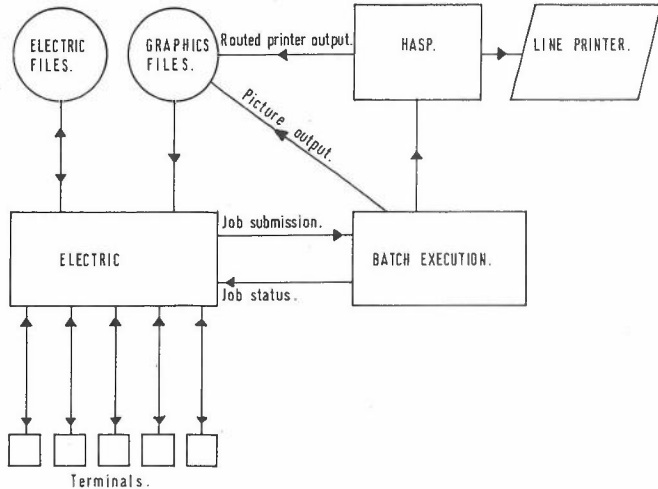


# ELECTRIC Reference Data



The ELECTRIC program is a facility for file handling, terminal job submission and job status interrogation together with output retrieval facilities. Both picture output and selected parts of normal printer output may be interrogated from a terminal. The general flow of information is shown in the diagram below.



## COMMANDS SYNTAX

All ELECTRIC commands have the same syntax for which the general form is:

COMMAND NAME=VALUE, NAME=VALUE, -----

The command may be abbreviated to four letters and must be separated from the parameter list by at least one space.

The parameter list may be in any order and spaces within the parameter list are ignored. If any of the characters ".,space( ),:" are required in the value, the value must be enclosed in primes. Double primes must be used for primes within primes (Fortran rules). The parameter setting, TEXT= may be abbreviated to the single character '!' if the text parameter setting is the last item in a parameter list. In this case all characters are allowed in the value and the value must not be enclosed in primes.

Lower case characters may be contained within the value by enclosing the value within a pair of double quotes (""). Otherwise lower case characters are translated into upper case.

## FILE NAME DEFINITION FOR ELECTRIC FILES

The general form of the file name definition is

FILENAME=DIRE1.DIRE2 ..... FILENAME (l1,l2,g1,g2,.....)  
 where DIRE1,DIRE2 etc are directory names

FILENAME is the filename of 1 to 8 characters  
 l1 and l2 are integers representing line numbers  
 to define part of the file  
 g1,g2 etc are group names (of two characters) or  
 the words YES or NO and describe the editing  
 that is required.

All parts of the definition apart from the FILENAME may be omitted.

DIRE1 must be one of the following reserved directory names:

H	ELECTRIC master directory
IDNAINDR	User ID's main directory
A	Abbreviation for user's main directory
B	May be set using the SETDIRE command to be a synonym for any directory
C	User's current directory

If DIRE1 is not one of the reserved names or if no directory is given in the file definition, the first name is assumed to be in the user's current directory.

