a new password to a member.

CPRS Sets the compress attribute on.

UPIP Sets update-in-progress indicator off (VSE/ICCF administrator only).

NOPASS Removes a password from a member.

/PURge name [password]

Removes a member from a library. Valid in command mode.

/RENAMe oldname newname [password]

Changes the name of a library member. Valid in command mode.

/RENUM Command (see /RESEQ Command)

[/]REPlace name [password] [m [n]] [PRIV|PUBL]

Replaces a library member with the data in the input area. Valid in command and input mode. Without a slash (/), also valid during editing in the input area.

m|n	First and last lines of the data in the input area that are to be moved to the library member.
PRIV|PUBL	Indicates that the member is to be saved as private (PRIV) or public (PUBL) data.

/RESeq name [password] [incr|100 [col|73 [n|8 [strt]]]]
/RENUM

Applies sequence numbers to a library member, or re-sequences existing ones. Valid in command mode.

incr	The re-sequencing increment. The maximum is 9999 and the default is 100.
col	Start of sequence field. The default is 73.
n	Size of sequence field. The default is 8, and maximum 16.
strt	Beginning sequence number (the default is 'incr').

/RETriev [OFF]

Places a previously entered command in the terminal input area.

OFF	Terminates the retrieve function and clears the internal stack of previously entered commands.

/RETURN

Only valid if you entered VSE/ICCF through the interactive interface of VSE/SP. The command brings you back to that interface.

/ROUTEP queue jobname [jobnumber][class][REM=remid]
/RP [PWD=password]

Routes a job from a VSE/POWER list or punch queue to a printer or punch, or to a remote terminal ID. Valid in command mode.

jobname	The 2-8 character name of the job to be routed.
jobnumber	The 1-5 digit job number given to the job by VSE/POWER.
REMID=	Remote identification code number (1 to 200).
password	The 1-8 alphanumeric password given to the VSE/POWER job when it was submitted.

/RUN [phasename [data]]
$

Loads a phase from the VSE core image library and executes it. Valid in command mode.

phasename	If no phase name is specified, executes the job in the input area.
data	The first and only data statement passed to the phase being loaded; consists of 1-72 columns of data.
$	The abbreviated form of the /RUN command. No space is required before the phase name. Note, however, that '$' destroys the contents of the input area.

[/]SAve name [password] [m [n]] [PRIV|PUBL]

Saves all or part of the input area in the library. Valid in command and input mode.

name	Name of the library member in which the data is to be saved.
pass	The four character password required only if the member is to be password protected.
m|n	First and last lines of the data to be saved (1-9999). For 'm', the default is one line. For 'n', the last line in the input area is default.
PRIV|PUBL	Indicates that the member is to be saved as private (PRIV) or public (PUBL) data.

/SENd {userid|COPER|ALL} message text

Sends a message to the system operator or to another ICCF terminal user. Valid in command and execution mode.

userid	Sends the message to terminal user 'userid'.
COPER	Sends the message to the system (console) operator.
ALL	Sends the message to all terminal users (should be used only by the VSE/ICCF administrator).

SET CONTROL CHARACTERS

[/]SET [/]CTL	BS=char	logical backspace character
	DEL=char	line delete character (ignore input line)
	END=char	logical line end character (to enter several commands and/or data lines in one line)
	ESC=char	escape character (the following character is not treated as a control character)
	HEX=char	hexadecimal entry character (the following hex-value is treated as single EBCDIC character)
	TAB=char	logical tab character

'char' specified as 'OFF' resets the previous /SET command

SET ICCF FEATURES ON OR OFF

[/]SET [/]CTL	BYPass [ON|OFF] COMlib DATanl EXTab IMPex MSGauto VERify

Initial settings:

BYP=OFF	ON causes control characters to be treated as data.
COM=ON	OFF excludes common library from directory lookups.
DAT=OFF	ON scans in- and output data for special (e.g. APL or TEXT) characters.
EXT=OFF	ON enables tabbing for conversational reads during execution.
IMP=ON	Allows a procedure to be invoked as if it were a command.
MSGauto	Is defined in the profile; OFF indicates that received messages are to be stored in the MSG member.

VER=ON For local 3270 terminals; OFF for all others. 'VERIFY' displays the last 10 input lines on 3270 terminals. On non-3270 terminals, the last input line is repeated.

SET SYSTEM CONTROL FEATURES

[/]SET
[/]CTL

```
BUFfer [bufsiz|REset|OFF]
CAse OFF|REset

CAse INput [UPper|REset|MIxed]

CAse [INput] UPper|REset|MIxed

CAse OUTPUT [UPper|MIxed|REset
             [NOctl|REset|CTL]]

CLAss  class[WAIT|NOWait]|REset|OFF|WAIT|NOWait
DELAY [TIme|time|STop|BYpass|REset|OFF]
LINesize lnsize
LOG [OFF|ON|nnn [INPut|OUTput|INOut]]
PF|PFLS|PFED|PFEX  CLear|ON|OFF|SAVE|RESTORE
PFnn|PFnnLS|PFnnED|PFnnEX  function|CLear|OFF
```

BUFFER allows you to control the size of your print buffer area.

CASE allows you to vary the character translation performed during terminal input or output.

CLASS allows you to set your interactive partition scheduling class.

DELAY Enables you to delay the execution of commands or lines of input.

LINESIZE Is used to vary the line length used for list mode display functions.

LOG Allows you to set or vary the terminal logging facility.

PF/PFnn Allows you to manipulate the program function key settings.

SET 3270 SCREEN FEATURES

[/]SET SCReen REset|OFF
[/]CTL ERase|NOERase
ALarm|NOALarm
CLear
i [d1 [d2 [c1 [c2]]]]
COlumn c1[c2]|REset
ROw r1[r2]|REset

This form of the [/]SET command is used either to set the screen image, or to set screen oriented features ON or OFF.

REset|OFF Sets the feature to a default.
NOERase Causes only lines receiving new data to be erased before data is written to the screen.
ALarm Sets an audible alarm, which sounds whenever something is written to the screen.
CLear Clears the active output area of the screen.
i Number of lines for the input area (1-4).
d1 Starting physical line number of the output areas (3-39).
d2 number of lines in the display areas (5-41).
c1 First column of the output area (1-80).
c2 Last column of the output area (1-132)
r1 First row (1-37) of terminal output on the screen.
r2 Last row (5-41) of terminal output on the screen..of

/SETIme [EXEC] m [n]
TIMEOUT t

Alters any of the three time factors which may affect terminal activity or interactive partition execution.

EXEC m|n 'm' is the number of execution units that a job can use before being cancelled (0-32767). 'n' is the total time in seconds (0-65535) that a job can occupy an interactive partition.
TIMEOUT t Total time in seconds (60-3600) allowed between instances of terminal activity before logoff is forced.

[/]SHow	BS	Backspace character
[/]STatus	BUFfer	Size of the print area
	BYPass	Control character bypass
	CASe	Input/output translation
	CHar	Any control character
	CLAss	Your execution class
	COMlib	Common library search
	CTL	Any control character
	DATAnl	Data analysis feature
	DAte	Date and time
	DEL	Delete character
	DELAy	Multi-command input delay
	END	Logical line end character
	ESC	Escape character
	EXec	Status of current execution in an interactive partition
	HEX	Hex control character
	IMPex	Implied execute
	LIMit	Various time limits
	LIBrary	Current/connected libraries
	LINesize	Line width
	LOG	Type of terminal logging
	MOde	Current terminal mode
	MSG	Message mode
	PF[ED][EX][LS]	PF keys in CM, ED, EX and LS/SP mode
	PFnn[ED][EX][LS]	PFnn key in CM, ED, EX and LS/SP mode
	PF SAVE	Content of PF-key save area
	PSize	Default partition size
	SCreen	Screen attributes
	TABChr	Tab character
	TABs	Tab location
	TErmid	Your terminal id
	TIme	Various time limits
	USer	Your four character id
	VERify	Input verify
	XLate	Input/output translation

The [/]SHOW command displays the current setting of options, features and parameters affecting your terminal. The '/SHOW' format is effective in any mode except edit mode; the 'SHOW' format is effective only in edit mode.

/SKip [m|-m|S+n|S-n|P+k|P-k|NExt|PRevious|CUrrent|TOP|BOTtom|END]

Moves the display forward or backward within the data being viewed. Valid in execution or list mode (/LIST or /LISTP) and only during display or print operations.

m|n	Number of lines (0-99999) that the display is to be moved forward or, with '-', backwards from the last line displayed (m=0 is default).
S	For a 3270 terminal, causing the move to start from the top of the current screen.
P	The number of execution mode printer pages to be skipped during a display to the terminal (skips to carriage channel 1, or top of form). '-k' causes backward skipping.
NExt/PRev	Causes a scroll forward or backward by one screen.
CUrrent	Causes a (re)display of the current page.
TOP	Positions the display to the top of the file.
BOTtom|END	Advances the print or display operation to the end of the current area. Press ENTER to complete the command and return to command mode.

/SQueeze name [password] [SAVEIN] [LOWER]

Converts a library member from display format to compressed format. Valid in command mode.

SAVEIN	Saves the version of the member displayed on your screen in the input area.
LOWER	Applies to a member that contains more lower than upper case characters.

/STATUS Command (see /SHOW Command)

/STATUSP jobname [jobnumber]
/SP

Displays the status of jobs submitted to VSE/POWER for execution in a VSE batch partition, or for transmission to another node. Valid in command mode.

jobname	The 2 to 8 character name of the VSE/POWER job whose status is to be displayed.

jobnumber The 1 to 5 digit number assigned to the job by VSE/POWER.

Status is displayed in the form:

'*STATUS=xy - job status':

x = N job not located
R job is in reader queue
L job is in list queue
P job is in punch queue
X job is in transmission queue

y = * job is still running. Otherwise, this is the disposition of the output of the job.

NOT FOUND - job is not known to VSE/POWER
COMPLETED - job has finished execution
EXECUTING - job is still running
AWAITING EXEC - job is awaiting execution

/SUMry name [password]

Displays all lines in the member beginning with a slash (/) and gives the total of all other lines. Valid in command mode.

/SWitch lib-no|LIBs|RESet|OFF

Switches to another library, which becomes the new current primary library. Valid in command mode.

lib-no library identification number of library to be switched to.

LIBs Exchanges the connected secondary library with the primary library.

RESet|OFF Returns to the library configuration in the user profile.

/SYNch

Re-synchronizes the terminal to a job running in an interactive partition (see /ASYNCH command). Valid in command mode.

[/]TABset n1...nm|language|OFF|CLEAR

Establishes your own internal or logical tab settings for a line. Valid in input and command mode.

n1...nm Column positions for tab settings.

language The programming language being used.

OFF|CLEAR Clears all tabbing.

The command may be followed by from 1 to 11 one-or-two digit numbers, which may not exceed the value of 80. Keywords for preset values are:

ASsembler	10, 16, 36, 72, 73
BASic	10, 20, 30, 40, 50, 60
COBol	8, 12, 16, 20, 24, 28, 32, 36, 40, 44, 73
FORtran	7, 73
PL1 or PLI	5, 10, 15, 20, 25, 30, 35, 40, 45, 50
RPG	6, 20, 30, 40, 50, 60
TENS	10, 20, 30, 40, 50, 60, 70

/Time

Displays the current date and time and the number of background execution units used. Valid in command and execution mode.

/USers [PROfile|STAts|LIBrary]

Displays the total number of terminal users and the number of users currently logged on. Valid in all modes except edit mode.

PROfile	Displays various fields in your user profile.
STATs	Displays statistics fields in your user profile.
LIBrary	Displays the libraries to which you have access.

EDITOR COMMANDS

(** indicates commands which are different for Full Screen and Context Editor)

Add string|/string/

Inserts the specified string of characters behind the last non-blank character in the zone area of the current line.

ALIgn [INdent]

Aligns text to the left and right hand margins of one or more lines of text. The margins are determined by the current ZONE setting or by a the column suffix (Cnn).

INdent Suppresses left justification.

ALter char1 char2 [n|*|1] [G] [S|O]

Changes one character to another, or references a character by its hexadecimal value.

char	Char1 is the character to be changed; char2 is the new character.
n	Number of lines to be searched (maximum 99999). An asterisk causes all lines in the file beginning with the current line to be searched.
G	Changes every occurrence of 'char1'.
S	Records changes in the stack area without opening it.
O	Opens the stack area and records changes in it.

BAckward [nn|1] **

Scrolls the display back the specified number of screens. As a context editor command, scrolls the display back the specified number of lines.

BLank mask

Replaces non-blank characters in a mask with blanks. Blanks are generated with the tab key, with logical tab characters, or with the column suffix (Cnn).

Bottom

Positions the pointer past the last line of the file.

BRIEF Command (see VERIFY Command)

CANcel

Terminates the full screen editor and returns the terminal to command mode.

CAse [M|U]

Temporarily overrides the system input translation currently in effect.

M	Allows the editor to accept both upper and lower case input.
U	Returns to normal upper case translation.

CENter [INdent]

Centers data within the zone determined by the ZONE command or the column suffix (Cnn).

INdent Includes leading blanks.

Change [/string1/string2/ [n|*|1] [G] [S|O] **

Changes one string of characters to another. Other operands are the same as for the ALTER command. Context editor: if entered without operands, the current line is placed in the input area where it can be modified.

CTL Command (see [/]SET Command)

CURsor CURrent
INPut
LINe [nn|1]
TABBack [tt]
TABForward [tt]

A full screen editor command that sets the cursor to a particular position on the screen.

CURrent	Advances the cursor to the first position of the current line
INPut	Advances the cursor to the next Type I or Type II command area on the screen.
LINe	Advances the cursor 'nn' lines to position 1 of the next line.
TABBack	Retards the cursor 'tt' columns.
TABForward	Advances the cursor 'tt' columns.

DELete [n|*|1|/string/]

Deletes lines from a file.

n	Number of lines to be deleted (1-99999).
*	Deletes all lines to end-of-file.
string	Marks the end of the area of the file to be deleted. Delimiters (/) must be used.

DELIM char

Changes the default delimiter (/) to another none alphabetic, none numeric character.

DOWN Command (see NEXT Command)

DUP [n|1]

Duplicates the current line 'n' times (1-100)

ECHO Command (see [/] ECHO System Command)

END Command (see QUIT Command)

ENTer name [password]

Allows you to edit another library member while in full screen edit mode.

name An existing member, or a newly created file. The input area is the default.

FILe [name [password] [PRIV|PUBL]] **

Saves the file as a library member and quits the full screen editor. To save a file using the context editor, see the /SAVE system command syntax.

name Name of the library member in which the data is to be saved.

pass The four character password required only if the member is to be password protected.

PRIV|PUBL Specifies that the member is to be saved as either private or public. The default will be the specification in your profile.

Find string

Compares the non-blank characters in 'string' with each line in the file until the specified string is found or end of file is reached.

FLag [ON|OFF]

Each change to a file will be indicated in columns 73-80 (default) of the changed record. The OFF operand is to be issued by the VSE/ICCF administrator only.

FORMat [*]m-n [*]m-n ...[*]m[-n]

A full screen editor command that divides a logical screen into separate areas and specifies how those areas are to appear.

m Number of lines per logical record (1, 2 or 3)

n Number of logical records per format area (2 or more).

* Suppresses the Type III command areas.

FOrward [nn|1] **

As a full screen editor command, scrolls the display forward the specified number of pages. As a context editor command, scrolls the display forward the specified number of lines.

GETfile name|* [password] [first|1 [num|*]]

Inserts all or a portion of a library member or a special area into the file being edited.

name	Name of library member to be inserted. May also be $$STACK, $$PUNCH, $$PRINT or $$LOG.
first	First line of the data to be inserted (default is the entire file).
num	Number of lines to be inserted, beginning with the line indicated by 'first'. The default (also if '*' is omitted) is the remainder of the file.

HARdcpy Command (see [/]HARdcpy System Command)

IMage [ON|OFF] **

This context editor command controls, how backspace and tab characters are treated within commands or input data. Displays current IMAGE setting if no operand is specified.

OFF	Causes backspaces or tabs to be treated as ordinary data.

INDex [nn|100]

Inserts entries at specified intervals ('nn' lines) into the file to which the line pointer can be moved using the POINT command.

INPut

Switches the terminal from edit to input sub-mode, so that all input (including editing commands) is treated as data.

Insert [string|/string/] ***

Inserts a new line ('string') into the file without entering input sub-mode. Can be used with the column suffix (Cnn). Without operands same as INPUT command in full screen editor. In context editor invalid without operands.

JUStify [Left|Right]

Justifies data to the left or right hand margin as determined by the current zone setting, or the column suffix (Cnn).

LAdd [nn|1]

Add the specified number of blank lines to the file (full screen editor only).

LEft [nn|1]

A full screen editor command that shifts the displayed data 'nn' columns to the left of a logical screen.

LIBRARY Command (see [/]LIBRARY System Command)

LINemode [n1 [n2|8]] [Left|Right] [Off]

Sets line mode editing on or off.

n1|n2 Sets the length of the line mode sequence number. 'n1' is 1-80 and 'n2' is 1-8.

Right|Left The Left field starts in column 1 and is 5 columns long; the Right column starts in column 73 and is 8 columns long.

Locate string|/string/
LOCUp
LUp
LOCNot
LN

Locate searches for the specified string moving forward through the file. LOCup searches backward from the current line. LOCNot searches for the first non-occurrence of 'string'. May be used with the column suffix (Cnn).

MSG Command (see /MSG System Command)

Next [n|1]
DOwn
FOrward

Advances the pointer in the file by 'n' lines.

Overlay string
OVERLAYX
OX

Overlays non-blank characters in a file with the specified characters. May be used with the column suffix (Cnn).

OVERLAYX Inserts hexadecimal characters by specifying two hexadecimal digits in the string for each column to be replaced.

PF command (see PRINT command)

PFnn

Invokes the function that has been associated with this PF key in the currently valid PF key set.

POint nn|Snn|Pnn

Sets the current line pointer to a given area of the file based on an index built by the INDEX command.

Snn Sequence number of the line.
Pnn Decimal number from 1 to 32 that sets the line pointer to the first record of an index table page.

Print [HEX] [n1|*|1 [n2|*|72]]
TYpe $$LOG
PRINTFwd $$STACK
PF $$PRINT
[S]

Displays lines from a file starting with the current line, or displays the whole file if no number is specified. The PRINTFWD form of the command (short form 'PF') advances the line pointer during display.

HEX	Displays data in both hexadecimal and character format.
n1	Number of lines to be displayed. The default is one full screen for the IBM 3270 and one line for the IBM 2740. If '*' is specified, the remainder of the file will be displayed.
n2	The last column of each line to be displayed. The default is the line size that was valid when the editor was entered. If '*' is specified, all 80 columns will be displayed.
$$LOG	Displays the log area.
$$STACK	Displays the stack area.
$$PRINT	Displays the last print buffer from the last execution.
S	Displayes a scale line.

PROmpt [nn|10]

Sets the prompt increment from its default of 10 to a user specified value during line mode editing.

Quit
END

Terminates editing for the associated file.

RENum [incr|100[scol|73[n|8[strt|incr]]]]

Re-sequences or renumbers the file being edited.

incr	Re-sequence increment (maximum 9999).
scol	Start of the sequence number field.
n	Length of the sequence number field (maximum 16).
strt	Starting sequence number (maximum 9999). The default value is the sequence increment.

REPEAT [n|*|1]
RPT

Executes the ALIGN, BLANK, CENTER, JUSTIFY, OVERLAY or SHIFT command 'n' times.

*	Causes the specified operation to be continued to the end of file, or to a maximum repetitions of 9999.

REPlace name[password][PRIV|PUBL] **

Replaces a library member with the contents of the input area or with a newly created file (see ENTER command). The name of a print member must end in '.P'. For context editor: see [/]REPLACE system command.

REStore

Restores the editor settings which were in effect when the last STACK EDIT command was issued.

Rewrite string|/string/ **

This context editor command replaces the current line with the specified string.

RIght [nn|1]

A full screen editor command that shifts the displayed data 'nn' columns to the right of a logical screen.

SAVE [name [password] [PRIV|PUBL]] **

Saves a newly created file or the input area as a new library member. A member newly created with the ENTER command can be saved under 'name', or under the name specified in the ENTER command (SAVE without operands). The name of a print member must end in '.P'. For the context editor see [/]SAVE System Command.

SCReen [nn [nn [nn ...]]]

A full screen editor command that specifies the number and size of logical screens to be created within the physical screen.

nn Number of lines per logical screen.

Search string|/string/

Scans each record of a file (as defined by the 'Cnn' suffix or ZONE setting) from the beginning through the end-of-file for the specified character string.

SET CTL AUTOinsrt [ON|OFF]

AUTOINSERT ON causes any data processed by the editor which is not an editor command to be processed as an INSERT command.

SET NULls [ON|OFF]
NUMbers
PFC
REPoption

Sets functions of the full screen editor environment on or off.

NULls ON Suppresses trailing blanks before data is displayed.
NUMbers ON Sets line numbering on in the Type III area.
PFC ON Sets program function control on, which causes data associated with a program function key to be treated as a command.
PFC OFF Causes data to be treated as data if the cursor is not in the Type I or II command area
REP ON Causes checking for logical tab characters to be bypassed (they are treated as characters).

SHIft [Left|Right [nn|1]]

Shifts the data within the current zone to the left or right the specified number of columns. Can be used with the column suffix (Cnn).

SHow NAMes

Displays the names of the files currently being edited with the full screen editor. (see also [/]SHOW System Command)

SPlit /string/|nn

Splits the current line into two lines. The division occurs before the specified string, or before the the specified column.

STACk OPEN|CLOSE
BACK [mm]
EDIT
/string/
nn
0
data

Stores lines in the stack area.

OPEN|CLOSE Opens or closes the stack area.
BACK Deletes lines from the stack area by moving the pointer back.
mm Number of lines to be stored. The default is 1 (0 adds a blank line).
EDIT Adds records to the stack area containing editor settings from the CASE, DELIM, FLAG, IMAGE, LINEMODE, TABSET, VERIFY, ZONE and SET commands. The settings can be restored using the RESTORE command.
data Allows commands or data to be stored in the stack area.

STATUS Command (see [/]SHOW System Command)

TABSET Command(see [/]TABSET System Command)

Top

Repositions the pointer to the top of the file (null line in front of the first line in the file).

TYPE Command (see PRINT Command)

Up n|1
BAckward

Repositions the pointer 'n' lines before the current line.

Verify OFF **
BRief
Verify [ON] [n1|72]
LONG [n1|72[n2|20[n3|7]]]
FULL [n4|1]

A context editor command that controls what is displayed at your terminal during editing.

OFF Causes changed lines not to be displayed.

BRief Same as VERIFY OFF

LONG Causes 'n1' columns and 'n2' number of lines to be displayed. The number of lines to be displayed before the current line is 'n3'.

FULL Invokes the full screen editor. 'n4' indicates the number of lines before and including the current line to be displayed (1 - 16).

Verify [FULL] [n1 [n2]]

A full screen editor command that is mainly used to vary the settings of: (1) the number of lines displayed prior to the current line, and (2) the number of physical lines associated with the command area.

FULL Optional, only to retain format compatibility with context editor VERIFY command.

n1 Number of lines to be displayed prior to and including the current line.

n2 Number of lines (max. 4) to be associated with the command area.

VIEW [[H]m n][,[H]m n][,[H]m n] ...

A full screen editor command that is used to re-arrange and format the 80 character records on the screen.

H Displays the data in hexadecimal format.

m|n First and last columns of data to be viewed or reformatted. If 'm' is zero, 'n' blanks will be inserted.

Zone [n1|*|1[n2|*|72|80]]

Restricts the effect of commands to a specified zone. The values remain in effect until reset with another ZONE command, or are overridden by a column suffix (Cnn).

n1|n2 Start and end of the specified zone. Column 1 is the default (or if '*' is specified) for 'n1', and column 72 or 80 (depends on installation option EDEND=) for 'n2'.

'nnnnn' [line]

Adds, replaces or locates lines by sequence number during line mode editing.

nnnnn Decimal number from 0 to 99999999 representing a line number in the file.

EDITOR LINE COMMANDS

A[nn] ADD

Adds the specified number (nn) of blank lines to the file. The maximum is 999.

C[nn] COPY

Copies the specified number (nn) of lines to the stack area. These lines can later be inserted elsewhere in the same file, or in another file, with the 'I' command).

D[nn] DELETE

Deletes the specified number (nn) of lines following the line where the command is given. One line is default.

I INSERT

Inserts the lines indicated by either the COPY or MOVE command after the present line.

K[nn] STACK or DATA COLLECT

Copies the specified number (nn) of lines (1 to 99) to the stack area.

Note: This command does not open the stack area. The lines are placed behind the data that is already there.

M[nn] MOVE

Moves the specified number (nn) of lines to the stack area. The lines thus moved to the stack area can be inserted into another area of the same file, or into another file, with the 'I' command.

/ SET LINE POINTER

Sets the line pointer to the present line.

"[nn] DUPLICATE

Duplicates a line a specified number of times.

>[nn[,mm]] SHIFT RIGHT
<[nn[,mm]] SHIFT LEFT

Shifts lines right or left a specified number of columns, beginning with the present line.

TA[nn] TEXT ALIGN

Aligns (justifies) the specified number (nn) of lines right and left, beginning with the present line.

TC[nn] TEXT CENTER

Centers the specified number (nn) of lines, beginning with the present line.

TL[nn] TEXT LEFT JUSTIFY
TR[nn] TEXT RIGHT JUSTIFY

Justifies the specified number (nn) of lines left or right, beginning with the present lines.

TS[nn] TEXT SPLIT

Splits the present line into two lines at the specified column.

JOB ENTRY STATEMENTS

/ASSGN SYSnnn REAder|PUNch|PRInter|LOG|PUNCHIn|IGN|UA

Alters the standard assignments for unit record devices used within programs in interactive partitions.

/COMment

Allows comments to be placed among job entry statements so that they are ignored during job stream processing.

/DATA [INCon|NOIncon]

Separates input to a compiler from job stream data statements which the compiled program expects to read.

INCon — Specifies that the program will ask for input conversationally from the terminal. Restores input processing to SYSIPT or the card reader.

NOIncon

/FILE param1 [param2 ... paramn]

Provides disk file information for jobs in interactive partitions in form of keyword operands and parameter.

File Statement Operands and Parameters:

BLKsize=n — Specifies the blocksize for 3350 and 3330 Model 11 SAM files. If omitted, the blocksize value in the DTF is used.

BUFfer=bufsize — Dynamically allocates storage for I/O areas (VSAM only);

CATalog=catname — VSAM catalog (NAME=) containing file entry;

CISize=cinv — Specifies the control interval size for a SAM file on an FBA device. The control interval size must be a multiple of the physical blocksize of the FBA device. May be specified only in conjunction with TYPE=SEQ.

CYL=YES — The number of tracks requested for dynamically allocated disk space is to begin and end on a full cylinder.

DATe=expinf — Expiry date(VSE files and dynamically allocated DISP=KEEP files). Must be specified for date protection;

DISp= Delete — Release dynamically allocated files at end of job step. Delete is the default.

[Pass] — Retain (pass) dynamically allocated files from step to step and release at end of job;

[Keep] — Keep permanent file (until scratched or cold started);

IDent='fileident' — Disk file identification (for dynamically allocated and VSE files);

LOC=start,len — 'start' is first track or block (FBA) number of file. 'len' is number of tracks or blocks in the file area (VSE file only);

MAXR=nnnnn
9999 — Specifies the maximum number of records (1-9999) to be contained in the target ICCF library member (9999 is default).

NAMe=filename — 1 - 7 character name of file in program (for VSE/ICCF files, the existing member of the library);

PASsword=password — Four character password of password protected VSE/ICCF files;

RETAIN=JOB
STEP — Specifies whether the /FILE specification JOB will be effective during the current job step or until end-of-job. STEP is the default. (Applies only to TYPE=ICCF punch or print files).

SERial=serno — A six character volume serial number for VSE input and output files;

SPAce=ntrks — Dynamic disk space allocation request;

TYPe=Direct Seq Vsam Iccf	For normal VSE files and for dynamically allocated file space, this operand specifies the file access type (DIRECT, SEQUENTIAL, VSE/VSAM).
UNIT=sysno	'SYS' number to be associated with the file.
VOLume=n	Distribution value (0-9) for temporary space request (dynamically allocated files only) over multiple lines.

/FORCE

Directs print lines from the print area to the terminal whenever print activity occurs without waiting for end-of-job, or until the print area is full.

/INCLUDE name [password][ICCFSLI]

Logically groups library members and/or the contents of work areas into a single source of input.

name	Name of the library member to be included. $$PUNCH, $$PRINT and $$LOG may also be specified.
password	To be specified if the member being included is password protected.
ICCFSLI	Causes the /INCLUDE statement to be transformed into the VSE/POWER JECL statement *$$SLI for a job stream that is submitted to VSE/POWER.

/LOAD phasename[,PARM='value']

Loads and executes a language compiler (or assembler), utility or other program.

phasename	Any 1 - 8 character name representing an entry in the VSE core image library.
PARM=	Allows a parameter of up to 100 characters to be specified.

/OPTion option1 [option2 ... option n]

Alter the standard setting of certain job processing options.

NOALIGN Used by the assembler to control whether or not

ALIGN — halfword, fullword and doubleword constants and storage areas are to be aligned on their appropriate boundaries.

DECK
NODECK — Places an object program in the punch area from which it may be read in and executed by LINKNGO. NODECK causes faster compilation but execution will not be possible.

NOEDECK
EDECK — Causes the assembler to produce edited macro decks for any macros included in the assembly and place these decks in the punch area.

NOLIST
LIST — Determines whether some compilers will produce a listing of the input source program on SYSLST (that is, at the terminal). NOLIST is the default for all compilers.

NOLISTX
LISTX — Determines whether some compilers will list the object program in hexadecimal format at the terminal (not used by the assembler or RPG II);

SUBLIB=AE
DF — Controls how the assembler accesses source statement sub-libraries for COPY statements and macro definitions.

NOSYM
SYM — Controls whether some compilers will list symbolic names at the terminal (not used by the assembler or RPG II);

NOXREF
XREF — Determines whether the assembler and some compilers will produce a cross-reference listing of symbolic names at the terminal.

RLD
NORLD — Controls whether the assembler lists the relocation library at the terminal. The default is set at installation time.

The following options apply only to jobs in VSE/ICCF interactive partitions.

ANYPHASE
=nn — Allows the address of the COMREG to be placed at any point within the non-GETVIS portion of the interactive partition. For example, ANYPHASE=40 sets the address to the 40K point within the interactive partition.

CLEAR — Controls whether the entire interactive partition

NOCLEAR (except for the first 6k) will be cleared whenever a job ends.

NOCONT The 'CONTINUE' option sets continuous mode as if the
CONTINUE /CONTINU command has been entered after /RUN or /EXEC.

NODUMP Determines whether the VSE/ICCF DUMP program is
DUMP invoked when an interactive program terminates abnormally:

EOFPRT Specifies whether an end-of-file record is placed in
NOEOFPRT the print area at the end of the print output after the job has terminated.

GETVIS=nnn Alters the default size of the background GETVIS area
or P-nnn (default 48K). P-nnn defines the value that the pro-
or AUTO gram needs for execution; the rest of the partition is allocated to the GETVIS area. GETVIS=AUTO causes VSE/ICCF to calculate GETVIS space according to the largest phase in the program.

GO Controls automatic invocation of LINKNGO (compatible
NOGO with ETSS II 'LOAD' and 'NOLOAD');

NOINCON Controls whether input data requests are directed
INCON to VSE units SYSIPT or SYSxxx (NOINCON) or to the terminal for conversational input;

NOJSDATA 'JSDATA' causes checking for /LOAD and /DATA state-
JSDATA ments to be bypassed allowing VSE/ICCF job streams to be read into a program.

NOLOG Controls whether job entry statements encountered by
LOG the job scheduler will be displayed at your terminal;

NOOBJECT 'OBJECT' causes the object deck in the job stream to
OBJECT be treated as data; then loads the object deck for execution as the next step of the job.

NOPERM 'PERMFILE' prevents open requests for file 'IJSYS0n'
PERMFILE from being altered to 'IKSYSpn', where 'p' is the interactive partition identifier (does not apply to compilers);

PROMPT Allows prompts ('?' for typewriter terminals and

NOPROMPT *ENTER DATA* for 3270) to be bypassed where a conversational read is encountered;

SAVE 'SAVE' bypasses resetting of the punch area pointer
NOSAVE and allows successive jobs to use the contents of
NORESET the punch area. 'RESET' resets the pointer to the
RESET beginnig of the punch area.

NOSPECIAL 'SPECIAL' must be set if the job to be executed
SPECIAL will use any special programming techniques such as rewriting job stream data to disk (read-no-feed followed by write) or reading backward in the job stream.

TIME=mm[,nn]
'mm' sets a execution time limit (1 execution unit is approximately one second) after which the job is cancelled (max. 32767). 'nn' limits the number of seconds that the job may occupy the interactive partition (max. 65535);

NOTRUNC '00' (or omission of 'nn') causes the first 78 char-
TRUNC=nn acters of each print line to be printed. Specifying 'nn' causes left truncation.

PRCLOSE Closes a member used to contain SYSLST, SYSLOG or
PUCLOSE SYSPCH data. This member was defined by a previous /FILE statement. Subsequent output is placed in the print or punch area.
SYSLOG Specifies from where the VSE librarian reads it's
SYSIPT input.

/PAUSE [comment]

Causes the scheduler to display the specified comment and then halt execution.

/RESET

Resets the effect of any previous /ASSGN statement to the installation defaults.

/TYPE comment

Displays the specified comment (or tags) at the terminal. Tags are: USR (user ID), TRM (terminal ID), PRT (interactive partition number).

/UPSI string

Sets UPSI switches on, off or leaves them unchanged.

string From 1 to 8 zeros, ones or x's. '1' sets the corresponding switch on, '0' sets it off, and 'x' leaves it unchanged. 'x' is the default. All UPSI switches are set off at the beginning of each job. Once set on during a job, they remain set until changed by another UPSI setting.

DUMP COMMANDS

ADD hexval1|GPRn [hexval2|0]

Adds two hexadecimal values, or the contents of a general purpose register and a hexadecimal value.

Backward [-n|h|-16]

Reduces the the scan/locate pointer by the specified number of bytes.

CANcel [NOprint]

Terminates the dump program and displays status.

DEC hexval

Converts a hexadecimal value to decimal.

DISPInd hexval1|GPRn [hexval2|0[length|+16]]
DIN

Displays an area of storage whose address is determined by a base address ('hexval1' or contents of a GPR) and a displacement ('hexval2'). 'length' controls number of bytes to be displayed.

Display
DISPAct
DA [address|*[length|+16]]
DISPCHar GPR[n[[GPR]m]]
DC FPR[n]
DISPFwd
DF

Displays the contents of program storage, general purpose registers or floating point registers.

DISPAct Same as DISPLAY but assumes actual rather than relative addresses.

DISPCHar Same as DISPLAY but only character representation of data is displayed rather than both character and hexadecimal.

DISPFwd Same as DISPLAY except that the scan/locate pointer is advanced by the length of the display.

DUmp [ALL]

Displays all general and floating point registers as well as all program storage areas.

End
Eoj

Terminates the dump program.

Forward [+n|h|+16]

Advances the scan/locate pointer by the specified number of bytes.

HEX decval

Converts a decimal value to hexadecimal.

Locate hexval|'string'

Locates a string of data characters within your object program area. The scan operation begins at the current location of the scan/locate pointer.

ORigin address [REL]
START
*
GETvis

Sets the basis for relative to actual address calculation to a location other than the program load point.

address	actual address of the start of the reference area.
REL	specifies that the previous address is relative to the program load point.
START	Re-establish the initial value (program load point) as basis for address calculation.
*	Start of reference area is the current scan/locate pointer value.
GETvis	Start of the reference area is the start of the interactive partition GETVIS area.

Point [+n|h|+0|GETvis]

Sets the scan/locate pointer to the specified relative location within the program (reference area).

SAVE [comment]

Obtains a hardcopy dump of the interactive partition.

SEarch hexval|'string'

Locates a string of data characters within your program area. The scan operation begins at the first location in your program (or the first location in an area specified by the ORIGIN command), and is thus equivalent to a LOCATE command preceded by a TOP command.

STatus [INstr [addr]|PSW]
SHow

Obtains various displays of information within the program. With no operand specified, the STATUS command displays the actual and relative addresses of all key program control factors together with information concerning the program termination status.

INstr	Points to an instruction within your program. The dump program decodes that instruction into actual and relative data locations, data length and the actual contents of the data fields.
addr	Relative hexadecimal address of the instruction. If not specified, the termination instruction will be decoded.
PSW	Displays the termination program status word.

SUB hexval1 [hexval2]
GPRn

Subtracts one hexadecimal value ('hexval2') from another hexadecimal value ('hexval1') or from the contents of a general purpose register ('GPRn').

Top

Sets the scan/locate pointer to the first position in the current reference area.

ASSEMBLE name1 [OBJ name2|OBJ *] [options]

Causes a library member to be processed by the VSE assembler.

name1	name of the library member containing the source program to be assembled.
name2	name under which the object module is to be saved. The default name (or if 'OBJ *' is specified), is the punch area.
options	/OPTION statement options

COBOL name1 [OBJ name2|OBJ *] [CBL] [options]

Causes a library member to be processed by the DOS/VS COBOL compiler.

CBL	Causes prompting for a COBOL CBL option statement.

All other parameters are the same as for the ASSEMBLE procedure.

[@]COPY nn|/string/ [command [operand]]

Copies lines within a file. These macros are only valid in the edit and full screen edit modes.

nn	number of lines to be copied (maximum 99)
/string/	All lines from the current line pointer down to (but not including) the first occurrence of 'string' will be copied.
command	Editor command such as UP, DOWN, LOCATE, LOCUP, or nnnnn)
operand	Associated operand, e.g. a decimal number (UP 3) or a string (LOC /XREF/).

COPYFILE name1 name2 [password]

Copies a library member and saves the copy in your primary library.

name1	Name of the member which is to be copied.
name2	name of the member containing the saved copy

password A four character password which applies to name1 and/or which will be applied to name2.

COPYMEM name1 [pass1] lib1 name2 [pass2] lib2 [PUrge]

Copies a library member and saves it under a specified name in a specified library.

name1	Name of the member to be copied
pass1	Password which applies to member name1.
lib1	Number of the library in which member name1 resides.
name2	Name of the copy of the original member.
pass2	Password which applies to member name2.
lib2	Number of the library into which member name1 is to be copied.
PUrge	Causes the member name1 to be purged from lib1

CPYLIB name [password] lib1 lib2

Copies a member from one library to another.

name	name of the library member to be copied from one library to another.
password	to be specified if the member is password protected.
lib1	library number which contains the member.
lib2	library number into which the member is to be copied.

$DA

Displays the current status of VSE partitions.

ED name [password]

Invokes the full screen editor. Valid in command mode.

name	name of the library member to be edited.
password	to be specified if library member name is password protected.

EDPRT
EDPUN

Allows viewing or editing of the print or punch (stack) area using the full screen editor. Valid in command mode.

FORTRAN name1 [OBJ name2|OBJ *] [PROCESS] [options]

Causes a library member to be processed by the VS FORTRAN compiler.

PROCESS Specifies that you are to be prompted for VS FORTRAN compiler options.

All other parameters are the same as for the ASSEMBLE procedure.

[@]FSEDPF

Sets the full screen editor program function keys to the following functions:

```
SET PF1ED BACK 1            (Page backward 1 page)
SET PF2ED NEXT 10           (Page forward 10 lines)
SET PF3ED FORW 1            (Page forward 1 page)
SET PF4ED CURSOR INP        (Set cursor to next command line)
SET PF5ED CURSOR LINE 16    (Set cursor forward 16 records)
SET PF6ED CURSOR LINE 5     (Set cursor forward 5 records)
SET PF7ED CURSOR CUR        (Set cursor to current line)
SET PF8ED CURSOR TABB 20    (Set cursor backward 20 columns)
SET PF9ED CURSOR TABF 20    (Set cursor forward 20 columns)
SET PF10ED CURSOR TABF 0    (Leave cursor unchanged)
```

GETL jobname [jobnumber [jobsuffix]] [jobclass] [NOPRINT|PRINT] [KEEP|DELETE] [MEM=member|*] [PWD=jobpassword]

Retrieves output from the VSE/POWER list queue.

jobname Name of the job which produced the print output

jobnumber 1 to 5 digit jobnumber assigned to the job by VSE/POWER.

jobsuffix 1 to 3 digit job suffix which designates the segment number (1 is default).

jobclass Class of the job in the VSE/POWER queue (A-Z).

NOPRINT|PRINT Specifies whether print control characters are placed in the output data.

KEEP|DELETE Disposition of the job after retrieval.

MEM=member|* Name of the member into which the output is to be placed. If no member (or 'MEM=*') is specified, the data are placed in the PRINT area.

password Specifies the 1 to 8 alphanumeric password assigned to the job in the *$$LST statement.

GETP jobname [jobnumber [jobsuffix]] [jobclass] [NOPRINT|PRINT][KEEP|DELETE][MEM=member|*[$$PRINT] [PWD=jobpassword]

Retrieves output from the VSE/POWER punch queue.

MEM=$$PRINT Causes the PUNCH queue data to be placed in the PRINT area. If neither the member name nor 'MEM=*' is specified, the data are placed in the punch area.

All other parameters have the same function as for the GETL procedure.

GETR jobname [[[jobnumber][nonnumjclass]]|[jobnumber[numjclass]]] [KEEP|DELETE] [MEM=member] [PWD=jobpassword]

Retrieves a job from the VSE/POWER reader queue.

[non]numjclass Either a numeric class (0 - n, where 'n' is the number of the VSE partition), or a nonnumeric class (a - z). A numeric jobclass must never be specified without jobnumber!. (A is default).

All other parameters have the same function as for the GETL procedure.

HELP [statement|/SET [option]|EDITOR|JES|LINE]

Displays summary and detailed information on using VSE/ICCF commands, macros, procedures, and job entry statements.

statement Name of a command, macro, procedure, or job entry statement.

/SET Requests HELP information on the /SET command. 'option' is any of the first operands of the /SET command.

EDITOR Request a display of all EDITOR commands.

JES Requests a display of all job entry statements.

LINE Requests a display of all editor line commands.

HC command operands

Switches to hardcopy mode, executes a specified command and returns to normal display mode.

command Any ICCF system command which is to be executed in hardcopy mode.

operands Any operands associated with the command specified.

LIBRC 1.s mn.mt [$$PUNCH|membername[password][REPLACE] [DATA=YES][EOD=xx]

Catalogs a VSE/ICCF library member or the punch area into a VSE sublibrary.

1 VSE library name

s VSE sublibrary name

mn VSE member name

mt VSE member type

$$PUNCH Contents of punch area is to be cataloged into the specified VSE sublibrary.

membername Name of VSE/ICCF member

password Password of VSE/ICCF member if it is password protected.

REPLACE If a member with the specified name already exists in the VSE sublibrary, the member should be replaced by the new data.

DATA=YES Applies only to cataloging a VSE procedure. It indicates that the procedure contains SYSIPT data.

EOD=xx Specifies two end-of-data characters. If omitted, the end-of-data delimiters are assumed as '/+'.

LIBRL 1.s mn.mt [$$PRINT|membername [password]] [REPLACE]

Displays a member of a VSE sublibrary, or stores it in print-type format as a member in your VSE/ICCF library or in the print area.

$$PRINT Member mn.mt is to be stored into the print area

membername Name od VSE/ICCF member into which member mn.mt is to be stored. The two rightmost characters should be '.P'.

REPLACE If a member with the specified name already exists in the VSE/ICCF library, it should be replaced by the new data.

All other operands are the same as for the LIBRC macro.

LIBRP 1.s mn.mt [$$PUNCH|membername [password]] [REPLACE]

Punches a member from a VSE sublibrary, or stores it as a member in your VSE/ICCF library or in the punch area.

$$PUNCH Member mn.mt is to be stored into the punch area

All other operands are the same as for the LIBRL macro.

LOAD [name1|*][JES name2|*][DATA name3|*][options]

Loads and executes the specified object program from the VSE/ICCF library.

name1 Name of the member containing the object deck. If '*' is specified, the object module will be read from the punch area.

JES name2 Name of the member containing file definitions and job entry statements for the execution of the program. If '*' is specified, you will be prompted for job entry statements.

DATA name3 Name of the member containing the job stream data for the execution. If '*' is specified, the data will be read conversationally from the terminal as if /DATA INCON had been specified.

options /OPTION statement options that are to be used for the execution.

[@]MOVE (see @COPY Macro)

Same as COPY macro except that the specified lines are deleted from their former location.

MVLIB (see CPYLIB Procedure)

Same as CPYLIB procedure except that the member is deleted from the original library.

PLI name1 [OBJ name2|OBJ *] [PROcess] [options]

Causes a library member to be processed by the DOS/VS PL/I optimizing compiler.

PROcess Causes prompting for a PL/I *PROCESS OPTION statement.

All other parameters are the same as for the ASSEMBLE procedure.

PRINT [name [password]]

Routes a library member (or the contents of the input area) to a hardcopy terminal associated with a 3270 terminal.

name Name of the library member to be printed. If omitted, the contents of the input area will be listed.

password The password (if any) associated with the member.

RELIST [name [password]]

Transfers the contents of the print area, a print-type member, or of a normal library member to the printer.

name Name of a library member containing the data to be printed. If this operand is omitted, the print buffer area will be printed.

password A four character password which need only be specified if the first operand is password protected.