COMMAND	DESCRIPTION	PARAMETERS				
		NAME	VALUE	DEFAULT	DESCRIPTION	
LOGIN	Logs user in	ID	2 Chars	None	Personal identifier	
		ACCT	4 Chars	None	Group account number	
		KEY	4 Chars	No key	Password	
		DEV	0-10	0	Device type	
		MF	YES,NO	YES	Fault message controller	
		REMOTE	1-99	LOCAL	Remote printer number	
LOGOUT	Logs user out					
ENTER	Creates a new file and puts ELECTRIC into a mode where it expects lines of text or edit sub-commands	FILE)	Name	None	New text file	
		JOB )	Name,ED	None	New edit file	
		ACCESS	4 Chars	FRFR	Access control	
		ENTLEN	1-255	255(text)	Maximum entry length	
			60	60(edit)	Fixed entry length	
		ENTTYP	4	4(dire)	Fixed entry length	
			4 Chars	HVLE(text)	Type of entries in text	
			4 Chars	HVLE(edit)	files, edit files and	
			4 Chars	WPDR(dire)	directories	
		FILEKEY	4 Chars	No filekey	File Password	
		LABEL	YES,NO	YES	Text labelling control	
			1-99	1	Edit label	
		OWNER	2 Chars	Login ID	File owner	
		PARTNERS	2-10	8	Max. no of partners	
		RETDT	DAY/MTH/YEAR	0/0/0	Retention date	
		ADDPTRN	List of id's	No partners	List of part-owners of the file	
APPEND	Appends text or edits to an existing file. After this command ELECTRIC expects lines of text or edit sub-commands	FILE)	Name	None	Text file to be appended to	
		JOB )	Name,ED	None	Edit file to be appended to	
		LABEL	1-99	1	Edit label	
		TAB	1 char	Space	Tab output character	
MODIFY	Modifies a text or edit file. After this command ELECTRIC expects edit sub-commands	FILE)	Name	None	Text file to be modified	
		JOB )	Name,ED	None	Edit file to be modified	
		LABEL	1-99	1	Edit label	
		TAB	1 char	Space	Tab output character	
\$\$	Terminates ENTER, APPEND, MODIFY and DFND sub-modes	ACTION	YES,NO	YES	Specifies whether editing should be performed	
		DF	YES,NO	NO	Controls defaults on PLANTS and SUPPLIES	
					Any user supplied parameters required for modifying text, e.g. to satisfy PLANTS and SUPPLIES with \$A	
COPY	Creates a new file and copies an existing file, edited or unedited into it	FILE)	Name	None	Text file to be copied	
		JOB )	Name,ED	None	Edit file to be copied	
		FILE2)	Name	None	New text file	
		JOB2 )	Name,ED	None	New edit file	
		OF	YES,NO	NO	\$P and \$\$ default control	
					All optional parameters associated with the ENTER command	
		Bracket parameters for FILE or JOB	l1(text)	0-end	0	First line to be copied
			l1(edit)	0.1-end	0.1	First edit to be copied
			l2	l1-end	end	Last line of text or last edit to be copied
			g1,g2,...	2 Chars	DG	Edit group names or dummy names
		Dummy group name	G1,G2,...	GROUP	No dummy names	Allows delayed specification of edit groups
		Bracket parameters for GROUP	g1,g2,...	2 Chars	No groups	Edit group names
			lb1,lb2,	1-99	No labels	Edit labels
		To copy an ELECTRIC file to or from an O.S. data set	TODSN	DSName	None	Output data set name
			FROMDSN	DSName	None	Input data set name
			VOL	6 Chars	USDSK1	Volume name
			DISP	NEW,OLD, SHR,MOD	SHR(read)	Disposition of data set
					NEW(write)	
			SPP	integer	2	Primary space in tracks
			SPS	integer	5	Secondary space in tracks
			DCB	F800,	F800	Record format specification
				F1320,	V1320	
			L	YES,NO	NO (for F)	Whether length to be written in record
					YES (for V)	
TYPE	Types out a file	FILE)	Name	(Current	Text file to be typed	
		JOB )	Name,ED	(file	Edit file to be typed	
		NL	1-10	Rest of file	Number of lines to be typed	
				file	(maximum depends on device)	
		MF	1-99	No MF	Fault message number	
		LINENUM	YES,NO	YES	Controls line numbering	
		TAB	1 char	Space	Tab output character	
					The LN,TEXT and COL parameters as defined for \$L and \$M	
		Bracket parameters for FILE or JOB	l1(text)	1-end	1	First line of text or edit or start of context search
			l1(edit)	0.1-end	0.1	Last line of text or edit
			l2	l1-end	end	Typing of title line
				YES,NO	YES	
STOP	Stops typing					
DELETE	Deletes a file	FILE)	Name	None	File to be deleted	
		JOB )	Name,ED	None	Edit file to be deleted	
		Bracket parameters for text file only	YES,NO	YES	Controls deletion of whole file or only text part	
CLEAR	Deletes all the entries in a file	FILE)	Name	None	Text file to be cleared	
		JOB )	Name,ED	None	Edit file to be cleared	