RPGIAUTO name1 [OBJ name2|OBJ *] [options]

Prepares an RPG II source program to use the AUTO REPORT feature, compiles it using the RPG II compiler and places the object module in a library member.

name1 Name of a library member containing the RPG II source program to be compiled.

OBJ name2 Library member where the object module is to be placed. The default (or if 'OBJ *' is specified), is the punch area.

options /OPTION job entry statement options, e.g. NODECK, LIST, etc.

RPGII name1 [OBJ name2|OBJ *] [options]

Causes a library member to be processed by the DOS/VS RPG II compiler.

The parameters are the same as for the RPGIAUTO procedure.

RPGIXLTR name1 [PUNCH name2|PUNCH *]

Prepares an RPG II source program to call the DL/I Translator for processing by the RPG II compiler and places the translated source module in a library member.

name1 Name of a member in the library containing the RPG II source program to be translated.

PUNCH name2 Library member name into which the translated source module is to be placed. The default (or if 'PUNCH *' is specified) is the punch area.

RSEF [nn]

Calls the RSEF program (the RPG II Source Entry Facility)

nn GETVIS space in multiples of 1K bytes reserved for execution of the RSEF program (default is 60K bytes).

SCRATCH fileid|* volser [strt,nspace [PURGE]]

Removes files specified as DISP=KEEP in the /FILE statement from the dynamic space area where they are no longer needed.

fileid file-id as it appears in the VTOC. '*' should be specified when using the PURGE option.

volser Volume serial number of the volume on which the file is located.

strt The starting track number of the file. Need only be specified if the VSE system is using the 'file protect' supervisor option or if PURGE is specified.

nspace Number of tracks (for CKD) or number of blocks (for FBA) in the file. Need only be specified if 'strt' is specified.

SDSERV [CONN|COM] [NAME|USER|DATE]

Sorts and displays the directory of the primary (no operand), connected (CONN) or common (COM) library. Sorting criteria are NAME, USER, or DATE.

SORT name1 [pass] [SEQ seqinf]]PRINT|PUNCH name2|*]

Sorts a library member and either places the output in the original library member, saves it in a new library member, places it in the punch area, or writes it back to the terminal.

name1 Library member to be sorted.

pass A 1 to 4 character password which must be specified for password protected members.

SEQ seqinf Indicates where the sort sequence fields are located. The format is XYYZZXYYZZ...where:
'X' is A or D indicating ascending or descending,
'YY' is the starting column number in the record,
'ZZ' is the number of columns in the sequence field.
Up to four sequence fields may be specified. The default columns are 1 to 15.

PUNCH name2 Name of the library member in which the sorted output is to placed. If omitted, the output replaces the original member.

PUNCH * Places the output in the punch area.

PRINT Returns the output to the terminal.

$SPACE

Causes the DTSSPACE program to be loaded into an interactive partition and executed. This program checks all dynamic disk space allocations within the system and prints its status.

STORE name [pass]

Stores the contents of the punch area in a library member. Must be specified immediately after the execution that created the output.

name Library member name under which the contents of the punch area will be stored.

pass A four character password which needs to be specified if the member is to be password protected.

SUBMIT name [pass1] [DIRECT] [PRINT] [PWD=pass2]
[DIRECTBG]
[RETURN]
[RETURNBG]

Submits a VSE/ICCF or VSE job stream to VSE/POWER for execution in another VSE partition.

name	Name of an ICCF library member containing the job stream to be executed.
pass1	A four character password which need only be specified if the library member is password protected.
DIRECT|DIRECTBG	Directs output to the system printer.
RETURN|RETURNBG	Directs output to the VSE/POWER output queue. being run in a VSE/POWER controlled partition.
PRINT	Displays the VSE JCL that is passed to VSE/POWER.
PWD=pass2	A 1 to 8 character password which is placed in the VSE/POWER $$ JOB card to password protect the output.

VSBASIC [LOAD|SOURCE] name1 [OBJ name2|*]
[JES name3|*]
[DATA name4|*]
[RUN]

Compiles and executes a VS/BASIC source or object program and saves the object deck.

LOAD	specified if the member 'name1' is a VS/BASIC object program.
SOURCE	If specified or omitted, the member 'name1' is assumed to be a VS/BASIC source program.
name1	Name of an ICCF library member which contains the VS/BASIC input in either source or object form.
OBJ name2	Name of the member in which the VS/BASIC object deck is to be saved. If '*' is specified, the object deck will be placed in the punch area. If omitted, no object deck will be produced.
JES name3	Member 'name3' contains job entry information for the job. '*' causes prompting for the job entry statements.

DATA name4 Name of a member containing the input data for the job. '*' causes the data to be read conversationally from the terminal

RUN Causes prompting for a VS/BASIC RUN OPTION statement.

VSBRESEQ name [incr|10 [pass]] [LIST] [NOUPD]

Re-sequences a VS/BASIC source program.

name Member containing the VS/BASIC program to be re-sequenced.

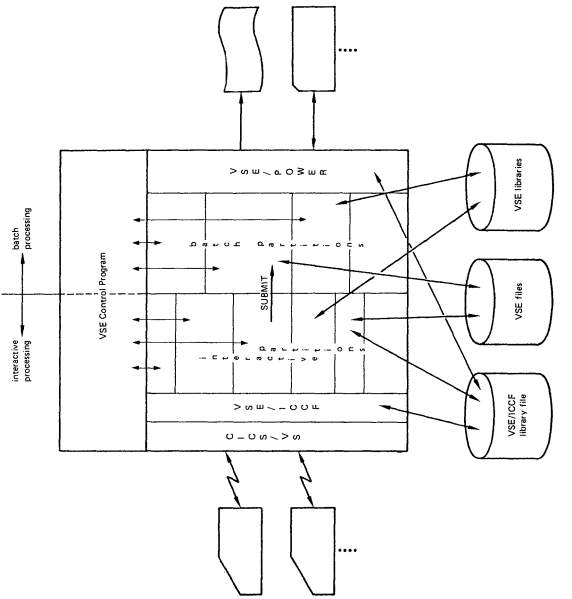
incr Re-sequencing increment (1-5000). The default is 10.

pass The 4 character password associated with the member if it is password protected.

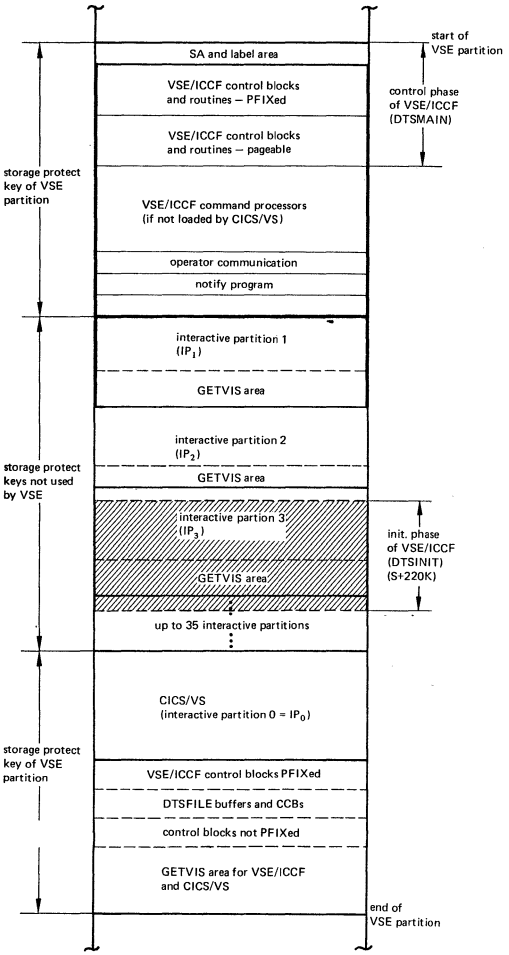
LIST Lists the re-sequenced deck at the terminal.

NOUPD Re-sequences the program and generates error and warning messages, but does not replace the member in the library.

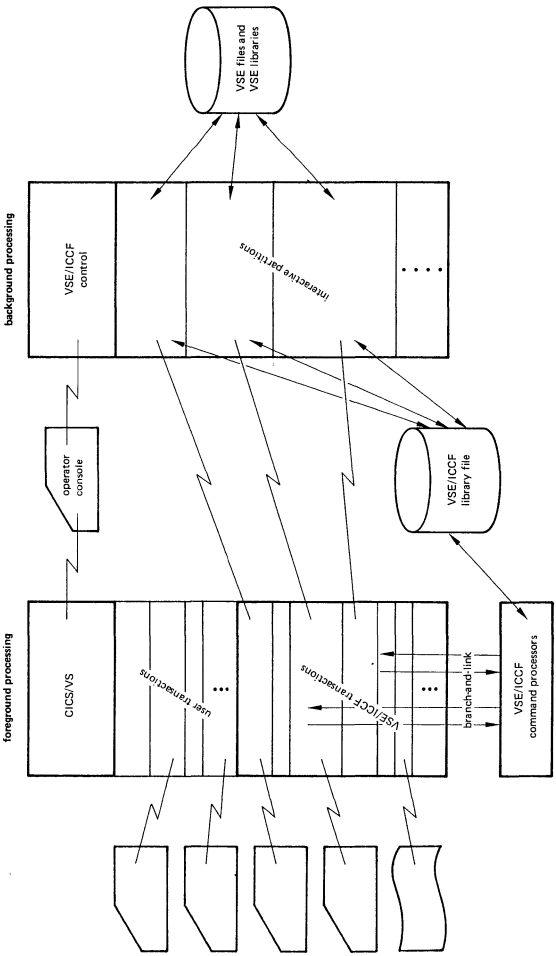
VSE/ICCF FUNCTION OVERVIEW



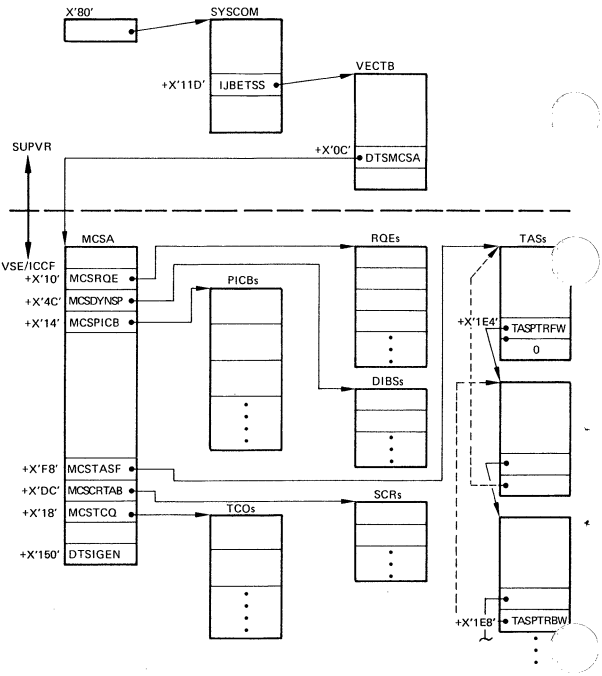
VSE/ICCF PARTITION LAYOUT



FOREGROUND VERSUS BACKGROUND PROCESSING

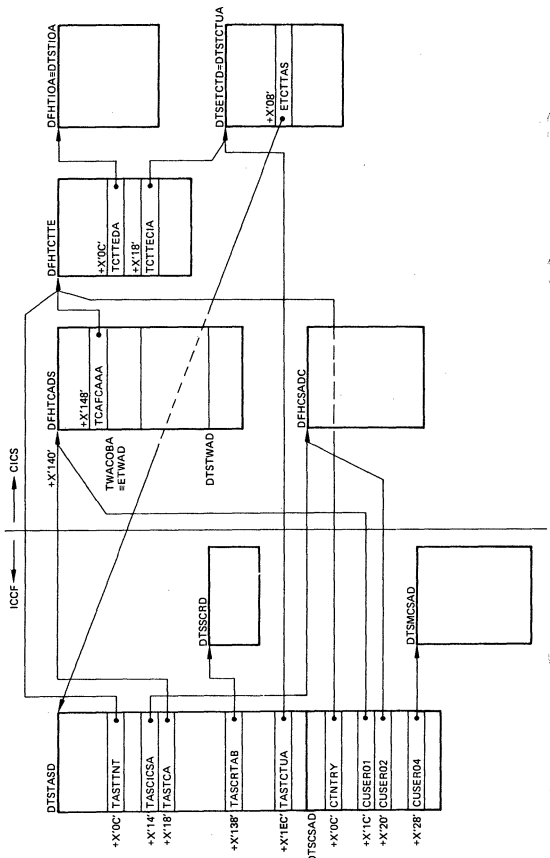


BASIC CONTROL BLOCK STRUCTURE FOR VSE/ICCF

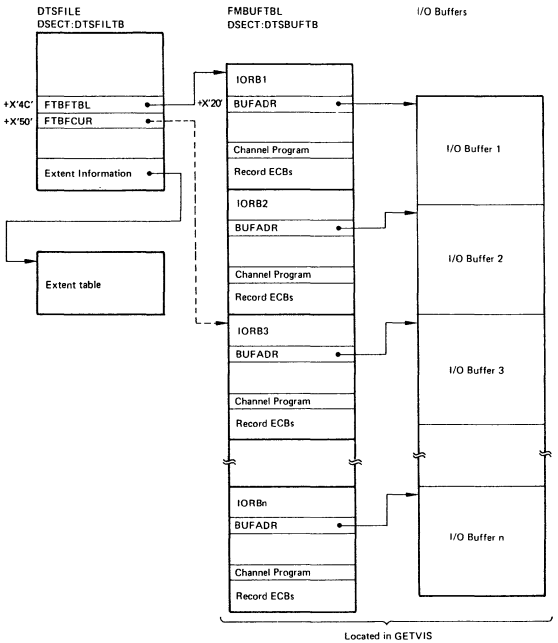


SESSION CONTROL BLOCK STRUCTURE

VSE/ICCF - CICS/VS CONTROL BLOCK STRUCTURE



ICCF - LIBRARY



MAIN TASK COMMON SYSTEM AREA

CT NAME: DTSMCSAD

THERE IS ONLY ONE MAIN TASK CSA. IT CONTAINS POINTERS TO KEY ELEMENTS WITH IN THE TIME SHARING SYSTEM. IT IS THE FOCAL POINT FOR INTER-TASK COMMUNICATION. IT ALSO CONTAINS CONSTANT INFORMATION USED IN SYSTEM ONTROL..

S AREA IS ADDRESSABLE VIA REGISTER 3 IN EVERY MODULE OF THE CONTROL PROGRAM.

OFFSET	LENGTH	NAME	TYPE	DESCRIPTION
0 (0)	8	MCSRCB	CL8	RESOURCE CONTROL BLOCK
8 (8)	8	MCSID	CL8	MCSA IDENTIFICATION STRING *$ICCF$*
16 (10)	4	MCSRQE	A	ADDR OF RQE TABLE START
20 (14)	4	MCSPICB	A	ADDR OF START OF PARTITION TABLE
24 (18)	4	MCSTCQ	A	ADDR OF START OF TASK CONTROL BLOCK
28 (1C)	4	MCSMNECB	A	ADDR OF MAIN TASK ECB
32 (20)	4	MCSHIECB	A	ADDR OF TIMER TASK (DTSCHIGH) ECB
36 (24)	4	MCSMTCSA	A	ADDR OF TERMINAL CONTROL SYSTEM AREA
40 (28)	4	MCSCSVCH	A	ADDR OF SVC HANDLER
44 (2C)	4	MCSCMCH	A	ADDR OF MONITOR CALL HANDLER
48 (30)	4	MCSSEND	A	ADDR OF END OF SUPERVISOR
52 (34)	4	MCSFLADR	A	ADDR OF FILE HANDLER
56 (38)	4	MCSMTCSE	A	TERMINAL CONTROL ENTRY POINT
60 (3C)	4	MCSPARAM	A	ADDR OF PARAMETER LIST FOR INTERTASK COMMUNICATION
64 (40)	4	MCSNXPCB	A	ADDR OF NEXT SELECTABLE PICB
68 (44)	4	MCSCOMRG	A	ADDR OF MAIN TASK COMMUNIC. REGION
72 (48)	4	MCSHIPT	A	HI PARTITION ADDRESS
76 (4C)	4	MCSDYNSP	A	ADDR OF DYN SPACE DISK INFO ELEMENTS
80 (50)	4		A	NOT USED
84 (54)	4	MCSSVAD	A	ADDR OF SVA START
88 (58)	4	MCSVRTAD	A	ADDR OF END OF VIRTUAL STORAGE
92 (5C)	4	MCSOPRTN	A	ADDR OF OPERATOR COMMUNIC ROUTINE

W to locate: Displ. X'(0C)'(DTSMCSA) of the ICCF Vector Table and reg.3 contain the addr. of the MCSA. (The MCSA starts right after the ICCF Copyright Constant.)

OFFSET	LENGTH	NAME	TYPE	DESCRIPTION
			X'80'	BIT ON - OPERATOR COMM ROUTINE ACTIVE
96 (60)	4	MCSOPTNS	F	SYSTEM OPTION BITS
100 (64)	2	MCSMTID	AL2	TID FOR T/S MAIN TASK
102 (66)	1	MCSCOMOP	C	INITIAL PARTITION DUMP OPTION BYTE
103 (67)	1	MCSLOGSW	C	LOGGING CONTROL SWITCH
			X'01'	LOGGING IS SET ON
			X'10'	FULL LOGGING HAS BEEN SET
104 (68)	4		A	RESERVED
108 (6C)	2		H	*
110 (6E)	2	MCSLSTLB	AL2	ADDR OF SYSLST LUB IF DUMMY ASSIGNED
112 (70)	1	MCSCOM	C	MAIN INTERTASK REQUEST BYTE
			C'A'	REQUEST ATTACHING A TASK
			C'C'	REQUEST CANCEL A TASK
			C'D'	CANCEL WITH DUMP
			C'E'	REQUEST CANCEL THE PARTITION
			C'V'	ATTACH COMING FROM CICS/VS
			C'W'	DETACH COMING FROM CICS/VS
			X'FF'	CANCEL T/S SYSTEM OPERATION
113 (71)	1	MCSCOMSV	C	COMMUNICATION BYTE, TRANSIENTS
			X'C1'	REQUEST INITIAL SPOOL ALLOCATION
114 (72)	1	MCSSYSST	C	SYSTEM STATUS BYTE
			C'D'	CANCEL/DUMP PENDING
			C'E'	END OF JOB PENDING
			C'O'	OPERATOR COMMUNICATION RUNNING
			C'T'	REQUEST TERMINAL CONTROL OPRTR COMM
			C'S'	SOFT SHUT DOWN (DELAYED EOJ)
115 (73)	1	MCSSYSQR	C	ENQ BYTE FOR SYSTEM LIBRARIES
			X'02'	BIT ON - LTA USED BY ATTENTN ROUTINE
			X'20'	BIT ON - RELO LIB ENQD
			X'40'	BIT ON - SOURCE LIB ENQD
			X'80'	BIT ON - CORE IMG LIB ENQD
116 (74)	4	MCSRSV01	A	RESERVED
120 (78)	4	MCSHIUSR	A	HIGHEST TAS ADDRESS ALLOCATED
124 (7C)	4	MCSCMECB	A	ECB FOR WAITING ON RQE
128 (80)	4	MCSIPARM	A	ADDR OF INIT. PARAMETER LIST
132 (84)	64	MCSTXNTP	16A	ENTRY POINTS FOR TXNN MODULES
196 (C4)	4	MCSRSV03	A	RESERVED
200 (C8)	4	MCSRSV04	A	RESERVED
204 (CC)	4	MCSUSR01	A	USER AREA
208 (D0)	4	MCSUSR02	A	*
212 (D4)	4	MCSUSR03	A	*
216 (D8)	4	MCSUSR04	A	*
220 (DC)	4	MCSCRTAB	A	ADDR OF SCREEN SIZE TABLE
224 (E0)	4	MCSDUMP	A	ADDRESS OF DUMP ROUTINE
228 (E4)	4		A	RESERVED
232 (E8)	1	MCSFLAG1	X	SUPERVISOR OPTIONS
			X'80'	SV WITH SECURITY GENERATED

OFFSET	LENGTH	NAME	TYPE	DESCRIPTION
			X'40'	HARDCOPY PRINTER WITH KATAKANA
233 (E9)	1	MCSSYSSD	X	SYSTEM SHUT DOWN CONTROL BYTE
			X'80'	BIT ON - EOJ REQUEST BY TERMINAL CTRL
			X'40'	BIT ON - WARN COMMAND ISSUED
			X'20'	BIT ON - NO MORE EXECS
			X'08'	BIT ON - TC OPERATION PENDING
			X'04'	BIT ON - TC IN 2ND SVC ROUTINE
			X'02'	BIT ON - HIGH TASK IN GENERAL WAIT
			X'01'	BIT ON - RESET HIGH TIMER
234 (EA)	2	MCSSDDEL	H	SECONDS TILL NO EXEC ALLOWED
236 (EC)	4	MCSHTIME	A	HIGH TIMER VALUE FOR TEST
240 (F0)	1		AL1	RESERVED
241 (F1)	1		AL1	*
242 (F2)	1		AL1	*
243 (F3)	1		AL1	*
244 (F4)	1		AL1	*
245 (F5)	1		AL1	*
246 (F6)	1	MCSTCTYP	X	C - CICS IS TERMINAL CONTROL
247 (F7)	1	MCSLOPEN	X	LIBRARY OPEN FLAGS, SAVES RTASTATE, DON'T ADD ANY BIT
			X'80'	ON - RUN DTSANALS RECOVER
			X'40'	ON - RUN DTSUTIL BACKUP/RES
248 (F8)	4	MCSTASF	A	ADDR OF FIRST TAS
252 (FC)	4	MCSTASL	A	ADDR OF LAST TAS
256 (100)	0	MCSFBTA	0C	FORCE BUFFER TIME ACCUMULATOR
256 (100)	4	MCSFBWA	F	FORCE BUFFER WORK AREA ADDR
260 (104)	4	MCSXPCCB	A	ADDR OF XPCCB FOR TERMINAL CONTROL
264 (108)	4	MCSFRFIL	F	SUBROUTINE ENTRY POINT FOR FREEING FILE ROUTINE
268 (10C)	4	MCSNTYRT	A	LOAD ADDR OF NOTIFY TASK
272 (110)	4	MCSXPNTP	A	SVA LOADED X PARTITION RTN
276 (114)	8	MCSXPIDK	XL8	XPCC TOKEN GIVEN AT IDENTIFY (POWER QUEUE ENTRY HANDLING)

ECBS USED BY /DISC DTSFILE COMMAND

284 (11C)	4	MCSECBMO	F	MAIN WAIT-ECB, POSTED BY DTSOPCM AFTER /DISC DTSF CMD AND AFTER /CONN DTSFILE CMD
288 (120)	4	MCSECBNO	F	NOTIFY WAIT-ECB,POSTED BY OPCM TO QUIESCE NTFY
292 (124)	4	MCSECBON	F	OPCM WAIT-ECB, POSTED BY NTFY WHEN IT QUIESCE
296 (128)	4	MCSECBOQ	F	OPCM WAIT-ECB,POSTED BY I$$Q WHEN ALL ICCF XACTIONS TERMD
300 (12C)	4	MCSECBQO	F	I$$Q WAIT-ECB,POSTED BY OPCM

OFFSET	LENGTH	NAME	TYPE	DESCRIPTION
				TO TERMIN.ALL ICCF XACTIONS
304 (130)	4	MCSECBNM	F	NTFY WAIT-ECB,POSTED BY MAIN
				TO AWAKE NTFY FOR /CON DTSF
308 (134)	4	MCSQECB	F	SSX-ECB TO BE POSTED AFTER A
				SUCCESSFUL /CON DTSFILE CMD
312 (138)	4	MCSFLAG2	C	/DISC DTSFILE CMS ERROR FLAG
			X'80'	/CON DTSFILE CMD IN PROGRESS
			X'40'	/DISC DTSFILE CMD IN PROGRES
				RESET WITH /CON DTSF CMD
			X'20'	DTSFILE DISCONNECTED
			X'10'	AT LEAST ONE OF THE I$$8'S NOT STARTD
			X'08'	I$$Q INITIALIZED
			X'04'	I$$Q IS IN INTERV.TIME WAIT
			X'02'	INVALIDATE BUFFERS AT CLOSE
			3C	PATCH AREA
316 (13C)	4	MCSSYSLD	A	ADDR OF LOAD PROTECT TABLE
320 (140)	4	MCSSYSFL	A	ADDR OF SYSTEM FILE TABLE
324 (144)	4	MCSSYSPG	A	ADDR OF SYSTEM PROGRAM TABLE
328 (148)	4	MCSENDP	A	ICCF PARTITION END ADDR
332 (14C)	4			NOT USED
336 (150)	0	GENSTART	0F	CONTINUE WITH GENERATION TABLE

GENERATION TABLE - CONTINUATION OF MCSA

ECT NAME: DTSIGEN

DTSIGEN CONTAINS AFTER ASSEMBLY AN AREA OF DC-CONSTANTS WHICH REFLECT THE OPTIONS SPECIFIED IN DTSOPTNS. ITS DSECT FORM IS TO BE CONSIDERED AS THE CONTINUATION OF THE DTSMCSAD DSECT. ITS CSECT BUILDS A PHASE WHICH IS LOADED AT INITIALIZATION OF THE ABOVE PROGRAMS.

NPARTN CONTAINS 0 - 36 ENTRIES WITH 8 BYTES. ENTRIES NOT USED ARE CLEARED WITH X'00'.

OFFSET		LENGTH	NAME	TYPE	DESCRIPTION
0	(0)	1	GENOPT1	B'00000000'	
				X'80'	ALTERNATE SECURITY FEATURE
				X'40'	ATTENTION SUPPORT FOR 2741
				X'20'	CONVERSATIONAL RJE SUPPORT
				X'10'	INTERACTIVE COMPILER
				X'08'	LOAD PHASE NAME PROTECTION
1	(1)	1	GENDISPK	X	DISPLAY/ATTEN KEY DEFINITION
2	(2)	1	GENCANKY	X	CANCEL KEY DEFINITION
3	(3)	1	GENEDEND	AL1(0)	DEFAULT END OF EDITOR ZONE
4	(4)	1	GENCRJEB	CL1' '	POWER OUTPUT QUEUE FOR TERM
5	(5)	1	GENCRJEC	CL1' '	POWER OUTPUT QUEUE FOR PRNT
6	(6)	1	GENCRJED	CL1' '	POWER PRINTER DISPOSITION
7	(7)	1	GENCRJEE	CL1' '	POWER INPUT QUEUE FOR GETR
8	(8)	4	GENCISZE	AL4(0)	FBA CONTROL INTERVAL SIZE
12	(C)	2	GENCOMLB	H'0'	COMMON LIBRARY NUMBER
					- 0 - IF NO COMMON LIBRARY
14	(E)	2	GENEDFLG	H'0'	EDITOR CHANGE FLAG COLUMN-1
16	(10)	2	GENHCLNE	H'0'	DEFAULT END OF HARDCOPY LINE
18	(12)	2	GENINTRV	H'0'	TIMER INTERRUPT INTERVAL
20	(14)	2	GENRECS	H'0'	RECORDS PER BLOCK
22	(16)	2	GENBLK	AL2	BLOCK SIZE CKD
24	(18)	2	GENBUFS	H'0'	NUMBER OF FILE BUFFERS
26	(1A)	2	GENECBS	H'0'	MAX NO. OF ECBS
28	(1C)	2	GENXTNTS	H'0'	NO. OF EXTENTS
30	(1E)	2	GENTCQ	H'0'	NO. OF CONCURRENT REQUESTS
32	(20)	2	GENTASKS	H'0'	NO. OF CONCURRENT TASKS
34	(22)	2	GENPARTS	H'0'	NO. OF INTERACTIVE PARTITIONS
36	(24)	2	GENUSRS	H'0'	NO. OF RQE TABLE ENTRIES
38	(26)	2	GENPSIZE	H'0'	PSEUDO PARTITION SIZE
40	(28)	4	GENPRINP	AL1(0),CL3	PROGRAMMER LU FOR READING
44	(2C)	4	GENPRLST	AL1(0),CL3	PROGRAMMER LU FOR WRITING

How to locate: DTSIGEN starts at displ. X'150' (GENSTART) of MCSA.

OFFSET		LENGTH	NAME	TYPE	DESCRIPTION
48	(30)	4	GENPRPCH	AL1(0),CL3	PROGRAMMER LU FOR PUNCHING
52	(34)	4	GENPRPIN	AL1(0),CL3	PROGRAMMER LU FOR READ PUNCH
56	(38)	4	GENPRLOG	AL1(0),CL3	PROGRAMMER LU FOR CONSOLE
60	(3C)	1		AL1	RESERVED
61	(3D)	2	GENPCH	XL2'0'	DUMMY PUNCH
63	(3F)	2	GENRDR1	XL2'0'	DUMMY READER 1
65	(41)	2	GENRDR2	XL2'0'	DUMMY READER 2
67	(43)	2	GENPRT	XL2'0'	DUMMY PRINTER
69	(45)	2	GENSPOOL	AL2(0)	NO. OF RECORDS IN PRINT SPOOL
71	(47)	1	GENSYSTM	CL1	TERMINAL CTRL SYSTEM C=CICS T=TTF
72	(48)	2	GENTCUPS	B	TERMINAL CTRL UPSI DEFAULT
74	(4A)	2	GENTCOFS	H'0'	TERMINAL CTRL USER AREA OFFSET
76	(4C)	2	GENTIO40	H'0'	DEFAULT TIOA SIZE FOR HARDCOPY
?78	(4E)	2	GENTIO00	H'0'	DEFAULT TIOA SIZE FOR SEQENTL DEVICE

36 INTERACTIVE PARTITIONS (NO./SIZE/WORK FILES/CLASS)

80	(50)	0	GENPARTN	0D	

INTERACTIVE PARTITION INFORMATION FORMAT

+00	(0)	1	GENPARID	C	PARTITION NO. 0-9 A-Z
+01	(1)	2	GENPARSZ	AL2	PARTITION SIZE
+03	(3)	1	GENPARWF	AL1	PRE-ALLOCATED WORK FILES
+04	(4)	4	GENPARCL	CL4	PARTITION CLASSES

INTERACTIVE PARTITION INFORMATION

80	(50)	8	PART1	X'F0',CL7	PARTITION 00
88	(58)	8	PART2	X'F1',CL7	PARTITION 01
96	(60)	8	PART3	X'F2',CL7	PARTITION 02
104	(68)	8	PART4	X'F3',CL7	PARTITION 03
112	(70)	8	PART5	X'F4',CL7	PARTITION 04
120	(78)	8	PART6	X'F5',CL7	PARTITION 05
128	(80)	8	PART7	X'F6',CL7	PARTITION 06
136	(88)	8	PART8	X'F7',CL7	PARTITION 07
144	(90)	8	PART9	X'F8',CL7	PARTITION 08
152	(98)	8	PART10	X'F9',CL7	PARTITION 09
160	(A0)	8	PART11	X'C1',CL7	PARTITION 10
168	(A8)	8	PART12	X'C2',CL7	PARTITION 11
176	(B0)	8	PART13	X'C3',CL7	PARTITION 12
184	(B8)	8	PART14	X'C4',CL7	PARTITION 13
192	(C0)	8	PART15	X'C5',CL7	PARTITION 14
200	(C8)	8	PART16	X'C6',CL7	PARTITION 15
208	(D0)	8	PART17	X'C7',CL7	PARTITION 16
216	(D8)	8	PART18	X'C8',CL7	PARTITION 17
224	(E0)	8	PART19	X'C9',CL7	PARTITION 18

OFFSET	LENGTH	NAME	TYPE	DESCRIPTION
232 (E8)	8	PART20	X'D1',CL7	PARTITION 19
40 (F0)	8	PART21	X'D2',CL7	PARTITION 20
48 (F8)	8	PART22	X'D3',CL7	PARTITION 21
256 (100)	8	PART23	X'D4',CL7	PARTITION 22
264 (108)	8	PART24	X'D5',CL7	PARTITION 23
272 (110)	8	PART25	X'D6',CL7	PARTITION 24
280 (118)	8	PART26	X'D7',CL7	PARTITION 25
288 (120)	8	PART27	X'D8',CL7	PARTITION 26
96 (128)	8	PART28	X'D9',CL7	PARTITION 27
304 (130)	8	PART29	X'E2',CL7	PARTITION 28
312 (138)	8	PART30	X'E3',CL7	PARTITION 29
320 (140)	8	PART31	X'E4',CL7	PARTITION 30
328 (148)	8	PART32	X'E5',CL7	PARTITION 31
336 (150)	8	PART33	X'E6',CL7	PARTITION 32
44 (158)	8	PART34	X'E7',CL7	PARTITION 33
352 (160)	8	PART35	X'E8',CL7	PARTITION 34
360 (168)	8	PART36	X'E9',CL7	PARTITION 35
368 (170)	4		F'0'	VERSION ID (RESERVED)
372 (174)	12	GENPATCH	3F'0'	PATCH SPACE
384 (180)	4	GENLAST	CL4'END	USED FOR CONTROL LOAD CHECK
388 (184)	0	GENEND	0F'0'	END OF AREA

INTERACTIVE PARTITION INFORMATION CONTROL BLOCK

DSECT NAME: DTSPICB

THE CONTROL BLOCK CONTAINS OF TWO PARTS, WHERE THE FIRST PART IS TO CONTROL THE PARTITION SIZE AND STATUS. ALSO IF PRINT AND PUNCH MEMBERS HAVE BEEN SPECIFIED, THE PRINT/PUNCH MEMBER CONTROL INFORMATION IS HOLD IN THIS AREA. IF THE ASSOCIATED INTERACTIVE PARTITION IS ACTIVE, THE CONTROL BLOCK CONTAINS AN ADDRESS TO THE TASK AREA AND THE INITIATING RQE ENTRY.
THE SECOND PART IS A PSW AND REGISTER SAVE AREA WHICH CONTAINS THE STATUS OF THE INTERACTIVE PARTITION AT INTERRUPT TIME IF SERVICE FROM THE SECOND LEVEL INTERRUPT HANDLER IS REQUIRED. THE SAVED REGISTERS ARE NOT SAVED IN REG. 9 TO 8 ORDER BUT IN REG. 2 TO 1 ORDER.

THE PICB QUEUE IS IN PFIXED STORAGE DUE THE WHOLE ICCF SESSION, TO BE SURE THAT IF THE HIGH TASK IS WORKING AT IT THAT NO PAGE FAULT INTERRUPT MIGHT OCCUR. THE FIRST BLOCK IS ALWAYS FOR THE TERMINAL CONTROL PARTITION WHICH HAS THE HIGHEST SPACE WITHIN THE ICCF PARTITION.
GETVIS SPACE FOR AN INTERACTIVE PARTITION IS ALWAYS INSIDE ITSELF, WHERE THE GETVIS SPACE FOR THE TERMINAL CONTROL INTERACTIVE PARTITION IS THE GETVIS SPACE FOR THE ICCF PARTITION.

OFFSET	LENGTH	NAME	TYPE	DESCRIPTION
0 (0)	8	PCBRCB	CL8	RESOURCE CONTROL BLOCK
	* * * *	PRECEDES ONLY THE 1ST PICB ENTRY		
		START OF PSEUDO PARTITION ENTRY		
8 (8)	4	PCBSTART	F	PARTITION START ADDRESS
12 (C)	4	PCBSTOP	F	PARTITION END ADDRESS
16 (10)	4	PCBALTST	F	START OF PARTITION IF START AREA USE
20 (14)	1	PCBGVCTR	C	GETVIS CONTROL BYTE
			X'01'	ON IF NOT FIRST GETVIS IN PARTITION
21 (15)	3		CL3	PARTITION END IF GETVIS SUPPORT
24 (18)	4	PCBECB	F	ECB USED FOR CONVERSATIONAL READS. THIS ECB IS POSTED BY DTSTX03.
28 (1C)	4	PCBTQE	F	ADDR OF TASK AREA
32 (20)	4	PCBRQE	F	ADDR OF RQE WHO INITIATED
36 (24)	4	PCBAUX	F	ADDR OF PICB EXTENSION (DTSAUXAR)

How to locate: Displ. X'14' (MCSPICB) of the MCSA contains the addr. of the PICB. (Reg.11 will normally point to the PICB)
or
At start of interactive partition after RQE, preceded by identifier 'DTSPICB'.

OFFSET		LENGTH	NAME	TYPE	DESCRIPTION
40	(28)	4	PCBCOMRG	F	ADDR OF COMREG AT PARTITION START
44	(2C)	4	PCBSTTIM	F	START TIME IN PSEUDO PARTITION
48	(30)	4	PCBACTIM	F	TIME OF LAST ACTIVITY
52	(34)	4	PCBCLASS	CL4	UP TO 4 CLASSES FOR PARTITION
56	(38)	1	PCBPROT	C	PARTITION PROTECT KEY
57	(39)	1	PCBSTAT	C	PARTITION STATUS
				X'00'	PARTITION BLOCK IS NOT IN USE
				X'40'	PARTITION BLOCK IS IN USE
				X'41'	HI LEVEL TIMER INTERRUPT TASK HAS DETERMINED THAT THE PARTITION SHOULD BE ROLLED OUT BUT A T/S SYSTEM RESOURCE WAS ENQ'D SO IT COULD NOT BE ROLLED OUT AT THAT TIME. THEREFORE, POST DTSCHIGH.
58	(3A)	1	PCBANYQ	C	BITS SET IF ANY RESOURCE ASSOCIATED WITH THE TASK IS ENQ'D
				X'01'	BG PROGRAM IN MUST-COMPLETE STATUS
				X'02'	THE PSEUDO PARTITION IS QUEUED ON AN INTERNAL RESOURCE AND MAY NOT BE ROLLED OUT.
				X'04'	PARTITION QUEUED ON RQE TABLE
				X'10'	TERMINATOR IS IN PROGRESS
				X'20'	MAIN COMREG IS ENQUEUED OR SPOOL SPACE ALLOCATION IS IN PROGRESS
				X'80'	EOJ/CANCEL IN PROGRESS FOR PARTITION
59	(3B)	1	PCBIDNT	C	PARTITION NO. 1 2 3 4 5 ETC.
60	(3C)	1	PCBOFFST	C	PARTITION OFFSET
61	(3D)	0	PCBASSGN	OCL5	DEVICE ASSIGN BUCKETS
61	(3D)	1	PCBREADR	C	ASSIGNMENT OF READER
62	(3E)	1	PCBPRINT	C	ASSIGNMENT OF PRINTER
63	(3F)	1	PCBPUNCH	C	ASSIGNMENT OF PUNCH
64	(40)	1	PCBLOG	C	ASSIGNMENT OF LOG DEVICE
65	(41)	1	PCBPIN	C	PUNCH INPUT ASSIGNMENT
66	(42)	1	PCBDYNSP	C	DYNAMIC SPACE ALLOCATION SWITCH
				X'01'	TEMPORARY SPACE ALLOCATED
				X'02'	DISP=PASS SPACE ALLOCATED
				X'04'	PERMANENT SPACE ALLOCATED
				X'FF'	ALL BITS ON IS NULL CONDITION
67	(43)	1	PCBOPTN	C	MISCELLANEOUS CONTROL BITS
				X'01'	USER IS RUNNING IN SVCP ROUTINE
				X'02'	ABEND REGISTER PSW STORED
				X'F0'	4 HI ORDER BITS ARE PRE-ALLOCATED WORKFILE CONTROL BITS
68	(44)	2	PCBSYS1	CL2	FIRST SYS NO. ASSIGNED TO DTSFILE
70	(46)	2	PCBSYS2	CL2	SECOND SYS NO. ASSIGNED TO DTSFILE
72	(48)	28	PCBPUN1	7F	CONTROL FOR PUNCH TO LIB
100	(64)	28	PCBPRT1	7F	CONTROL FOR PRINT TO LIB

OFFSET	LENGTH	NAME	TYPE	DESCRIPTION
BOTH PRECEEDING AREAS HAVE THE FOLLOWING FORMAT:				
+00 (0)	4		F	FIRST RECORD IN CHAIN FOR MEMBER
+04 (4)	4		F	NEXT RECORD IN CHAIN FOR MEMBER
+08 (8)	1		C	C 'L' IF SYSLLG, X'00' IF NOT
+09 (9)	3		AL3	MAX NO. OF RECORDS FROM /FILE MAXR=
+12 (C)	1		C	C 'J' IF MEMBER FOR JOB, X'00' IF NO
				C 'C' IF MAXR HAS BEEN REACHED
+13 (D)	3		AL3	NO. OF RECORDS USED SO FAR FOR MEMBER
+16 (10)	4		AL4	RECORD NO. OF DIRETORY RECORD
+20 (14)	8		8C	MEMBER NAME WHICH GETS PRT/PUN OUTPUT
AREA USED TO TRANSFER INTERRUPT INFO TO DTSCSVCP FROM SVC HANDLER				
128 (80)	8	AUXPSW	D	SAVE SVC OLD PSW AT SVC INTERRUPT
136 (88)	4	AUXREG2	F	REG.2
140 (8C)	4	AUXREG3	F	REG.3
144 (90)	4	AUXREG4	F	REG.4
148 (94)	4	AUXREG5	F	REG.5
152 (98)	4	AUXREG6	F	REG.6
156 (9C)	4	AUXREG7	F	REG.7
160 (A0)	4	AUXREG8	F	REG.8
164 (A4)	4	AUXREG9	F	REG.9
168 (A8)	4	AUXREG10	F	REG.10
172 (AC)	4	AUXREG11	F	REG.11
176 (B0)	4	AUXREG12	F	REG.12
180 (B4)	4	AUXREG13	F	REG.13
184 (B8)	4	AUXREG14	F	REG.14
188 (BC)	4	AUXREG15	F	REG.15
192 (C0)	4	AUXREG0	F	REG.0
196 (C4)	4	AUXREG1	F	REG.1
200 (C8)	4	AUXLST2	F	SAVE LAST SVC2 INTERRUPT ADDR
204 (CC)	4	AUXPARMC	F	ADDR OF PARMLST IF DTSCLPRC IN I.A.P.
208 (D0)	1	AUXSVCI	C	SVC INTERRUPT CODE
209 (D1)	1	AUXFLGP	C	VARIOUS INFORMATION FOR/FROM
				2ND-LEVEL SVC INTERCEPTOR
			X'01'	ATTENTION INTERRUPT PROCESSED
210 (D2)	2	PCBXBCNT	H	COUNT OF XECBS
212 (D4)	2	PCBUSCNT	H	COUNT OF NON-RELEASED USE REQUESTS
214 (D6)	1	PCBPKEY	X	PSW KEY SAVED BY MC 0,RESTORD BY MC 3
215 (D7)	1		C	UNUSED
216 (D8)	16	PCBPATCH	4F	PATCH AREA
232 (E8)	0	PCIB$	0F	END OF TABLE

INTERACTIVE PARTITION CONTROL BLOCK EXTENSION

ECT NAME: DTSAUXAR

THE CONTROL BLOCK CONTAINS OF SIX PARTS. THE FIRST PART IS USED AS PSW AND REGISTER SAVE AREA IF A TASK IS ROLL-OUT ELIGIBLE (IT IS THAN A COPY FROM THE TCQ STARTING AT LABEL TCQSAVE). THE SECOND PART IS USED TO CONTROL /INCLUDE CHAINING AND NESTING. THE THIRD FOURTH AND FIFTH SECTION NTAINS MISCELLANEOUS CONTROL INFORMATION. THE SIXTH PART CONTAINS THE MREG FOR THE INTERACTIVE PARTITION.

THE PICB EXTENSIONS ARE PFIXED BY THE HIGH PRIORITY TASK WHEN HE IS WORKING ON IT TO BE SURE THE NO PAGE FAULT INTERRUPT MIGHT OCCUR DURING UPDATE OF THIS CONTROL BLOCK.