COMMAND	DESCRIPTION	PARAMETERS			
		NAME	VALUE	DEFAULT	DESCRIPTION
EXEC	Submits a text file, edited or unedited, to the central computer job queue	FILE) Name JOB ) LABEL YES,NO, CONT,ED NO COL 1-73 73 DF YES,NO NO ID 2 chars (Login ACCT 4 chars (values ROUTE ELECTRIC ( ( Routes to GRAPHICS PRINTER6 ( LOCAL Routes to terminal 1130 RENOTen ( Routes to remote w/s	None	None	File to be submitted Controls labelling of line output First column of label Controls defaults on PLANTS and SUPPLIES ID planted on job card ACCT planted on job card Routes to terminal 1130 Routes to remote w/s
		The optional parameters as defined for Output Routing Any user specified parameters required for editing, e.g. to satisfy PLANTS and SUPPLIES All bracket parameters associated with the COPY command, including dummy group names			
STATUS	Gives status of jobs in the 360 or HASP status file	JOB 1-8 char OPT 1-999 H,M SKIP integer 0	None	None	Job name HASP job number Information controller No. of jobs to be skipped
CANCEL	Cancels a job which is queued or executing	JOB 1-999 ID 2 Chars (Login ACCT 4 Chars (values	None	None	HASP job number ID on job card ACCT on job card
PARM	Allows entry of parameter list without operation	Any parameters which are to form part of the parameter list of the subsequent command			
EXAMINE	Types out the information in the control block of a file	FILE) Name JOB ) Name,ED	None	None	Text file to be examined Edit file to be examined
	Bracket parameters:	1 1-4 YES,NO NO	4	NO	No. of lines of information Controls typing of key
CHANGE	Changes the information in the control block of a file	FILE) Name JOB ) Name,ED DELPTR One ID ALL	None	None	Text file to be changed Edit file to be changed Deletes given partner Deletes all partners
		The ACCESS, ADDPTR, FILEKEY, LABEL, OWNER and RETDT parameters as defined for the ENTER command			
RENAME	Renames files or directories	FILE1) Name JOB1 ) FILE2) Name JOB2 )	None	None	File to be renamed New name of file or directory
CREDIR	Creates a new directory	FILE Name	None	None	Name of the new directory
		The ACCESS, ADDPTR, FILEKEY, LABEL, OWNER, PARTNERS and RETDT parameters as defined for the ENTER command			
SETDIR	Redefines the users current B or C directories	B Name C Name	No change	No change	New B directory New C directory
USERS	Types out a list of logged-in users	MF YES,NO	YES		Fault message controller
PRINT	Prints a file (or files) on the system line-printer	FILE) Name JOB ) Name,ED FILEn) Name JOBn ) Name,ED r1,2... list LINENUM YES,NO, COWT LABEL ED,NO COL 1-113 93 ENTLEN 4-130 120 JBNM 1-5 char OUTPUT PH 2 chars Login ID CLASS 1 char X TIME min-sec 10 secs LINES integer 2 COPIES integer 1 FORMS 1-4 char No forms 555 No forms LNCNT integer 58 TAB 1 char Space	None	None	File to be printed Edit file to be printed List of files to be printed Controls numbering of file entries Controls edit labelling First column of label Max. entry length Name of output job First 2 chars of job name Job class Job CPU time Max. no. of lines of output No. of copies of output Special forms Lower case print chain No. of lines per page Output tab character
		The ID, ACCT, DF, ROUTE and optional routing parameters as defined for the EXEC command			
PUNCH	Punches a file (or files) on to cards on the system card punch	FILE, JOB, FILEN, JOBN, DF, ROUTE, PH, CLASS, TIME, JBNM, ID and ACCT parameters as defined for the PRINT command LABEL YES,NO, CONT,ED NO COL 1-73 73 ENTLEN 4-80 80 CARDS integer 100 ENTER YES,NO NO PUNCH REMOTen LOCAL	None	None	Controls labelling of card output First column of label Max entry length Max. no. of cards output Outputs ENTER command before each file and \$\$ after each file Routes cards to v/s punch