FSET	LENGTH	NAME	TYPE	DESCRIPTION
		SAVE AREA FOR SWAPPING WITH TASK SAVE WHEN ROLL-OUT OCCURS		
0 (0)	0	AUXSAVE	0CL174	ATTACH SAVE AREA
0 (0)	8	AUXSVNAM	CL8	NAME OF TASK IN PARTITION
8 (8)	8	AUXSVPSW	CL8	SAVED PSW
16 (10)	64	AUXSVRGS	16F	REGISTER SAVE AREA 9-8
80 (50)	48		12F	FP REGISTER SAVE AND WORK AREA
128 (80)	8	AUXRSPSW	D	RESTART PSW AFTER FORCED WAIT
136 (88)	12	AUXRSRGS	3F	RESTART REGS AFTER FORCED WAIT 15,0,1
148 (94)	8	AUXPCKAD	2F	SAVE AREA FOR PROGRAM CHECK STXIT
156 (9C)	8	AUXABND	2F	STXIT AB CONTROL INFO SAVE AREA
164 (A4)	8	AUXOCMAD	2F	STXIT OC INFO SAVE AREA
172 (AC)	1	AUXFLAG	X	ROLL-OUT/ROLL-IN FLAGS
173 (AD)	1		X	RESERVED
	* * * *	END OF SWAPPING AREA		
174 (AE)	1	AUXDISP	X	DISPATCHING STATUS
175 (AF)	1	AUXCOND	X	ROLL-OUT CONDITION
176 (B0)	4		CL4	RESERVED
		AREA USED TO CONTROL NESTED INCLUDES ON INPUT		
180 (B4)	2	AUXCURCT	H	COUNT OF INCLUDES IN THE JOB
182 (B6)	2	AUXRSV02	H	RESERVED
184 (B8)	4	AUXRSV01	F	RESERVED
188 (BC)	4	AUXCURIN	F	CURRENT INPUT REC (8 /INCLUDE LEVELS)
192 (C0)	28		7CL4	OTHER 7 LEVELS

How to locate: Displ. X'24' (PCBAUX) of the PICB's contains the addr. of the AUXAR's. (Reg.9 will normally point to the AUXAR)

OFFSET	LENGTH	NAME	TYPE	DESCRIPTION
220 (DC)	0	AUXCURND	0F	MARKER FOR END OF NESTING
220 (DC)	4	AUXNXTR	F	CURRENT REC ADDRESS FOR INTEGRITY
		AREA USED TO CONTROL SYS NO.S ASSIGNED TO LIBRARY		
224 (E0)	4	AUXSYSRC	CL4	CURRENT RECORD NO. READ
228 (E4)	4		CL4	SECOND INPUT FILE CONTROL
		CONTROL AREA FOR /FILE INFO STORED IN PARTITION		
232 (E8)	4	AUXFINF	A	ADDR OF /FILE INFO START
236 (EC)	4	AUXAUXPR	A	ADDR OF AUXILIARY PROCESSOR
		PARAMETER LIST FOR PSEUDO PARTITION SVC 61/61/65		
240 (F0)	4	AUXPCOMR	A	ADDRESS OF PSEUDO PARTITION COMREG
244 (F4)	4	AUXPSTOP	A	HIGH ADDRESS OF PSEUDO PARTITION
		DUMMY COMMUNICATION REGION ASSOCIATED WITH PSEUDO PARTITION		
248 (F8)	228	AUXCOMRG	CL228	RESERVE SPACE FOR COMREG
476 (1DC)	0	AUXAR$	0F	END OF TABLE ENTRY

INTERACTIVE PARTITION SAVE AREA

ECT NAME: DTSAUXPP

THE FIRST PART OF THE CONTROL BLOCK CONTAINS A SAVE AREA, WHICH REFLECTS THE PSW AND REGISTER VALUE AT INTERACTIVE PARTITION TERMINATION TIME. THIS AREA IS USED BY THE 'DTSCDUMP' PROGRAM. THE REMAINING AREAS ARE USED AS WORK AND SAVE AREA BY THE SECOND LEVEL INTERRUPT HANDLER AND THE FILE TINE.

OFFSET	LENGTH	NAME	TYPE	DESCRIPTION
0 (0)	0	DTSAUXPP	DSECT	START ADDRESS OF LOW END OF PARTITION
				MISCELLANEOUS CONTROL AREAS
0 (0)	120	AUXENDSV	CL120	TERMINATION REGISTERS AND PSW
				AREA USED BY EXITS TO FILE CONTROL ROUTINE (DTSFILRT)
120 (78)	16	AUXFCPRM	4F	PARAMETER LIST
136 (88)	128	AUXFCSAV	32F	FILE ROUTINE SAVE AREA
264 (108)	0	AUXFCA	0CL16	FILE CONTROL AREA
264 (108)	5	AUXFCOP	CL5	TYPE OF OPERATION, READ, UPDATE ...
269 (10D)	1	AUXFCCMP	C	M 0 1 2 ETC. SOURCE OF FILE RTN ENTRY
270 (10E)	4		CL4	I/O COUNTS
274 (112)	4	AUXFCREC	CL4	NO. OF RECORD TO RETRIEVE
278 (116)	2		CL2	UNUSED
				MISCELLANEOUS SAVE AREAS
0 (118)	8	AUXTANM	CL8	LOGICAL TRANSIENT NAME
8 (120)	1	AUXCMD	C	SAVE LAST CCW COMMAND CODE
289 (121)	1	AUXDSK	C	FLAG IF CHNL PROGR IS FOR DISK DEVICE
290 (122)	1	AUXSWTA	C	WORK AREA SWITCH
291 (123)	1	AUXSWTB	C	WORK AREA SWITCH
292 (124)	1	AUXFCSWT	C	SWITCH
293 (125)	1	AUXCMDA	C	CONTROL COMMAND IF WRITE AFTER SPACE
(126)	1	AUXFLAG1	C	FLAG BYTE
		AUXEOF	X'80'	EOF CARD READ
295 (127)	1		C	NOT USED
296 (128)	4	AUXLOLOD	F	LOWEST LOAD ADDRESS IN PARTITION
300 (12C)	1	AUXCANCL	XL1	PARTITION CANCEL CODE FOR DUMP

ow to locate: Displ. X'08' (PCBSTART) of the PICB contains the addr. of the save area in partition, which is also the start of the interactive partition.

OFFSET	LENGTH	NAME	TYPE	DESCRIPTION
301 (12D)			ORG *-1	
300 (12C)	4	AUXDUWA	F	DUMP WORK AREA ADDRESS
		AREAS USED AS SUBROUTINE REGISTER SAVE AREAS		
304 (130)	24	AUXWORK	6F	REGISTER SAVE AND WORK AREA
328 (148)	4	AUXSVRA	F	REGISTER SAVE
332 (14C)	4	AUXSVRB	F	*
336 (150)	4	AUXSVRC	F	*
340 (154)	4	AUXSVRD	F	*
344 (158)	80	AUXWORKA	20F	GENERAL WORK AREA
		INPUT/OUTPUT AREAS FOR ICCF FILE LIBRARY ROUTINES		
424 (1A8)	92	AUXRCA1	CL92	IO WORK AREA 1
516 (204)	92	AUXRCA2	CL92	IO WORK AREA 2
		WORK AREA 2 USED BY LOAD/FETCH RELOCATION ROUTINES		
516 (204)	0	AUXFTPRM	0CL60	DEFINE WORK AREA
516 (204)	4	AUXFTNAM	A	CALLSEQ LIST-ADDRESS OF PHASE NAME
520 (208)	1	AUXFTOPT	C	OPTION BITS FOR FETCH/LOAD
		AUXDE	X'02'	REG 1 POINTS TO DIRECTORY ENTRY
		AUXTXT	X'01'	TXT=NO SPECIFIED
521 (209)	3	AUXFTLST	AL3	ADDRESS OF GENL LIST IF ANY
524 (20C)	4	AUXADSAV	F	SAVE AREA FOR LIST RETURN POINTER
		DIRECTORY ENTRY LIST WORK AREA		
528 (210)	2		H	UNUSED
530 (212)	8	AUXFTPNM	CL8	PHASE NAME
538 (21A)	3		CL3	TTR LOCATION OF TEXT
541 (21D)	1	AUXFTN	C	LENGTH OF REST OF AREA, HALFWORDS
542 (21E)	4		CL4	TEXT BLOCK CONTROL
546 (222)	1	AUXFTC	C	SWITCHES
			X'02'	DIRECTORY ENTRY IS ACTIVE
			X'10'	PHASE IS IN THE SVA
			X'80'	PHASE IS SELF RELOCATABLE
547 (223)	1		C	UNUSED
548 (224)	3	AUXFTPPP	CL3	LOAD POINT AT LINKEDIT
551 (227)	3	AUXFTEEE	CL3	ENTRY POINT AT LINKEDIT TIME
554 (22A)	3		CL3	RELOAD INFO
557 (22D)	3	AUXFTAAA	CL3	PARTITION START AT LINKEDIT
560 (230)	4		CL4	REMAINING DATA
564 (234)	4		CL4	REMAINING DATA
568 (238)	8	AUXFTARA	CL8	ADDRESS LIST LIKE AUXFTNAM

OFFSET	LENGTH	NAME	TYPE	DESCRIPTION
		INPUT/OUTPUT AREA FOR PASSING DATA TO/FROM PSEUDO-PARTITION		
608 (260)	2	AUXINPLN	H	LENGTH OF INPUT FROM TERMINAL
610 (262)	2		H	
612 (264)	256	AUXRCA	CL256	INPUT AREA
		INPUT AREA USED TO REQUEST TERMINAL WRITE		
612 (264)	4	AUXWECB	F	ECB POSTED BY MTCS AFTER WRITE
616 (268)	4	AUXWDECB	A	BTAM DECB FOR THE LINE
620 (26C)	4	AUXWTTN	A	TERMINAL TABLE ENTRY
624 (270)	4	AUXWMSG	A	ADDRESS OF MESSAGE
(274)	2	AUXWOPCO	CL2	TERMINAL OPERATION CODE
0 (276)	56	AUXWDATA	CL56	MESSAGE OUTPUT AREA
		AREAS USED FOR USER PROGRAM LINKAGE		
868 (364)	72	AUXUSV	18F	USER'S SAVE AREA
940 (3AC)	4	AUXUPARM	F	ADDR OF USER'S PARAMETER LIST
944 (3B0)	6	AUXUEOJ	XL6	EOJ BOOTSTRAP
950 (3B6)	2	AUXUXRC	H	USER'S RETURN CODE
		PRESERVATION OF BG EXECUTION STATUS FOR IDUMP		
952 (3B8)	8	AUXPHASE	CL8	ABORTING PHASE
960 (3C0)	0	AUXPP$	0D	END OF DSECT

REQUEST QUEUE ENTRY

DSECT NAME: DTSRQED

IF THERE IS A REQUEST FOR AN EXECUTION IN AN INTERACTIVE PARTITION, DTSTX03 OR DTSPROCS (FOR 'MULTEX') ARE SCANNING FOR A FREE ENTRY IN THE QUEUE AND IF FOUND, INSERTING THE TAS ADDRESS AND THE EXECUTION CLASS INTO THE ENTRY. THAN THE HIGH PRIORITY TASK IS POSTED WHICH THAN TRIES TO FIND A FREE PICB ENTRY FOR THIS CLASS AND INSERTS THE PICB ADDRESS INTO RQE ENTRY. DTSCJENT (WHICH RUNS AS FIRST PHASE IN THE INTERACTIVE PARTITION) SETS AND RESETS IN THE RQE ENTRY USER DEFINED OPTIONS. STATUS OF EXECUTION IS INSERTED INTO THE RQE ENTRY BY THE HIGH PRIORITY TASK, THE SECOND LEVEL INTERRUPT HANDLER AND THE COMMAND PROCESSOR DTSTX03. AT END OF JOB THE PICB ADDRESS IN THE RQE ENTRY IS REMOVED BY THE HIGH TASK, THAN THE FOREGROUND IS POSTED TO CONTINUE PROCESSING. DTSTX03 THAN REMOVES THE TAS ADDRESS FROM THE RQE ENTRY AND FREES THE ENTRY TO BE AVAILABLE FOR THE NEXT EXECUTION REQUESTS.

THE RQE IS IN EXCLUSIVE CONTROL BY THE HIGH PRIORITY TASK, THE SECOND LEVEL INTERRUPT HANDLER, DTSPROCS, DTSCOPCM OR THE COMMAND PROCESSOR DTSTX03 IF ONE OF THEM WORKING ON IT. THIS IS DONE VIA A 'TS' INSTRUCTION AND A WAIT POST LOGIC.
THE RQE IS PFIXED DURING THE WHOLE ICCF SESSION.

OFFSET	LENGTH	NAME	TYPE	DESCRIPTION
0 (0)	8	RQERCB	CL8	RESOURCE CONTROL BLOCK FOR RQE TBL
	* * * * PRECEDES ONLY THE FIRST RQE ENTRY			
		START OF REQUEST QUEUE		
8 (8)	4	RQETAS	F	POINTER TO INITIATING USER AREA
12 (C)	4	RQEPICB	F	POINTER TO PICB; 0 IF NOT YET EXECU
16 (10)	1	RQEPRTNO	C	PARTITION NO. IF SCHEDULED
17 (11)	1	RQESTAT	C	CURRENT STATUS OF QUEUED ENTRY
			X'00'	QUEUED BUT NOT YET IN PSEUDO PARTITN
			X'20'	EXECUTION IN PROGRESS IN BG
			X'40'	PARTITION IS ELIGIBLE FOR ROLL-OUT
			X'80'	ANY CANCEL CONDITION
			X'41'	REQUEST R/O DUE TO FULL PRINT SPL
			X'21'	MAY BE ROLLED IN AFTER PRINT IN FG
			X'42'	REQUEST R/O DUE TO CONVERSTNL READ
			X'22'	MAY BE RESTARTED, CONVERSATIONAL

How to locate: Displ. X'10' (MCSRQE) of the MCSA contains the addr. of the RQE. (Reg.4 will normally point to the RQE) Preceded by the identifier 'DTSRQED'

OFFSET	LENGTH	NAME	TYPE	DESCRIPTION
				READ COMPLETED
			X'43'	REQUEST ROLL-OUT DUE TO TIME SLICE
			X'23'	MAY BE RESTARTED, NEXT TIME SLICE
			X'25'	WAITING FOR INITIAL SCHEDULED START
			X'46'	ROLL OUT DUE TO END OF JOB (OPTION)
			X'26'	RESTART NEXT STEP AFTER NORMAL EOJ
18	(12)	1 RQEOPT	C	OPTION BITS FOR COMPILE AND EXEC
			X'01'	TRUNCATE PRINT LINE AT RIGHT FOR THIS
				JOB. USEFUL FOR 80 CHAR DEVICES
			X'02'	NO LOADER STEP DESIRED
			X'04'	DO NOT USE EXECUTION MONITOR
			X'08'	BASIC INPUT COMMAND IS CONSOLE IN
			X'10'	SAVE CURRENT PUNCH AREA, ADD ON END
			X'20'	RESET TO START OF PUNCH AREA IF SAVE
			X'40'	ON IF IJSYS FILES KEEP NAME
			X'80'	NO OBJECT DECK DESIRED
19	(13)	1 RQEOPTA	C	MORE USER OPTION BITS
			X'01'	DUMP OPTION IS SET ON
			X'02'	SPECIAL TECHNIQUES ALLOWED LIKE
				READING BACKWARD IN INPUT AREA
				OR READ/NO FEED
			X'04'	ON IF NO CLEAR OF PSEUDO PARTITION
			X'08'	PROGRAM CAN READ ENTIRE INPUT AREA
			X'10'	ON INDICATES NO PROMPT DESIRED
			X'20'	ON INDICATES NO PRINT EOF
20	(14)	1 RQECOND	C	CONDITION BITS AND SWITCHES
			X'01'	FETCH LOADER AS NEXT JOB STEP
			X'02'	SPECIAL ATTENTION ROUTINE HOOK
			X'04'	END OF DATA ON /LOAD CARD
			X'08'	END OF INPUT ON /DATA CARD
			X'10'	END OF INPUT FILE
			X'20'	INPUT ENDED ON OBJECT DECK
			X'40'	LOADER REQUESTED AT SOME FUTURE POINT
			X'80'	PROCESSING AN OBJECT DECK
21	(15)	1 RQECONDA	C	MORE INTERNAL SWITCHES
			X'01'	STXIT OC ATTENTION REQUESTED
			X'02'	REQUEST SCHEDULE OF DUMP ROUTINE
			X'08'	CJENT IS CALLED FOR CLEAN - UP
				ACTIVITIES ONLY
22	(16)	1 RQECLASS	C	CLASS OF JOB BEING RUN
23	(17)	1 RQETYP	C	LOAD MODULE TYPE BITS
			X'01	THIS PROGRAM SHOULD NOT BE ROLLED OUT
			X'02'	DO NOT EXECUTE RESULTING OBJ MONITOR
			X'04'	PRIORITY TASK (CONVERSATNL PROGRAMS)
			X'08'	THIS IS A COMPILER RUNNING
			X'20'	THIS IS AN AUTHORIZED PROGRAM
24	(18)	1 RQETYPA	C	MORE TYPE BITS

OFFSET		LENGTH	NAME	TYPE	DESCRIPTION
				X'20'	PROGRAM TIES UP RELO LIB
				X'40'	PROGRAM TIES UP SOURCE LIB
				X'80'	PROGRAM TIES UP CORE IMG LIB
25	(19)	1	RQETRAMT	C	LINE TRUNCATE START VALUE
26	(1A)	1	RQELANG	C	LANGUAGE CONTROL BYTE
				X'01'	ASSEMBLY LANGUAGE
				X'02'	COBOL
				X'03'	FORTRAN
				X'04'	BASIC
				X'05'	PL/1
				X'06'	RPG II
				X'07'	APL
27	(1B)	1	RQESTAT2	C	RQE CANCEL CODE SAVE AREA
				X'81'	CANCEL DUE TO TOO MUCH PUNCH OUTPUT
				X'82'	INVALID CCB OR CCW ADDRESS
				X'83'	INVALID /INCLUDE CARD
				X'84'	CANCEL DUE TO TOO MANY INPUT CARDS
				X'85'	CANCEL DUE TO INSUFFICIENT LIB SPACE
				X'86'	NORMAL END OF JOB IN PARTITION
				X'87'	DUMP/JDUMP ISSUED
				X'88'	CANCEL COMMAND ISSUED
				X'89'	USE OF UNAUTHORIZED PROGRAM
					UNAUTHORIZED PROGRAM OR LIB ACCESS
				X'8A'	INVALID, MISPLACED OR MISSING LOAD
				X'8B'	MEMBER NOT IN LIB
				X'8C'	INVALID SECURITY OR PASSWORD
				X'8D'	NESTING LIMIT EXCEEDED
				X'8E'	REQUEST CANCEL FROM TERMINAL
				X'8F'	CANCEL DUE TO EXEC TIME EXCEEDED
				X'90'	CANCEL - FULL SCREEN WRITE ERROR
				X'91'	CANCEL DUE TO INVALID FILE RTN REQST
				X'92'	CAN'T FIND FILE BUFFERNW/ NO UPDAT
				X'93'	RELEASE TO REC NOT PREVIOUSLY REAL
				X'94'	CANCELD BECAUSE SYSTEM LIB NOT AVALBL
				X'95'	REC NO BEYOND LAST EXTENT
				X'96'	ZERO LENGTH REC ENCOUNTRD (EOF WLR)
				X'97'	QUESTIONABLE DISK ERROR CONDITION
				X'98'	WRONG LENGTH REC I/O ERROR
				X'99'	DISK ERROR, MISSING OR WIERD IDS
				X'9A'	DATA CHECK ON DISK
				X'9B'	ATTEMPT TO PERFORM INVALID FILE
					OPERATION (OVERLAY SYST REC, ETC.)
				X'9C'	CANCELLED BY MAIN CONSOLE OPERATOR
				X'9D'	CANCELLED DUE TO JOB ENTRY STMT ERROR
				X'9E'	INVALID JOB STREAM POINTERS
				X'9F'	JOB CANCELLED DUE TO INVALID USE O.
					JOBCOM MACRO

OFFSET		LENGTH	NAME	TYPE	DESCRIPTION
				X'A0'	JOB CANCELLED DUE TO A LABEL LONGER THAN 2K
				X'A1'	JOB CANCELLED DUE TO AN INVALID LABEL FUNCTION REQ (LOCGRPL)
				X'A2'	SUBMIT CANCELLED DUE TO NON-ZERO RETURN CODE FROM POWER
				X'A3'	JOB CANCELLED DUE TO DOS UNLOCK FAILURE
28	(1C)	0	RQERINF	0F	USER'S RETURN INFORMATION
28	(1C)	2	RQEXRCE	H	USER'S RETURN CODE EXTENTION
30	(1E)	2	RQEXRC	H	USER'S EXECUTION RETURN CODE
32	(20)	8	RQEPATCH	2F	RQE BLOCK PATCH SPACE
40	(28)	0	RQED$	0D	ALLIGNMENT
40	(28)			ORG	DTSRQED+8 ORG TO START

TERMINAL ASSOCIATED STORAGE

DSECT NAME: DTSTASD

THIS DSECT DESCRIBES THE FIELDS CONTAINED WITHIN TERMINAL ASSOCIATED STORAGE. THERE IS ONE TAS AREA FOR EACH TERMINAL WITHIN THE SYSTEM. THE TAS IS CONSTRUCTED AT SIGN ON TIME AND IS MAINTAINED DURING THE TERMINAL SESSION. THE AREA IS USED TO RETAIN INFORMATION WHICH MUST BE RETAINED BETWEEN TRANSACTIONS FROM THE TERMINAL.

OFFSET	LENGTH	NAME	TYPE	DESCRIPTION
0 (0)	8	TASIDENT	CL8	TAS IDENTIFIER *$MTTS$*
		ADDRESS CONSTANT POINTERS (ADCONS)		
8 (8)	4	TASDECB	A	ADDR OF LINE DECB FOR THIS TERMINAL
12 (C)	4	TASTTNT	A	TERMINAL TABLE ENTRY ADDRESS
16 (10)	4	TASPNTRY	A	ADDR OF PROG TABLE ENTRY FOR TX00 POINTS TO ICCF PPT ENTRY FOR CICS
20 (14)	4	TASCICSA	A	ADDR OF CICS CSA
24 (18)	4	TASTCA	A	TCA ADDR (CICS ONLY)
28 (1C)	4	TASADCON	A	BASE ADDR FOR COMMON SUBROUTINES
32 (20)	4	TASFLERR	A	ADDR OF FILE ERROR ROUTINE
36 (24)	4	TASINTBL	A	ADDR OF INPUT TABLES
40 (28)	4	TASOTTBL	A	ADDR OF OUTPUT TABLES
		* * * * THESE ADCONS POINT TO LISTS OF ADCONS WHICH POINT TO THE		
		* * * * ACTUAL CHARACTER TRANSLATE TABLES FOR INPUT AND OUTPUT.		
		USER INFORMATION IN TAS		
44 (2C)	4	TASUSER	CL4	USER IDENTIFICATION
48 (30)	4	TASTRMID	CL4	TERMINAL ID FOR USER
52 (34)	4	TASPRTAD	F	ADDR OF TERMNL TABLE ENTRY FOR PRTR
56 (38)	4	TASPRTR	CL4	TERMNL ID OF PRTR ASSOCIATD WITH 3270
60 (3C)	4	TASIDREC	F	POINTER TO USER ID RECORD
64 (40)	2	TASLIBID	H	LIBRARY ID ASSOCIATED WITH THIS USER
66 (42)	2	TASRLSCT	PL2	MONITOR FREEING OF RECORDS

How to locate: Displ. X'F8' (MCSTASF) of the MCSA contains the addr. of the first TAS, displ. X'FC' (MCSTASL) of the MCSA contains the addr. of the last TAS.
Label *$MTTS$* identifies start of TAS.
Displ. X'1E4' of the TAS points to the next TAS, displ. X'1E8' of the TAS points to the previous TAS.
NOTE: Not pointed to by any control block if in DTSPROCS, DTSCLPRP, DTSBATCH, or DTSNTFY.

OFFSET	LENGTH	NAME	TYPE	DESCRIPTION
68 (44)	1	TASOPTA	C	USER OPTIONS FROM ID RECORD
			X'01'	ON IF USER CAN SUBMIT DOS JCL
			X'02'	USER PROFILE HAS PROMPTING
			X'04'	ON IF USER DATA STORD PRIVATE DEFAULT
			X'08'	USER IS FLAGGED AS BATCH ONLY
			X'10'	BIT OFF MEANS SECURITY ON ANY ACCESS
			X'20'	BIT OFF MEANS SECURITY ON MAINT.
			X'40'	BIT OFF MEANS SECURITY ON PASSWORD
			X'80'	USER DEFAULT FOR INCLUSION PROMPT
69 (45)	1	TASOPTB	C	USER OPTIONS FROM ID RECORD
			X'01'	UNUSED
			X'02'	USER MAY UPDATE COMMON CODE BY USING SHARE COMMAND
			X'04'	USER MAY ISSUE PASSWORD COMMAND TO CHANGE HIS LOGON PASSWORD
			X'08'	ON IF USER IS AUTHORIZED FOR CERTAIN PROGRAM USAGE
			X'10'	USER MAY SWITCH TO ANY OTHER LIB
			X'20'	GENERAL ADMINISTRATIVE FUNCTIONS
			X'40'	USER BYPASS FOR STANDARD FILE CHECKS
			X'80'	NO TIMEOUT FORCED LOGOFF
70 (46)	1	TASOPTAA	C	USER OPTIONS FROM ID RECORD
			X'01'	IF ON USER CAN'T USE /GROUP COMMAND
			X'02'	USER MAY ONLY ACCESS PROGRAMS IN THE SYSTEM PROGRAM TABLE
			X'04'	USER CANNOT ALLOCATE PERMANENT SPACE FROM DYNAMIC AREA
			X'40'	IF ON INSERTION OF POWER-JCL IN SUBMIT CAN BE SUPPRESSED
			X'80'	IF SET ON AUTOMATIC MESSAGE DISPLAY
71 (47)	1	TASOPTBB	C	USER'S SECURITY LEVEL
72 (48)	1	TASOPTC	C	USER OPTIONS SET INTERNALLY
			X'01'	USER IS SUCCESSFULLY SIGNED ON
			X'02'	PROMPTING ON BIT
			X'04'	INDICATES UPDATE OK
			X'08'	INDICATES INPUT AREA OK
			X'10'	EXECUTION IS FROM BATCH NOT TERMINAL
			X'20'	SET BY MAIN CONTROL TO FORCE UPDATE
			X'40'	INDICATES INPUT MODE OF EDITOR
			X'80'	INCLUSION PROMPTING ON IN /INP
73 (49)	1	TASOPTD	C	USER OPTIONS SET INTERNALLY
			X'01'	ON IF LENGTHY FUNCTION INTERRUPTED; FOR RESTART AFTER ANY PENDING RQST
			X'02'	DISPLAY IS IN HARDCOPY MODE
			X'04'	BYPASS ROLL-OUT IN EFFECT
			X'08'	SPECIAL CANCEL; PASS CANCEL INFO FROM TX03 TO DTSPROCS FOR CANCEL OF

OFFSET	LENGTH	NAME	TYPE	DESCRIPTION
				EXECUTION OF EXECUTED PROGRAM.
			X'10'	DELAY CANCEL TILL EXECUTING PSEUDO
				PARTN IS CANCELED. APPLIES TO CLIS
			X'20'	ON IF IMPLIED EXECUTE OK
			X'40'	DON'T OPEN TIOA WHEN ENTERING MODE
			X'80'	INSERT FF CHAR IN HC OUTPUT
74 (4A)	1	TASOPTE	C	USER OPTIONS SET INTERNALLY
			X'01'	PROGRAM FUNCTION KEYS DISABLED
			X'02'	INPUT VERIFICATION SET
			X'04'	LOGGING IS SET ON
			X'08'	LOGGING IS TO INCLUDE INPUT
			X'10'	LOGGING IS TO INCLUDE FIRST OUTPUT
			X'20'	MORE INPUT LINES WAITING IN BUFFER
			X'40'	WAIT BETWEEN OUTPUTS OF MULTIPLE TSTA
				COMMAND OR LINE INPUT (CICS ONLY)
			X'80'	TIME DELAY BETWEEN OUTPUTS IF
				MULTIPLE LINE INPUT (CICS ONLY)
75 (4B)	1	TASOPTF	C	USER OPTIONS SET INTERNALLY
			X'01'	ON TO BYPASS TAB, BKSPC PROCS, ETC
			X'02'	FORCE TABBING FOR EX MODE INPUT
			X'04'	ON IF PROCESSING IN MACRO
			X'08'	ON IF NOT TO PRINT MACRO RESULT
			X'10'	INDICATE NEW EXEC TIME LIMIT
			X'20'	INDICATE NEW PSEUDO PARTITION TIME
			X'40'	ON IF NO SEARCH OF COMMON LIB
			X'80'	ON TO BYPASS INPUT OUTPUT INTER-
				PRETATION OF CONTROL CHARACTERS
				WHILE IN EXECUTION MODE
76 (4C)	1	TASOPTG	C	USER OPTIONS SET INTERNALLY
			X'01'	NO CONVERSATIONAL PROMPT
			X'02'	ON IF DISCONNECTED EX MODE
			X'04'	DEFERRED EXECUTION COMPLETED
			X'08'	ON IF REQUESTING SHUTDOWN
			X'10'	OUTPUT IS 80 BYTE RECS; NO TRUNC
			X'20'	ON FOR 3270 DATA ANALYSIS INTRPRTN
			X'40'	AUX INFO CTRL BIT 1
			X'80'	AUX INFO CTRL BIT 2
77 (4D)	1	TASOPTH	C	USER OPTION SET INTERNALLY

LIMIT VALUES AND STATISTICS

FACTORS TO CONTROL USER'S ALLOCATION OF LIBRARY SPACE

78 (4E)	2	TASMAXST	H	MAX NO. OF RECORDS ALLOWED IN MEMBE
				THAT IS, MAXIMUM INPUT AREA SIZE
80 (50)	2	TASMAXPN	H	MAXIMUM PUNCH AREA ALLOCATION

OFFSET	LENGTH	NAME	TYPE	DESCRIPTION
82 (52)	2	TASMAXPR	H	MAXIMUM PRINT AREA ALLOCATION
84 (54)	2	TASACTPR	H	ACTUAL SPOOL ALLOCATION MAX
				FACTORS TO CONTROL RUNAWAY SYSTEM USE
86 (56)	2	TASTMLIM	H	TIME LIMIT FOR EXECUTION
88 (58)	2	TASTMOUT	H	TIME CANCEL IF NO ACTIVITY
90 (5A)	2	TASTMTEX	H	MAX TOTAL TIME IN PSEUDO PARTITION
				USER STATISTICS
92 (5C)	2	TASEXTIM	H	EXECUTION TIME
94 (5E)	2	TASEXTMA	H	TOTAL TIME IN PSEUDO PARTITION
96 (60)	4	TASRQSTS	F	NO.OF ENTRIES THRU TX00 FOR THIS USER
100 (64)	4	TASFLACS	F	NO. OF ACCESSES TO THE FILE
104 (68)	4	TASALLOC	F	APPROXIMATE RUNNING COUNT OF USER SPACE ALLOCATION
				CONTROL I/O CHARACTER TRANSLATION
108 (6C)	1	TASTRINP	C	POINTER TO INPUT XLATE TABLE
109 (6D)	1	TASTRDSP	C	POINTER TO OUTPUT XLATE TABLE
	* * * *	BINARY VALUES 0 1 2 ETC. WHICH POINT TO THE ADCON		
	* * * *	POINTER FOR THE TRANSLATE TABLE CURRENTLY IN EFFECT.		
				LIBRARY DIRECTORY SEARCH CONTROL
110 (6E)	0	TASLIBAR	OCL36	LIBRARY DIRECTORY SEARCH
110 (6E)	1	TASLIBTS	C	LIBRARY HEADER FLAG BITS SET BY THE GETMEMB ROUTINE
111 (6F)	1	TASDRBTS	C	DIRECTORY RECORD FLAG BITS SET BY THE GETMEMB ROUTINE
112 (70)	4	TASLBREC	F	RECORD NO. OF LIBRARY HEADER RECORD FOR USER'S CURRENT PRIMARY LIBRARY
116 (74)	4	TASLBPTR	F	RECORD NO. OF THE DIRECTORY RECORD IN WHICH THE LAST LOOKED UP MEMBER WAS FOUND.
120 (78)	4	TASDRREC	A	ADDRESS IN RCA1 OF THE DIRECTORY SUB-RECORD WHERE THE LAST LOOKED UP MEMBER WAS FOUND.
124 (7C)	4	TASLBFIL	F	RECORD NO. OF THE FIRST RECORD IN THE MEMBER JUST LOOKED UP.
128 (80)	4	TASLBCON	F	RECORD NO. OF HEADER RECORD FOR THE CONNECTED LIBRARY IF ANY.
132 (84)	8	TASDRSPC	2F	LOCATION OF FREE SPACE IN DIRECTORY
140 (8C)	2	TASDIRCT	H	COUNT OF DIRECTORY SUB-RECORDS

OFFSET	LENGTH	NAME	TYPE	DESCRIPTION
142 (8E)	2	TASDIRMX	H	MAXIMUM NO. OF MEMBERS IN LIB ALLOWED
144 (90)	2	TASSPCCT	H	COUNT OF FREE SUBRECORDS IN DIRECTOR
				MODE AND RETURN CONTROL INFO
146 (92)	1	TASEXPEC	C	CURRENT MODE OF USER
				EXPECTANCY CODES ON RETURN TASEXPEC
			X'00'	IN COMMAND MODE - EXPECT COMMAND
			X'01'	IN INPUT MODE - EXPECT INPUT
			X'03'	IN UPDATE MODE - EXPECT UPDATES
			X'04'	IN EDIT MODE - EXPECT EDIT COMMAND
			X'08'	SHOW PF COMMAND RUNNING
				THE FOLLOWING MODES ARE COLLECTIVELY CALLED EXECUTION MODE
			X'02'	EXECUTION MODE, LIST/DISPLAY CONT.
			X'10'	BACKGROUND IN PROGRESS FOR THIS TAS
			X'11'	BG IN PROGRESS, REQUIRES TX03 SERVICE
			X'12'	TX03 CONTINUING SPOOL PRINT
			X'13'	TX03 IS AWAITING TERMNL INPUT FOR BG
147 (93)	1	TASCOMCD	C	REMEMBER LAST COMMAND CODE
148 (94)	1	TASCMMOD	C	COMMAND MODIFIER USED TO PASS INFO ABOUT THE COMMAND TO ANOTHER MODULE
			X'01'	EDITOR PRINT FORWARD REQUESTED
			X'02'	EDITOR VERIFY LONG FOR TX04
			X'05'	TESTED BY ECMCHANG 3270 CHANGE IN INPUT AREA
149 (95)	1	TASTBLBT	C	FLAG BITS FROM COMMAND TABLE
			X'04'	ON IF CMD ONLY VALID FOR PRIMARY LIB
			X'20'	ON IF CMD VALID FOR COMPRESSED MEMBE
			X'40'	ON IF LONG RUNNING COMMAND
150 (96)	1	TASRTYP	C	TYPE OF RE-INITIATION IN EFFECT
151 (97)	1	TASLGOF	C	LOGOFF REASON CODE
			X'01'	TERMINAL TIMEOUT
			X'02'	LOGIC ERROR IN ICCF OR CICS
			X'03'	LOGIC ERROR IN ICCF OR CICS
			X'04'	COM.PROC NOT RES.NOR IN PCT
			X'05'	PROGR CHECK,ABEND IN COM PRO
			X'06'	RESERVED
			X'07'	NOT ENOUGH CICS DYN STORAGE
			X'08'	PREVIOUS LOGON NOT LOGGED OFF PROPERLY
			X'09'	SAME AS 7
			X'0A'	SSX BRIDGE - PARAMETER LIST INVALID, OR INVALID ADDRESS IN LIST

OFFSET		LENGTH	NAME	TYPE	DESCRIPTION
				X'0B'	LOGOFF BY /DISC DTSFILE CMD
				X'0C'	SSX - RECONNECTION REJECTED
				X'0D'	LOGOFF BY /DISC USER/TERM CM
				X'0E'	SSX -┐ FUNCTION REQUESTED
					WITHOUT TERM, TERM REQUIRED
				X'FF'	LOGOFF FORCED BY EOJ RTNE

INPUT FILE CONTROL INFORMATION

152	(98)	0	TASCTRLN	0CL16	INPUT FILE INFORMATION
152	(98)	4	TASSTREC	F	STARTING RECORD IN INPUT AREA
156	(9C)	4	TASCRREC	F	CURRENT OR LAST RECORD IN INPUT AREA
160	(A0)	2	TASLNNO	H	COUNT KEPT ON LINE NO.
162	(A2)	2	TASPRAMT	H	PROMPT INCREMENT
164	(A4)	4	TASPROMP	F	CURRENT PROMPT VALUE

EDIT OR UPDATE FILE CONTROL INFO

168	(A8)	0	TASCTRUP	0CL40	UPDATE CONTROL INFORMATION
168	(A8)	8	TASNMTRN	CL8	NAME OF MEMBER (BLANK IF INPUT AREA)
176	(B0)	4	TASFRTRN	F	STARTING RECORD NO.
180	(B4)	4	TASCRTRN	F	CURRENT RECORD NO.
184	(B8)	4	TASADAFT	F	REC NO. AFTER WHICH ADDITNS ARE MADE
188	(BC)	4	TASADTO	F	REC NO. BEFORE WHICH ADDITNS ARE MADE
192	(C0)	4	TASFRLN	F	STRTNG LINE NO. DURING ADD OR REPLACE
196	(C4)	4	TASTOLN	F	ENDING LINE NO.
200	(C8)	4	TASLNTRN	F	CURRENT LINE NO.

EDITOR ONLY CONTROL FIELDS

204	(CC)			ORG	TASADAFT
184	(B8)	4	TASEDEND	F	LAST REC NO. IN EDITED FILE
188	(BC)	4	TASEDIND	A	ADDR OF INDEX IF ANY
192	(C0)	2	TASEDRPT	H	REPEAT VALUE FOR BLANK OR OVERLAY
194	(C2)	2	TASEDRTN	H	LAST EDITOR ROUTINE ENTERED
					USED BY ROLL-OUT RESTART
196	(C4)	0	TASEDPRM	0CL12	EDITOR CONTROL FACTORS
196	(C4)	1	TASEDSWT	C	SWITCHES FOR EDITOR:
				X'01'	ON AFTER FIRST TIME THROUGH EDITOR
				X'02'	ON IF IN BRIEF MODE OF EDITOR
				X'04'	ON IF EDITING A COMMON MEMBER
				X'08'	LONG MODE OF EDITOR SET
				X'10'	LINEMODE EDITING IN EFFECT
				X'20'	FLAG UPDATES TO FILE IN COLUMN 72
				X'40'	LONG MODE CONTROL
				X'80'	INPUT INVALID COMMAND
197	(C5)	1	TASVERCL	C	VERIFY PRINT COLUMN NO.

OFFSET		LENGTH	NAME	TYPE	DESCRIPTION
198	(C6)	1	TASZONST	C	LOCATE/CHANGE - ZONE START
199	(C7)	1	TASZONND	C	LOCATE/CHANGE - ZONE END
200	(C8)	1	TASEDDLM	C	STARTING DELIMITER FOR EDIT
201	(C9)	1	TASEDVER	C	VERIFY LONG POSITIONING VALUE
202	(CA)	1	TASVRPRT	C	NO. OF LINES TO PRINT IF LONG VERIFY
203	(CB)	1	TASEDLNS	C	START COLMN OF SEQ NO. IF IN LINEMODE
204	(CC)	1	TASEDLNC	C	NO. OF COLUMNS FOR SEQUENCE NO.
205	(CD)	1	TASCASE	C	CURRENT CASE SETTING
206	(CE)	1	TASEDSW2	C	EDITOR CONTROL FLAGS
				X'80'	CURRENT IMAGE SETTING
				X'40'	5550 DOUBLE BYTE DISPLAY MODE ON - IF DB SUPPORT INITIALIZED & DBCS MEMBER
				X'20'	SET DBCS ON/OFF GIVEN
				X'10'	FILE ... DBCS=ON GIVEN
				X'08'	FILE ... DBCS=OFF GIVEN
				X'04'	TABBING TO BE PERFORMED
207	(CF)	1	TASTMPCL	C	COLUMN WHEN CN COMMAND SUFFIX USED

MAINTENANCE CONTROL AREA

208	(D0)			ORG	TASCTRUP
168	(A8)	8	TASMNTNM	CL8	NAME OF MEMBER BEING UPDATED
176	(B0)	4	TASMNTPS	CL4	PASSWORD IF ANY
180	(B4)	1	TASMNTCD	C	MAINT CODE M-MAINT, A-READ ACCESS
181	(B5)	1	TASMNTAT	C	MEMBER ATTRIBUTE (DBCS)
				C'2'	DOUBLE BYTE DATA
				C'1'	NO DOUBLE BYTE DATA
				C'0'	ATTR NOT TO BE CHANGED
182	(B6)	2		CL2	NOT USED

CRJE CONTROL AREAS

208	(D0)			ORG	TASCTRUP
168	(A8)	0	TASRJEA	0CL40	RJE CONTROL AREAS IN TAS
168	(A8)	0	TASRPARM	0CL20	XP PARAMETER LIST
168	(A8)	4	TASRXPCB	A	ADDR OF XPCCB
172	(AC)	4	TASRTECB	F	TIMER ECB USED BY DTSIXP
176	(B0)	8	TASRWTL	2F	WAIT LIST
184	(B8)	1	TASRFF	X	WAITLIST DELIMITER FIELD
				X'FF'	END OF WAITLIST INDICATOR
185	(B9)	1	TASRFLG	X	DISPOSITION CONTROL FIELD
				X'01'	INTERACTIVE PARTITION
				X'02'	FOREGROUND
186	(BA)	1	TASRFUNC	X	REQUEST BYTE

OFFSET		LENGTH	NAME	TYPE	DESCRIPTION
				X'01'	SENDR REQUEST
				X'02'	CONNECT REQUEST
				X'04'	DISCONNECT-PURGE REQUEST
187	(BB)	1		X	RESERVED
188	(BC)	4	TASRXSPL	F	ADDRESS OF SPL AREA
192	(C0)	4	TASRSPLC	F	TOTAL LINE COUNT IN LST FILE
196	(C4)	4	TASRCURR	F	CURRENT SPOOL LINE NUMBER
200	(C8)	4	TASRBUFA	F	ADDRESS XPCC-REPLY BUFFER
204	(CC)	2	TASRBUFL	H	LENGTH OF XPCC-REPLY BUFFER
206	(CE)	1	TASRCTLB	X	CONTROL BYTE
				X'01'	SET ON IF GETSPOOL BROWSE NEEDED
				X'02'	SWITCH USED TO INDICATE EOF
				X'04'	IND STATUSP HAS VALID JOB]
				X'08'	ON, IF LIST MODE IN /DQ CMD
				X'10'	ON, SUCCESSFUL OPEN OF /LP
207	(CF)	1	TASRCC	X	CONTROL COMMAND CODE

LIST CONTROL INFORMATION

208	(D0)	0	TASLSTCT	OCL31	PRINT CONTROL TO USER TERMINAL
208	(D0)	4	TASLSTCR	F	CURRENT REC NO. DURING /LIST
212	(D4)	4	TASLSTLN	F	CURRENT LINE NO. FOR /DISPL
216	(D8)	4	TASLSTND	F	LINE ON WHICH TO END LIST
220	(DC)	4	TASLSTTP	F	TOP-OF-PAGE RECORD NUMBER
224	(E0)	4	TASLSTTL	F	TOP-OF-PAGE LINE NUMBER
228	(E4)	4	TASLOCPT	F	RESTART /SKIP 'LOCATE STRING
232	(E8)	2	TASLSTSA	H	CURRENT SHIFT AMOUNT
				X'64'	MAX SHIFT AMOUNT ALLOWED
				TASLSTTP	SAVE START COLLUMN LOC STRNG
				TASLSTTP+2	SAVE END COLLUMN LOC STRING
				X'01'	MIN START COLLUMN LOC STRTNG
				X'9C'	MAX END COLLUMN LOCATE STING
234	(EA)	1	TASENTMD	C	SAVE MODE ON ENTRY TO LIST FUNC
235	(EB)	1	TASLSTCL	C	LIST CONTROL
				X'01'	LIST OPERATION TERMINATED
				X'02'	END OF DISPLAY REACHED
				X'04'	INDICATE ENTRY FROM EDITOR
				X'08'	LOGICAL END OF DSPLY REACHED
				X'40'	/LISTP ACTIVE (NOT /DQ E.G.)
				X'80'	LIST SHIFT MODE ACTIVE
236	(EC)	1	TASEXBTS	C	BITS USED TO RECALL LIST FUNCTION
				X'01'	ON IF COMPRESSION REQUESTED
				X'02'	NONSTOP OUTPUT MODE REQUESTED
				X'04'	MEMBER BEING LISTED IS COMPRESSED
				X'08'	HEXADECIMAL LIST REQUESTED
				X'10'	FULL LIBRARY LIST FOR USER
				X'20'	FULL LIBRARY LIST, ALL USERS

OFFSET	LENGTH	NAME	TYPE	DESCRIPTION
			X'40'	LIST IS FOR POWER SPOOL FILE
			X'80'	ERROR OCCURRED DURING /LIST
237 (ED)	1	TASSUBRC	C	INDEX TO ENTRY IN DIR RECORD
238 (EE)	1	TASSUBOF	C	OFFSET TO ENTRY IN DIR RECRD

INSERT COMMAND CONTROL

239 (EF)			ORG	TASLSTCT - USE SAME AREA AS LISTER
208 (D0)	0	TASINSCT	OCL31	
208 (D0)	4	TASINSCR	F	CURRENT REC NO.
212 (D4)	4	TASINSLN	F	CURRENT LINE NO.
216 (D8)	4	TASINSND	F	ENDING LINE NO.
220 (DC)	1	TASINSDF	X	DIRECTORY FLAGS OF INS. MEM
221 (DD)	3		CL3	UNUSED
224 (E0)	4		F	UNUSED
228 (E4)	4		F	UNUSED
232 (E8)	2		H	UNUSED
234 (EA)	5		CL5	UNUSED
239 (EF)			ORG	

EXECUTION TIME CONTROL AREA

240 (F0)	2	TASXINCA	H	COUNT OF PRINTED RECORDS
242 (F2)	2	TASXINCB	H	COUNT OF PUNCH OUT RECORDS
244 (F4)	2	TASXINCC	H	COUNT OF INPUT CARDS READ
246 (F6)	2		H	UNUSED
248 (F8)	4	TASXINST	F	JOB STREAM START
252 (FC)	4		F	???
256 (100)	2	TASXMAIN	H	MAIN LIB AT EXECUTION
258 (102)	2	TASXCON	H	CONN LIB AT EXECUTION
260 (104)	2	TASXCOM	H	COMM LIB AT EXECUTION
262 (106)	1	TASCLASS	C	USER EXECUTION CLASS
263 (107)	1	TASXCNTL	C	EXECUTION CONTROL
		TASEXNWT	X'01'	RETURN CNTLR TO TERMNL USER IF NO IP IS AVAILABLE FOR EXECUTION
264 (108)	1	TASXCNCD	C	FORCED CANCEL CODE
265 (109)	2	TASXRSVD	2C	RESERVED
267 (110)	1		C	UNUSED

PRINTER FILE CONTROL INFORMATION

268 (10C)	0	TASPRTCT	OCL8	CONTROL PRINT FROM BACKGROUND
268 (10C)	4	TASPRTST	F	START OF PRINTER FILE
272 (110)	4	TASPRTND	F	END OF PRINTER FILE

OUTPUT FILE CONTROL INFORMATION

OFFSET	LENGTH	NAME	TYPE	DESCRIPTION
276 (114)	0	TASOUTCT	OCL8	OUTPUT FILE INFORMATION
276 (114)	4	TASOUTST	F	OUTPUT START RECORD NO.
280 (118)	4	TASOUTND	F	OUTPUT END RECORD NO.