COMMAND	DESCRIPTION	PARAMETERS			
		NAME	VALUE	DEFAULT	DESCRIPTION
TAPE	Puts contents of a file (or files) on to magnetic tape	FILE, JOB, FILEN, JOBN, DF, ROUTE, PH, CLASS, TIME, ENTER, JBNM, ID, ACCT parameters as defined for the PUNCH command LABEL YES,NO, CONT,ED NO COL 1-248 93 ENTLEN 4-255 255 VOL 1-6 char None JBN 0-3 3 DISP NEW,OLD NEW SHR,MOD DSM 1-8 char TAPEOUT FILENUM 1-9999 1 TYPE SL,NSL, SL HL, SUL UNIT ( See TAPES RECFL ( JCL FB LRECL ( manual 80 BLKSIZE ( 800	None	None	Controls labelling of taped output First column of label Maximum entry length Tape volume name Tape density Disposition of data set Data set name Data set sequence no. Type of tape labels Device type or group name Format of records Logical record length Block size
MESSAGE	Sends a message to other users	TOID List of id's TEXT 1-90 ch	None	None	ID's of recipient users Text of message
MAIL	Sends a file as a letter to another user	FILE) Name JOB ) TOID 2 chars SER 1-6 char H YES,NO YES	None	None	File to be mailed Receiver's identifier Serial no. for filename Heading controller
ARCHIVE	Archives a file to the archive disk	FILE) Name JOB )	None	None	File to be archived
RESTORE	Restores a file from archive disk	FILE) Name JOB )	None	None	File to be restored

#### M.O.T.E.S

##### 1. Abbreviations:

FILE - FL JOB - JB GROUP - GR NAME - NM YES - YS  
FILEn - Fln JOBN - Jbn LABEL - LB TEXT - TXT or :

##### 2. Check Types

The values given for PLANTED fields may be checked to be of the following types:

AL - Alphabetic IN - Integer AN - Alphanumeric NO - Any characters allowed  
FI - Fixed point NU - Numeric NM - Alphanumeric with first character alphabetic

##### 3. Line Number Notation

The parameters LN and L1 are completely interchangeable.  
The notation for referencing edits is:

LN=Ln.lpos

where ln is the line number of the text line to which the edit refers  
lpos is the sequence number of the edit on that line

##### 4. Access Control to Files

The ACCESS parameter for a file requires a 4 character value

the 1st character gives the access allowed to the file owner  
the 2nd character gives the access allowed to any partners declared for the file  
the 3rd character gives the access allowed if the KEY word is given  
the 4th character gives the access allowed to the general user

Allowed character values for access are:

F which allows full access to the file for any purpose  
A which allows access only for appending information into the file and reading the file  
R which allows access only for reading the file  
N which allows no access  
E which allows use with EXEC only

##### 5. Device Type Parameter

At LOGIN a user may set the DEV parameter to indicate to ELECTRIC the type of terminal he is using. The table below gives a list of the device types currently available. The default setting is DEV=0.

DEV value	Terminal type	Lines/page	Chars/line
0	Typewriter	999	100
1	Computek 400	30	84
2	Tekttronix 4002	30	84
3	Tekttronix 4070	30	72
4	Teletype	999	68
5	Teletype	999	76
6		16	80
7	Case Vista	16	76
8	Delta 5000	24	76
9		36	80
10		18	72
11		12	100