USER LOG CONTROL AREA

284 (11C)	4	TASLOGST	F	START RECORD NO.
288 (120)	4	TASLOGND	F	LAST RECORD NO. IN AREA
292 (124)	4	TASLOGCR	F	CURRENT RECORD NO.

RETRIEVE CONTROL AREA

296 (128)	4	TASRVBEG	F	START ADDR OF RETRIEVE BUF
300 (12C)	4	TASRVEND	F	END ADDR OF RETRIEVE BUF
304 (130)	4	TASRVCUR	F	PTR TO NEXT CMD FOR RETRIEVE
308 (134)	1	TASRVSWI	C	CTL FLAG FOR RETRIEVE FCTN
			X'01'	RETRIEVE SET ON
			X'02'	DON'T STORE THIS LINE
			X'04'	ENTER-KEY PRESSED
			X'FF'	LENGTH OF RETRIEVE BUFFER

SCREEN AND OUTPUT CONTROL PARAMETERS

312 (138)	4	TASCRTAB	F	ADDR OF ACTIVE SCREEN TABLE ENTRY
316 (13C)	4	TASCRLAR	F	ADDR OF LARGE SCREEN TABLE ENTRY
320 (140)	4	TASFSPRM	F	F/S PARM LIST POINTER SAVE AREA

TASCREEN AND SUBFIELD DEFINITIONS

SCREEN CONTROL VALUES

324 (144)	1	TASCROPT	C	CONTROL OPTIONS
			X'01'	INDICATES NO SCREEN ERASE
			X'02'	DON'T VALIDATE LENGTH
			X'04'	DON'T XLATE OUTPUT
			X'10'	ON IF ALARM ON 3270
			X'20'	ON IF SCREEN INPUT AREA CLEARED
			X'40'	SET ON FOR MDT BIT ON
325 (145)	1	TASCRINP	C	NO. LINES IN INP AREA
326 (146)	1	TASCRSOT	C	STARTING LINE FOR OUTPUT
327 (147)	1	TASCROUT	C	NO. LINES IN OUTPUT AREA
328 (148)	1	TASCRSTR	C	STARTING OUTPUT COLUMN
329 (149)	1	TASCREND	C	ENDING OUTPUT COLUMN
330 (14A)	1	TASDELAY	C	DELAY BETWN CONTINUOUS BUFFERS
331 (14B)	1	TASCONTN	C	CONTINUOUS MODE DELAY
332 (14C)	1	TASSCRST	C	STATUS OF SCREEN
			X'01'	ALTERNATE SCREEN SIZE INDICATOR

OFFSET	LENGTH	NAME	TYPE	DESCRIPTION
			X'02'	MDT FLAG ON FOR INPUT AREA
			X'04'	FULL SCREEN WRITE IN PROGRESS
			X'08'	CLEAR KEY AFTER FULL SCREEN WRITE
			X'10'	FULL SCREEN WRITE W/O READ
			X'20'	TIOA CONTAINS ICCF COMMAND
			X'40'	SET IN CASE OF SHORT ON STORAGE COND.
			X'80'	APL TERMINAL
333 (14D)	1	TASCRSTA	C	STATUS OF SCREEN
			X'80	KATAKANA TERMINAL
334 (14E)	1	TASCREST	C	SCREEN RESTORE FLAGS
			X'01'	DO NOT RESTORE SCREEN
			X'02'	RESTORE SCREEN
			X'04'	RESTORE SCREEN (FOR EDITOR)
			X'08'	REMEMBER F/S-REQ WAS R-TYPE
			X'10'	REMEMBER F/S-REQ WAS T-TYPE
			X'20'	REMEMBER FIRST F/S-REQUEST
			X'40'	DON'T XLATE INPUT FROM BACKGROUND
			X'80'	DON'T DESTROY SCREEN

3270 EXTENDED FEATURES

335 (14F)	1	TASCREF	C	3270 EXTENDED FEATURES
			X'80	EXT. DATASTREAM SUPPORTED
			X'40	COLOR SUPPORTED
			X'20	PSS SUPPORTED
			X'10	HIGHLIGHT SUPPORTED
			X'08	VALIDATION SUPPORTED
			X'04	PARTITION SUPPORTED
			X'02	MSR CNTRL SUPPORTED
336 (150)	1	TASCRE2	C	3270 EXTENDED FEATURES
			X'80	FIELD OUTLINING SUPPORTED
			X'40	MIXED FIELD SUPPORTED
				(OTHER BITS RESERVED FOR
				FUTURE USE (SEE CICS))
337 (151)	1	TASCREFS	C	FLAG BYTE FOR F/S R/W
				CONTROLS 1 'SVC 82 CYCLE'
			X'80	DATASTREAM ERROR
			X'40	AUT.MSG.DISPLAY SUPPRESSED
			X'08	WRITE STRUCT.FIELD REQUEST
			X'02	WF WITH READ PART.QUERY

RETURNCODES FROM F/S R/W

X'04'	SHORT ON STORAGE
X'08'	USER MUST RESTORE
X'0C'	/WARN ISSUED
X'10'	INVALID OUTPUT DATASTREAM

OFFSET	LENGTH	NAME	TYPE	DESCRIPTION
			X'14'	EDS NOT SUPPORTED
			X'1C'	INVALID PARAMETER LIST
			X'20'	DATASTREAM ERROR
			X'40'	AUT.MSG.DISPLAY SUPPRESSED

PROGRAM FUNCTION KEY CONTROL

(152)	1	TASPFMD	C	ALL,LIST,EDIT,EXEC.MODES
(153)	1		C	UNUSED
(154)	4	TASPFSWT	F	CURRENT PF OFFSET INTO TABLE
(158)	16	TASPFKEY	16C	SWITCHES - 0 INDICATES PF NOT SET
(168)	4	TASPFKSV	F	SWITCHES FOR SAVE OF PF-KEYS

INPUT CONTROL CHARACTERS

(16C)	0	TASDEFLT	OCL8	DEFAULTS FROM USER ID RECORD
(16C)	1	TASDELC	C	DELETE CHARACTER
(16D)	1	TASTABC	C	TAB CHARACTER
(16E)	1	TASBSC	C	BACKSPACE CHARACTER
(16F)	1	TASEND	C	LINE END CHARACTER
(170)	1	TASESC	C	ESCAPE CHARACTER
(171)	1	TASCHHEX	C	HEX CONTROL CHARACTER
(172)	1	TASLNSZ	C	LINE SIZE PARAMETER
(173)	1		C	UNUSED
(174)	12	TASTABS	CL12	TAB SETTINGS

CONTROL MACRO PROCESSING

(180)	4	TASMACCR	F	CURRENT MACRO PROCESSING RECORD
(184)	2	TASMACLM	H	LIMIT ON MACRO READS
(186)	1	TASMACSW	C	MACRO CONTROL SWITCH
			X'01'	ON IF LIMIT ALREADY SET
(187)	1	TASMCNEW	C	EXIT: NEW COMMAND IN TX13

MISCELLANEOUS CONTROL INFORMATION

(188)	4	TASEXPCR	F	CURRENT COMPRESSION ROUTINE POINTER
(18C)	4	TASRSTAD	A	RESTART ADDRESS AFTER ROLL-OUT
(190)	8	SAVEA	CL8	SAVE AREA
(198)	8	SAVEB	CL8	*
(1A0)	8	TASSVC	2F	SAVE AND WORK AREA
(1A8)	8	TASSVD	2F	SAVE AND WORK AREA
(1B0)	8	TASSVE	2F	SAVE AREA
(1B8)	4	TASPSTAD	A	ADDR OF CICS ECB FOR FG AWAKE
(1BC)	2	TASTTYPE	CL2	DEVICE TYPE
(1BE)	2	TASRSV08	CL2	RESERVED
(1C0)	4	TASRSV06	F	USED IN FULL SCREEN EDITOR

OFFSET	LENGTH	NAME	TYPE	DESCRIPTION
		NEXT EQUATES ARE FOR FIRST BYTE OF TASRSV06		
			X'80'	SPECIAL HANDLING FOR TX00 AND EDIT
			X'40'	REMEMBER MSG35 FOR FS-EDIT
452 (1C4)	4	TASRSVCP	F	CURRENT RECORD FOR COMPRESS
456 (1C8)	4	TASSEC	F	32-1 SECURITY CLASSES
460 (1CC)	4	TASAUT	F	R/W AUTHORIZATION PER CLASS
464 (1D0)	8	TASSVF	2F	LINE NUMBER SAVE AREA
472 (1D8)	4	TASD$EXC	F	RECORD POINTER TO D$ RECORD WHEN /EXEC 'MEMBER NAME' WAS REQUESTED AND MEMBER WAS FOUND. POINTER IS SET BY TX08 AND RESET BY CJENT OR 2. LEVEL SVC HANDLER.
476 (1DC)	8	TASINCSV	CL8	NAME OF UNRESOLVED INCLUDE
		CHAINING ADDRESSES TO TAS AND TCTUA		
484 (1E4)	4	TASPTRFW	A	FORWARD CHAINING TO NEXT TAS LAST TAS IN CHAIN HAS 0 POINTER.
488 (1E8)	4	TASPTRBW	A	BACKWARD CHAIN TO PREVIOUS TAS FIRST TAS IN CHAIN HAS 0 POINTER.
492 (1EC)	4	TASTCTUA	A	ADDR OF TCTUA
		MESSAGE COMMUNICATION FLAGS FOR COMMUNICATION BETWEEN NOTIFY TASK, LOGON PROCESSOR(TX01), /MSG-COMMAND(TX04) AND ICCF		
496 (1F0)	8	TASMTIME	D	TIME STAMP OF LAST COMMON MESSAGE DISPLAYED
504 (1F8)	0	TASMECBU	0XL4	EVENT CONTROL BLOCK FOR USER MESSAGES
504 (1F8)	2		XL2	RESERVED
506 (1FA)	1	TASMECBT	X	TRAFFIC FLAG
			X'80'	POST INDICATION
507 (1FB)	1	TASMECBS	X	TEST AND SET CONTROL
508 (1FC)	1	TASLGCNT	X	LOGON COUNT, IF 00 LOGON COMPLETE, IF NOT 00 LOGON IN PROCESS. SET AT INITIAL ENTRY BY TX01 TO NOT 00, RESET ALSO BY TX01. TESTED BY ICC TO PREVENT I$$7 FROM BEING EXECUTED
509 (1FD)	1	TASMSGF	X	MESSAGE MODE FLAG
			X'01'	MESSAGE EXISTING IN COMMON MEMBER
			X'02'	MESSAGE EXISTING IN USER'S MEMBER
			X'04'	FORCE AUTOMATIC MSGS FOR COMMON MSGS
			X'08'	FORCE AUTOMATIC MSGS FOR USER MSG SET BY NOTIFY TASK; RESET BY TX04 AFTER MSG DISPLAY; TESTED BY ICCF TO SEE WHETHER I$$7 CAN BE STARTED OR

OFFSET	LENGTH	NAME	TYPE	DESCRIPTION
				TERMINATED
			X'10'	MESSAGE DISPLAY IN PROCESS FOR COMMON MSG (TX04 ONLY)
			X'20'	MESSAGE DISPLAY IN PROCESS FOR USER MSG (TX04 ONLY)
			X'40'	MESSAGE MODE 'MS' SET IF I$$7 STARTED; SET IN TX04 AFTER TX00 FOUND /MSG; TESTED BY DTSHIGH, SAME ACTION AS FOR ASYNCH MODE; RESET AFTER SCREEN REBUILD; RESET BY ICCF AFTER MSGCLOSE IF NON-AUTOMATIC, TESTED BY ICCF TO PREVENT RECURSIVE CALLING MSG COMMAND PROC.; TESTED IN TX04 TO SEE IF 'CONTINUOUS' ENTRY.
			X'80'	SET BY TX04 AT END OF MSG PROCESSING AFTER ALL MSGS ARE DISPLAYED. RESET BY ICCF.

SAVE AREAS FOR MSG DISPLAY (TX04)

510 (1FE)	2	TASLIBNO	H	ACTUAL LIB NO. BEFORE MSG DISPLAY
512 (200)	4	TASLIBR1	F	RECORD NO. OF LIB 1 HEADER RECORD
516 (204)	4	TASMFWD	F	FORWARD POINTER OF MSG DISPLAY
520 (208)	4	TASMBWD	F	BACKWARD POINTER OF MSG DISPLAY
524 (20C)	4	TASMPTR1	F	ADDR OF DUMMY RECORD
528 (210)	4	TASMPTR3	F	ADDR OF CURRENT RECORD(2)
532 (214)	4	TASMPTR2	F	ADDR OF CURRENT RECORD(1)
536 (218)	4	TASMPTR4	F	BACKWARD POINTER OF CURRENT RECORD
540 (21C)	4	TASMDUSR	F	NO. OF DIRECTORY REC FOR MSG$USERID
(220)	4	TASLBSAV	F	SAVE AREA FOR TASLBPTR
548 (224)	1	TASSELF	CL1	FLAG FOR SAME USERID
549 (225)	1	TASMTZ	CL1	X'00' IF NO MSGS IN TIOA X'C6' IF ERRORS IN MSG DISPLAY X'FF' IF MESSAGES IN TIOA

SAVE AREAS FOR I$$7

550 (226)	2	TAS$7TIL	H	LENGTH OF TIO2
552 (228)	1	TAS$7AID	CL1	SAVE AREA FOR AID
553 (229)	2	TAS$7CUR	CL2	SAVE AREA FOR CURSOR
555 (22B)	1	TAS$7COM	CL1	SAVE AREA FOR LAST COMMAND CODE
556 (22C)	4	TAS$7TIO	F	SAVE AREA FOR TIOA2 OF INTERROGATED TRANSACTION; CONTAINS 'MSGT' IF CICS
560 (230)	1	TAS$7CMM	CL1	SAVE AREA COMMAND MODIFIER

OFFSET	LENGTH	NAME	TYPE	DESCRIPTION
561 (231)	4	TAS$7TRN	CL4	SAVE AREA FOR INTERROGATED TRANSACTN
565 (235)	1	TAS$7SCR	CL1	SAVE AREA FOR TASFSW, TASFSWO, TASFSCMD FLAGS OF TASSCRST
566 (236)	1	TAS$7EDS	CL1	SAVE AREA FOR TASFULL FLAG IN TASEDSWT

SAVE AREAS FOR RETURN CODES

567 (237)	8	TASRTCD	CL8	RETURN CODE FOR MACRO PROCESSING
575 (23F)	1		C	UNUSED
576 (240)	4	TASNUMRC	F	NUMERIC RETURN CODE
				NUMERIC RETURN CODES BELOW X'80' ARE TO BE USED FOR ICCF CANCEL CODES INDICATING THE REASON OF TERMINATION OF AN INTERACTIVE PARTITION
			X'81'	EXEC REQST REJECTED; NO IP
			X'88'	ERROR IN /LIST (TASLSTER ON)
			X'01'	POWER COMMAND ERROR CODE
				X'000001NN' --¬ NN X'01' TO
				X'89' SET BY DTSIXP/DTSTX03
580 (244)	0	TASEXINF	0F	EXECUTION RETURN INFORMATION
580 (244)	2	TASEXRCE	H	EXECUTION RETURN CD EXTENTN
582 (246)	2	TASEXRC	H	EXECUTION RETURN CODE

SWITCH FOR GETMEMB IN TX00 AND TX08

584 (248)	1	TASGMEMB	CL1	C'M' GETMEMB FOR MACRO PROCESSING ALREADY DONE
				C'P' GETMEMB FOR PROCEDURE PROCESSING ALREADY DONE
				C' ' SWITCH CLEARED
585 (249)	3		CL3	UNUSED

CONTROL AREA FOR THE ICCF/CICS INTERFACE

588 (24C)	4	TASIPWA	F	ADDRESS OF I$$P TRANSACTION WORK AREA
592 (250)	1	TASIPMOD	X	I$$P PROCESSING SWITCHES
			X'80'	I/O TO REAL TERM REQUESTED, E.G. FOR LIST MODE
			X'40'	I/O GOES TO REAL TERMINAL
			X'20'	NATIVE ICCF MODE REQUESTED
			X'08'	LOGON IN PROCESS SIMULATED SESSION
			X'04'	RETURN TO CALLER
			X'02'	COMMAND IN DTSTCCB INPUT BUFFER
			X'01'	NATIVE ICCF MODE

OFFSET	LENGTH	NAME	TYPE	DESCRIPTION
				COPIED FIELDS FROM DTSIGEN
593 (251)	1	TASGENO1	CL1	GENOPT1 COPIED FROM DTSIGEN
594 (252)	2	TASCMLIB	H	COMLIB NO. COPIED FROM GENCOMLB; COPIED IN TX01 AT /LOGON
				FORCED LOGOFF CONTROL
596 (254)	1	TASLOCKE	X	LOCK BYTE FOR TAS
				NOT 0, XACTION ACTIVE FOR IT
597 (255)	1	TASLGFSW	X	FORCED LOGOFF INDICATOR
			X'01'	IF ON-USER WILL BE FORCED I.E. NO MORE ACCESS TO TERM
			X'02'	1 - USER WILL BE FORCED - NEXT TIME ICCF GETS CONTROL
598 (256)	1	TASPFLPC	X	PF LOOP COUNT TO FIND RECURSIVE PF CMD CALLS IN FS-ED
				BG EXECUTION UNDER PROGRAM CONTROL ([2ND IP[)
599 (257)	1	TASSESS	CL1	SESSION TYPE...
			X'00'	REAL SESSION
			X'01'	SIMUL.SESS. UNDER DTSCLPRC
			X'02'	SIMUL.SESS. UNDER DTSPROCS
			X'40'	REAL SESSION TO BE CANCELED DUE TO TERMINAL TIMEOUT
			X'80'	REAL SESSION TO BE CANCELED DUE TO OPERATOR CANCELED PP
600 (258)	4	TASSIMUL	A	PTR TO TAS OF THE SIMULATED SESSION, WHICH RUNS UNDER DTSCLPR IN THE REAL SESSION REPRESENTED BY THIS TAS.
604 (25C)	4	TASPWRCB	A	ADDR OF POWER INTERFACE CNTRL BLOCKS
608 (260)	1	TASTRNSV	C	LAST CHAR OF ORIGINAL XACTION
609 (261)	3	TASTSKSV	CL3	PACKED CURRENT TASK NUMBER
				CONTROL AREA FOR DOUBLE BYTE SUPPORT
612 (264)	4	TASDBSWK	F	ADDR OF DB SUPPORT WORK AREA
616 (268)	1	TASDBCTL	X	DB SUPPORT CONTROL SWITCHES
			X'80'	DB SUPPORT INITIALIZED
				ON - IF 5550 MIXED FIELD
			X'40'	5550 DOUBLE BYTE DISPLAY MODE ON - IF DB SUPPORT INITIALIZED (POWER/SPOOL LIST & DBCS MEM IF LIST
			X'10'	5550 MIXED FIELD TERM ASSOCIATED

OFFSET	LENGTH	NAME	TYPE	DESCRIPTION
				WITH SIMULATED SESSION
				(INFO REQUIRED IN MSGIO)
617 (269)	1	TASSPC	CL1	EDT SPECIAL SUBSTITION CHAR
618 (26A)	2		CL2	UNUSED
620 (26C)	20	TASPATCH	5F	PATCH AREA

ICCF TASK CONTROL BLOCK

'ECT NAME: DTSTCQD

IF THERE IS AN EXECUTION REQUEST, THE HIGH PRIORITY TASK CONNECTS A TASK CONTROL BLOCK TO A PICB AND THE INITIATING RQE. THAN A BOOTSTRAP ROUTINE IS MOVED INTO THE INTERACTIVE PARTITION AND THE TASK IS ATTACHED BY THE HIGH PRIORITY TASK. THE TASK CONTROL BLOCK CONTAINS IF ACTIVE A POINTER TO THE ASSOCIATED PICB AND THE INITIATING RQE. ALSO IT CONTAINS THE TASK ID AND THE /VSE TASK SAVE AREA.

THE FIRST BLOCK IS FOR THE HIGH PRIORITY TASK AND CONTAINS NEITHER A POINTER TO A PICB BLOCK NOR TO AN RQE ENTRY. THE SECOND BLOCK IS FOR THE TERMINAL CONTROL TASK AND CONTAINS NO POINTER TO A RQE ENTRY. THIS TWO TASKS ARE ALWAYS ATTACHED. ALL FOLLOWING ENTRIES IN THE QUEUE ARE FOR INTERACTIVE PARTITIONS. THE TCQ IS PFIXED DURING THE WHOLE ICCF SESSION.

OFFSET	LENGTH	NAME	TYPE	DESCRIPTION
0 (0)	8	TCQRCB	CL8	RESOURCE CONTROL BLOCK
	* * * *	PRECEDES ONLY THE FIRST TCQ ENTRY		
		START OF TCQ AREA		
8 (8)	1	TCQIDNT	C	TASK IDENTIFICATION NO.
9 (9)	1	TCQSTAT	C	TASK STATUS
			X'01'	ON IF TASK MAY NOT BE DETACHED. THIS IS TRUE FOR TIMER CONTROL AND MTCS
			X'02'	ON IF TASK AREA CURRENTLY ATTACHED
			X'04'	ON IF TASK IN USE
			X'08'	TASK WAS FREE AND SELECTED FOR ATTACH
			X'10'	TASK AREA IS ACTIVE AND DOS TASK IS NOT YET DETACHED
10 (A)	1	TCQTIME	C	TIME USED DURING THIS SLICE
11 (B)	1	TCQSLICE	C	TIME THIS TASK TO RUN
12 (C)	1	TCQPRTY	C	CURRENT PRIORITY WITHIN ICCF
13 (D)	3		CL3	UNUSED
16 (10)	4	TCQECB	F	TASK ECB
20 (14)	4	TCQWAITS	F	COUNT OF WAITS SINCE LAST SCAN
24 (18)	4	TCQRQE	F	ADDRESS OF REQUEST QUEUE ENTRY
28 (1C)	4	TCQPCIB	F	ADDRESS OF ACTIVE PCIB
		START OF TASK SAVE AREA		

How to locate: Displ. X'18' (MCSTCQ) of the MCSA contains the addr. of the TCQE. (Reg.12 will normally point to the TCQE.)

OFFSET	LENGTH	NAME	TYPE	DESCRIPTION
32 (20)	0	TCQSAVE	0CL174	TASK SAVE AREA
32 (20)	8	TCQNAME	CL8	TASK NAME
40 (28)	8	TCQPSW	CL8	INTERRUPT PSW FOR RESTART
48 (30)	4	TCQREG9	F	REGISTER 9
52 (34)	4	TCQREGA	F	REGISTER A
56 (38)	4	TCQREGB	F	REGISTER B
60 (3C)	4	TCQREGC	F	REGISTER C
64 (40)	4	TCQREGD	F	REGISTER D
68 (44)	4	TCQREGE	F	REGISTER E
72 (48)	4	TCQREGF	F	REGISTER F
76 (4C)	4	TCQREG0	F	REGISTER 0
80 (50)	4	TCQREG1	F	REGISTER 1
84 (54)	4	TCQREG2	F	REGISTER 2
88 (58)	4	TCQREG3	F	REGISTER 3
92 (5C)	4	TCQREG4	F	REGISTER 4
96 (60)	4	TCQREG5	F	REGISTER 5
100 (64)	4	TCQREG6	F	REGISTER 6
104 (68)	4	TCQREG7	F	REGISTER 7
108 (6C)	4	TCQREG8	F	REGISTER 8
112 (70)	8		2F	SYSTEM USE
120 (78)	32	TCQFPRGS	8F	FLOATING POINT REGISTERS
152 (98)	1	TCQSVTIK	C	ATTACH SAVE AREA FOR TIK
153 (99)	7		CL7	SYSTEM USE
160 (A0)	2	TCQRSPSW	D	RESTART PSW AFTER FORCED WAIT
168 (A8)	12	TCQRSRGS	3F	REGS 15,0,1 IF TASK IN FORCED WAIT
180 (B4)	8	TCQPCKAD	2F	SAVE AREA FOR STXIT PC INFO
188 (BC)	8	TCQABND	2F	SAVE AREA FOR STXIT ABEND INFO
196 (C4)	8	TCQOCMAD	2F	SAVE AREA FOR STXIT OC INFO
204 (CC)	1	TCQFLAG	X	FLAGS FOR ROLL-IN INFO
			X'01'	DASD FILE PROTECT INHIBIT FLAG TO BE RESTORED AT ROLL-IN
			X'02'	STXIT INFO TO BE RESTORED AT ROLL-I
205 (CD)	1	TCQFLAGA	X	FLAGS FOR SVC CONTROL
			X'01'	NEXT SVC2 MIGHT COME FROM LTA
			X'02'	SUBSYSTEM IS EXEC IN IP
			END OF TCQSAVE	
206 (CE)	1	TCQDISP	X	DISPATCHING STATUS OF TASK
			X'01'	TASK GETS A DISPATCHING CYCLE AND NEEDS TO BE RESTARTED
			X'02'	TASK IS IN FORCED WAIT
			X'04'	TASK IS SET BOUND BY DISPATCHER EXIT
			X'08'	REQUEST CANCEL OF TASK
207 (CF)	1	TCQCOND	X	NON-ROLL-OUT CONDITIONS FOR TASK
			X'01'	TEMPORARY NON-ROLL-OUT DUE TO ABEND PROCESSING

OFFSET		LENGTH	NAME	TYPE	DESCRIPTION
				X'02'	TEMPORARY NON-ROLL-OUT BECAUSE OF LOCKED RESOURCES
				X'04'	TEMPORARY NON-ROLL-OUT BECAUSE OF XECB SERVICES
				X'08'	TEMPORARY NON-ROLL-OUT BECAUSE OF OWNING B-TRANSIENT
				X'10'	TASK WAITS ON INTERNAL RE-SVC
				X'20'	TASK IS NOTIFY BOUND (SVC113)
				X'80'	TASK IS USER REQUEST BOUND
				X'FF'	TASK IS NOT BE ROLLED OUT
208	(D0)	4		CL4	CURRENTLY NOT USED
212	(D4)	20	TCQENTRY	CL20	ENTRY SEQUENCE AFTER ATTACH
232	(E8)			ORG *-1	ORG TO LAST BYTE OF ENTRY SEQUENCE
231	(E7)	1	TCQTIK	C	MY SAVE AREA FOR KEY OF TASK ATTACHED
32	(E8)	4	TCQENECB	F	INITIAL WAIT ECB
236	(EC)	12	TCQPATCH	3F	TCQ PATCH SPACE

COMMUNICATION VECTOR TABLE

DSECT NAME: DTSVECTB

THE ICCF VECTOR TABLE SERVES AS COMMUNICATION AREA BETWEEN ICCF AND THE SUPERVISOR. THE MACRO ALLOWS TO GENERATE THE VECTOR TABLE OR OPTIONALLY THE DSECT FOR THE VECTOR TABLE.

THE VECTOR TABLE CONTAINS
- ENTRY POINT ADDRESSES INTO ICCF BUILT AT ICCF INITIALIZATION TIME
- INTERRUPT INFORMATION BUILT BY THE SUPERVISOR INTERRUPT HANDLERS

OFFSET		LENGTH	NAME	TYPE	DESCRIPTION
0	(0)	0	DTSVECB	0F	BEGIN OF VECTOR TABLE
0	(0)	4	DTSOCAP	F	ICCF OC ROUTINE
4	(4)	4	DTSSVCAP	F	ICCF SVC APPENDAGE ROUTINE
8	(8)	4	DTSMCAP	F	ICCF MC APPENDAGE ROUTINE
12	(C)	4	DTSMCSA	F	ADDR OF ICCF MCSA
16	(10)	4	DTSCUSA	F	ADDR OF CURRENT SA
20	(14)	4	DTSSVCPB	F	SECOND LEVEL SVC INTERCEPT
24	(18)	4	DTSSVCPE	F	ADDR RANGE FOR PROGRAM CHECK
28	(1C)	2	DTSSVCC	H	SVC INTERRUPT CODE
30	(1E)	2	DTSMCC	H	MC INTERRUPT CODE
32	(20)	2	DTSHTID	H	TID OF HIGH PRIORITY TASK
34	(22)	2	DTSITPIK	H	ICCF-PIK AT INIT. OR TERM. TIME
36	(24)	4	DTSECB	F	SUPVR-MUST-COMPLETE ECB
40	(28)	2	DTSNPART	H	NO. OF INTERACTIVE PARTITION
42	(2A)	0	DTSFLAGS	0CL2	ICCF-FLAGS
42	(2A)	1	DTSFLG1	C	CURRENTLY UNUSED
43	(2B)	1	DTSFLG2	C	MORE FLAGS
				X'80'	ICCF SUPERVISOR ROUTINE CANCELED
				X'40'	SVC IS TO BE REPEATED BY SUPERVISOR; THE ORIGINAL SVC CODE IS IN DTSSVCC
44	(2C)	1	DTSFLGJ	C	JCL FLAGS
				X'01'	DUMP OPTION ON/OFF
				X'02'	LOG OPTION ON/OFF
				X'04'	FAST-CCW-XLATION OPTION ON/OFF
45	(2D)	0	DTSDUM	0CL8	DUMMY ASSIGNMENTS
45	(2D)	2	DTSLST	CL2	SYSLST/SYSNNN ASSIGNMENT
47	(2F)	2	DTSIPT	CL2	SYSIPT/SYSNNN ASSIGNMENT
49	(31)	2	DTSPCH	CL2	SYSPCH/SYSNNN ASSIGNMENT
51	(33)	1	DTSPCHIN	C	SYSNNN ASSIGNMENT
52	(34)	1	DTSLOG	C	SYSNNN ASSIGNMENT

How to locate: Displ. X'11C' (IJBETSS) of the SYSCOM contains the addr. of the ICCF Vector Table.

OFFSET		LENGTH	NAME	TYPE	DESCRIPTION
53	(35)	1	DTSPKEY	C	PSW KEY SAVED BY MC O
54	(36)	2	DTSVCUCN	H	RECOVERY COUNT FIELD
56	(38)	2	DTSCNTHA	H	COUNT OF CURRENT ICCF SLI LEVELS
58	(3A)	2	DTSCNTHB	H	BIT B'0000111111111111' ON SHOWS WHICH PART. HAS CURRENTLY ICCF SLI IN USE. HIGH BIT TO LOW BIT IS PART. FB FA F9 F8 F7 F6 F5 F4 F3 F2 F1 BC
60	(3C)	2	DTSCNTHC	H	NOT USED YET COUNT FIELD
62	(3E)	2		H	UNUSED
64	(40)	4	DTSCNTFA	F	NOT USED YET FULLWORD
68	(44)	8		CL8	RESERVED

THE FOLLOWING ADDRESSES ARE USED BY DTSCTRLH TO EXCHANGE AB AND PC EXIT ROUTINE ADDRESSES IN CASE OF TASK SWAPPING ..... TEMPORARILY .....

76	(4C)	4	DTSPCBAD	F	PCB TABLE ADDRESS
80	(50)	2	DTSTIBAD	H	TIB DISPLACEMENT
82	(52)	2	DTSTIBTC	H	OFFSET OF TIB TCB ADDR
84	(54)	2	DTSTCBPC	H	OFFSET OF PC EXIT ROUTINE A
86	(56)	2	DTSTCBAB	H	OFFSET OF AB EXIT ROUTINE A
88	(58)	2	DTSTIDST	H	OFFSET OF PCB TID STRING

CROSS-REFERENCE COMMANDS - MODULE(S)

The following table shows the sequence in which the VSE/ICCF command processors DTSTX00 to DTSTX13 are executed in order to handle given command.

System Commands			
$	see /RUN	/LISTC	00-04(-12,if compr)
/ASYNch	00-03	/LISTP	00-04-03
/ATten	00-03	/LISTX	00-04(-12,if compr)
'CANcel	00-03(EX) 00-04(LS)	/LOCATE	00-03(SP) 00-04(LS)
	00-08(IN)[1]	/LOCP	see /LOCATE
/COMpres	00-03(EX) 00-04(LS)	/LOGOFF	00-06
/CONNect	00-07	/LOGON	00-02
/Continu	00-03(EX) 00-04(LS)	/LP	see /LISTP
/COUNT	00-05	/MAil	00-04
/CP	see /CTLP	/MSG	00-04
/CTL	see /SET	/PASswrd	00-07
/CTLP	00-03-04-03	/PFnn	00
/DELete	00-08	/PROmpt	00
/DISPC	00-04(-12,if compr)[2]	/PROTect	00-05
/Display	00-04(-12,if compr)	/PURge	00-05
/DQ	00-03-04-03	/RENAMe	00-05
/ECHO	00-07	/RENUM	see /RESeq
/EDit	00-02-04	/REPlace	00-08-05
/END	00-08	/RESeq	00-05
/ENDRun	00-08-03	/RETRIEV	00-07
'EP	see /ERASEP	/RETURN	00
/ERASEP	00-03	/ROUTEP	00-03
/EXec	00-08-03	/RP	see /ROUTEP
/GRoup	00-05	/RUN	00-03
/HARdcpy	00-07	/SAve	00-08-05
/HELP	00-04	/SENd	00-07
/INPut	00	/SET	00-09
/INSert	00-08-04(-12,if compr)	/SETIme	00-07
/LIBC	00-04	/SHIFT	00-03(SP) 00-04(LS)
/LIBrary	00-04	/SHow	see /STatus
/List	00-04(-12,if compr)	/SKip	00-03(SP)[3] 00/04(LS)

---

[1] Different sequences are possible for different modes.

[2] DTSTX12 is used, if the member to be displayed is compressed.

/SP	see /STATUSP
/SQueeze	00-12
/STatus	00-07
/STATUSP	00-03
/SUMry	00-04
/SWitch	00-07
/SYNch	00-03
/TABset	00-09
/Time	00-07
/USers	00-07

Editor Commands

	Context	F/S Editor
Add	00-02-04	13-00-02
ALIgn	00-02-04	13-00-02
ALter	00-11-04	13-00-11
BAckward	see UP	
BLank	00-02-04	13-00-02
Bottom	00-02-04	13-00-02
BRIEF	see VERIFY	
CANcel		13
CAse	00-02	13-00-02
CENter	00-02-04	13-00-02
Change	00-11-04	13-00-11
CTL	see SET	
CURsor		13
DELete	00-11-04	13-00-11
DELIM	00-02-04	13-00-02
DOWN	see NEXT	
DUP	00-11-04	13-00-11
ECHO	00-02	13-00-02
END	see QUIT	
ENTer		13
FILe	see SAVE	
Find	00-02-04	13-00-02
FLag	00-02-04	13-00-02
FORMat		13
FOrward	see NEXT	
GETfile	00-11-04	13-00-11
HARDCPY	00-07	13-00-07
IMage	00-02	13-00-02
INDex	00-02-04	13-00-02
INPut	00-11-04	13
Insert	00-11-04	13-00-11
JUStify	00-02-04	13-00-02
LAdd		13-00-11
LEft		13
LIBrary	00-02-04	13-00-02-04
LINemode	00-02	13-00-02
LN	see LOCNot	
Locate	00-11-04	13-00-11
LOCNot	00-11-04	13-00-11
LOCUp	00-11-04	13-00-11
LUp	see LOCup	
MSG	00-04	13-00-04
Next	00-02-04	13-00-02
Overlay	00-02-04	13-00-02
OVERLAYX	00-02-04	13-00-02
OX	see OVERLAYX	
PF	see PRINTFwd	
PFnn		13
POint	00-02-04	13-00-02
Print	00-02-04	13-00-02-04
PRINTFwd	00-02-04	13-00-02-04
PROmpt	00-02-04	13-00-02
RIght		13
Quit	00-02	13-00-02-04
RENum	00-02-05	13-00-02-05
REPEAT	00-02-04	13-00-02
REPlace	00-02-05	13-00-02-05
REStore	00-02-04	13-00-02
Rewrite	00-02-04	13-00-02
RPT	see REPEAT	
SAVE	00-02-05	13-00-02-05
SCReen		13
Search	00-11-04	13-00-11
SET	00-02-09	13-00-02-09
SHIft	00-02-04	13-00-02
SHow	see STATUS	
SPlit	00-11-04	13-00-11
STACk	00-02-11-04	13-00-02-11
STATUS	00-02-07	13-00-02-07
TABSET	00-02-09	13-00-02-09
Top	00-02-04	13-00-02
TYPE	see Print	
Up	00-02-04	13-00-02
Verify	00-02-13	13
VIEW		13
Zone	00-02-04	13-00-02
'nnnnn'	00-11	13-00-11

---

[3] SP: the file displayed is a VSE/POWER spool file.

F/S Editor Line Commands

/	13
"	13-00-11
>	13-00-02
<	13-00-02
A	13-00-11
C	13-00-02-11
D	13-00-11
I	13-00-11
K	13-00-02-11
M	13-00-02-11
TA,TC,TL,TR	13-00-02
TS	13-00-11

DTSFDUMP UTILITY PROGRAM

The DTSFDUMP program is used to interpret and format VSE/ICCF tables and to display the formatted output on SYSLST. It can run either in a VSE or a VSE/ICCF interactive partition.

When run in a VSE partition DTSFDUMP can set different modes of operatio by UPSI bit settings. If UPSI bit 0 is not set (//UPSI 0), the program requires a tape created by the program 'DOSVSDUMP', which must be assigned to SYS007. A scan is made on the tape for the ICCF identifier and, if found, tables are formatted and printed. A blank line is inserted in the dump at the start of each control block that was found to make control tables in the dump easier to locate. The actual and relative addresses of all formatted tables are printed to make them easier to find in the assembler listings of VSE/ICCF. When the ICCF identifier is not found o the tape (an EOF is found) an error message is printed and the job i terminated.

If UPSI bit 0 is set (//UPSI 1), a test is made to see if VSE/ICCF is running in another partition and, if so, a dump is made from the running ICCF partition to SYSLST in the same format as if from tape. This dump does not seize the system, which means data in the tables and the final dump may differ. If VSE/ICCF is not running, an error message is printed and the job is terminated. To get a seized dump, issue the DUMP ALL,cuu command where cuu is a tape drive with an unlabeled scratch tape mounted. This seized dump may the be processed via DTSFDUMP.

If UPSI bit 1 (//UPSI x1) is set, only tables are printed but not the final dump.

If UPSI bit 2 (//UPSI xx1) is set, a number of 'forward space files' on the tape is desired. The number of files is specified by using UPSI bit 5 to 7 (xxxxxnnn). This means if bits 5 to 7 are all zero, one forward space file is performed; if 5 to 7 are set, eight forward space files are performed, making it possible to skip up to eight tape marks. This function can be used if more than one dump is on the input tape, or for processing a stand alone dump tape, where the dump data are in the third file (in this case you have to specify //UPSI xx1xx001).

If UPSI bit 3 (//UPSI xxx1) is set, it is possible to scan, for a specifie character string, the VSE/ICCF partition or the dump on tape dependir on UPSI bit 0. You are prompted by a message to enter the scan start an stop address. If no address is entered the scan is made for the whole VSE/ICCF partition. After the next message you can enter the scan string in hexadecimal (two characters per byte) or in character format (one character per byte). For character format the scan string must be enclosed in quotes. An included quote in the string must be entered twice. The maximum length of the scan argument is 16 bytes. If the scan argument is entered in hexadecimal format, each halfbyte which is entered as 'X' (47XXBX) may have any bit configuration in the dump (see description o the following pages). Each match found is printed on SYSLST.

When DTSFDUMP is run in a VSE/ICCF interactive partition you are able to display various ICCF tables and to display or alter areas in the supervisor or in ICCF. You are also able to scan within the ICCF partition.

The following describes typical DTSFDUMP output from operations in interactive partitions:

CSA	01	RQE	01	PICB	05	TCQ	11	MNECB	0
HIECB	01	DIFO	02	EXPICB	01	LAB1NFO	00	AUXP1	00
AUXP2	01	AUXP3	02	AUXP4	02	AUXP5	02	AUXP6	06
AUXP7	01	MFH	01	MFCT	01	EXTENTTB	01	BUFTABLE	10
FILEBUFF	10	BUFF	03	TCCSA	01	TAS	01	FSEP	00
FSCR	00	FSED	00	XPCCB	01				

```
ENTER TABLE NAME AND NUMBER OF ENTRY                              *
OR EOJ FOR EXIT OR DD HEXADDR OR SA HEXADDR OR SCAN OR SCAF
```

By typing in the table name and a number of up to the value shown after the name, you are able to display the current value in this table formatted on your terminal. For example, if you want to display the sixth entry you have to enter:

```
TCQ 06
```

If no number is entered after the table name, the first entry is taken. Each table name may be abbreviated to at least one character, but the table will be scanned from left to right and top to bottom. So if, for example, you enter only 'T', the TCQ entry will be displayed; but if you enter 'TCC', the TCCSA will be displayed.

Following is the meaning of the tables:

CSA	Main Task Common System Area including DTSIGEN
RQE	Request Queue Entry
PICB	Interactive Partition Control Block
TCQ	Task Control Queue Block
MNECB	Main Task ECB
HIECB	Timer Interrupt ECB
DIFO	Dynamic Disk Information Block
BUFF	Buffer from the file rcutine
EXPICB	Interactive Partition Information Block Extension
LABINFO	Label Information Block
AUXP1	Save Area in Interactive Partition Part One
AUXP2	Save Area in Interactive Partition Part Two
AUXP3	Save Area in Interactive Partition Part Three
AUXP4	Save Area in Interactive Partition Part Four
AUXP5	Save Area in Interactive Partition Part Five
AUXP6	Save Area in Interactive Partition Part Six
AUXP7	Save Area in Interactive Partition Part Seven
MFH	Main File Handler Pointer
MFCT	DTSFILE Control Table
EXTENTTB	DTSFILE Extent Table and Set Vector Value Table
BUFTABLE	Buffer Table Entry
TLEBUFF	CCW's and ECB's for Buffer Table Entry
TCCSA	Terminal Control Main Area
TCS	Terminal Associated Storage
FSEP	Full Screen Editor Session Table
FSCR	Full Screen Editor Screen Table
FSED	Full Screen Editor Member Table
XPCCB	Control Block for Message Service

Also the following codes are possible:

nnnnnn

128 bytes starting at hex address nnnnnn will be displayed in hex and character format.

SA nnnnnn

Up to 16 bytes starting at hex address nnnnnn might be altered. The area is displayed first, if no alteration is wanted. Pressing the ENTER key with no data in the input line will leave the storage alter mode.

Entering 'DD' or 'SA' with no hex address will result in the following three lines:

```
ICCF ADDRESS FROM 21A920 to 3CB580
```

```
OR SUPERVISOR ADDRESS 0 TO 032780 ALLOWED
NO OR INVALID HEXADDR TRY AGAIN
```

The displayed addresses are the space where you might use the 'DD' or 'SA' function.

SCAN or SCANF

The ICCF partition will be scanned in a user defined area for a user defined scan argument which might be a character or a hex string. The maximum length of the scan argument is 16 bytes. Command 'SCAN' will scan whole area and display all hits in hex and character format. Command 'SCANF' will display each hit directly and the user can then decide if he wants to continue scanning or not. After entering 'SCAN' or 'SCANF' the following message will be printed:

```
SCAN ADDRESS FROM 21A920 TO 3CB580
ENTER SCAN START AND STOP ADDRESS OR EOJ FOR EXIT
```

Now the scan limits must be entered. The following forms are possible:

nnnnnn mmmmmm	scan from address nnnnnn to address mmmmmm
nnnnnn	scan from address nnnnnn to end address
-mmmmmm	scan from start to address mmmmmm
NO INPUT	scan from start to end address

nnnnnn and mmmmmm must be within the scan limits which are indicated in the message above. mmmmmm must be higher then nnnnnn.

After the following message is printed, you can enter your scan argument.

```
ENTER SCAN STRING OR SCAN STRING WITH FO FOR FIRST OCCURRENCE ONLY
```

The following forms are possible as a scan argument:

'ABCDEFG'	Character string which must be enclosed in quotes.
'RRT''RRT'	Enclosed quotes must be entered twice without blank.
47f0B004	Hex string which must be an even number of hex characters.
47XXBXX4	Hex string with unknown halfbytes in the X positions. Any data in the X positions will be treated as equal.
50E0BXX8 FO	The FO sets you in SCANF mode if the scan function was called with 'SCAN'.

The scan function is the same if the DTSFDUMP is running in a batch partition. The scan function will then be called by UPSI bit 3 (xxx1).

EOJ

Exit the program. EOJ at any place for any requested input will exit t program.

VSE/ICCF Handbook
Order No. LY33-9122-0

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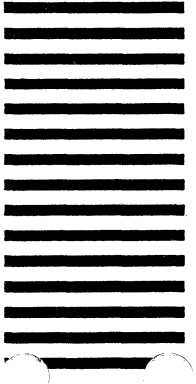

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