EDIT SUB-COMMANDS

COMMAND	DESCRIPTION	PARAMETERS			
		NAME	VALUE	DEFAULT	DESCRIPTION
\$I (INSERT)	Inserts a line or following lines of text after given line of file	LN TEXT	0-end 1-90 ch	Current LN No text	Text line number Edit line number Text to be inserted
\$D (DELETE)	Deletes given lines of text	LN L2	1-end LN-end	Current LN LN	First line to be deleted Last line to be deleted
\$R (REPLACE)	Replaces given lines of text or following lines of text	LN L2 TEXT	1-end LN-end 1-90 ch	Current LN LN No text	First line to be replaced Last line to be replaced Text of new line
\$E (EDIT)	Replaces a string of characters in a line of text or in an edit with the supplied text or inserts text after a given character	LN L2 C1 C2 A-Z, TEXT SS	1-end 0.1-end LN-end 1-end (C1-1) -end 0-90 ch 0-90 ch	Current LN Current LN LN \$U value \$U value No editing	First line to be edited First edit to be edited Last line or edit to be edited First char of string Last char of string Used with editing positions defined by \$U or by C1 and C2 Search-string
(C2=C1-1 causes text to be inserted after column C2) (TEXT=, A*, etc. Deletes the defined character string) (SS= appends text to end of line or edit)					
\$P (PLANT)	Allows delayed editing by giving a symbolic name to a field defined by the column parameters C1 and C2 or by \$U	LN,L2,C1,C2 and SS as defined for the \$E command NAME, CH DF	1-8 char AL,NU, AN,MM, IN,FI,NOI YES,NO	None NO NO	Name of field to be inserted into. See \$U Specifies the type of the text to be planted Default control
\$L (LOCATE)	Locates a line or lines of a file and types them out. The current line is the last line typed	LN TEXT COL NL	1-end 1-90 ch n,-n 1-10	Next line No search 1 1	Line to be located or start of context search Text for context search Start of context search No. of lines to be typed
(COL=n searches for character string anywhere in the entry after column n)					
\$M (MOVE)	Locates an edit or edits in the edit file and types them out. Allows context searching on \$I edits	LN NL TEXT and COL as defined for the \$L command	0.1-end 1-10	Next edit 1	Edit to be located or start of context search Number of edits to be typed
\$O (UNDER-LINE)	Defines the column parameters of a field or fields in a line or edit which are subsequently be used with a \$E or \$P command	No parameters.	The fields may be underlined with strings of slashes, bars or letters. The characters used for underlining a given field must be the same. Different fields may be underlined by the same or different characters. Insertion is defined by a single character followed by a minus sign. The underlining letters become symbolic names which may be set equal to the required text or plant name with \$E or \$P respectively. The symbolic name associated with slashes or bars is TEXT for use with \$E or NAME for use with \$P.		
\$A (ADD)	Allows the text of a file to be added into the file being edited after the given line	FILE LN	name 0-end 0.1-end	None Current LN None	File to be added Text line number Edit line number
All bracket parameters as defined for the COPY command					
\$S (SUPPLY)	Allows delayed adding of one file into another using a symbolic name	NAME LN DF FILE	1-8 char 0-end 0.1-end YES,NO name	None Current LN None NO No default file	Symbolic name Text line number Edit line number Controls whether default allowed Name of file to be supplied as default
All bracket parameters as defined for the COPY command					
\$G (GROUP)	Allows a sub-set of edits to be defined by their labels. Brackets parameters for NOT or ONLY	NAME LIST Name lb1,lb2, ...lbn	2 chars NOT,ONLY 1-99 None	None None None None	Group name Defines whether group is inclusive or exclusive Two character group name List of edit labels for grouping the group
\$C (CANCEL)	Cancels existing edits	LN L2	0.1-end LN-end	Current LN LN	First edit to be cancelled Last edit to be cancelled
\$X (COMMENT)	Allows comments to be stored in edit files	LN TEXT	0.0-end 1-90 ch	Current LN No comment	Edit line number Text of comment
(Comments may also be given as following lines of text)					

GRAPHICS ON-LINE COMMANDS

Picture output and routed line printer output can be sent from jobs to GRAPHICS files. These files can be interrogated via ELECTRIC using the commands listed below.

COMMAND	DESCRIPTION	PARAMETERS			
		NAME	VALUE	DEFAULT	DESCRIPTION
LIST	Lists users' graphics files	ID TYPE	2 chars ARCH	Users' ID	Identifier Lists a given files
ROOM	Gives details of space used and allocation	ID	2 chars	Users' ID	Identifier
FIND	Finds specified graphics file. After this command ELECTRIC expects graphics sub-commands	FILE	Name.GEN	None	Filename.generation no Default for generation number is the latest generation of the file
SCRATCH	Deletes specified graphics file	FILE	Name.GEN	Current file	Filename.generation no No default allowed for generation number

GRAPHICS sub-commands following a successful FIND command. Parameters associated with the following sub-commands are for use with text files only.

INDEX	Outputs the section index				
NEXT (or N)	Outputs next frame or page	LN NL	1-999 1-999	1 999	First line to be output No. of lines to be output 2 (for text search)
		TEXT (or TXT)	1-8 ch		Text for context search
		NPOS	1-999	1	Output starts at NPOS'th occurrence of TEXT
		C1 C2	1-end C1-end	1 end	First and last column numbers to be output.
		(11,12)	1-999	(1,999)	These parameters remain same. Text search starts at column C1. First and last line numbers to be output (alternative to LN,NL). \$P No space between sub-command and first bracket
K	Outputs frame or page K (0<K<10000)				All parameters as defined for the NEXT sub-command
*K	Moves on K frames				All parameters as defined for the NEXT sub-command
-K	Moves back K frame				All parameters as defined for the NEXT sub-command
SEC.NAME	Outputs section NAME				All parameters as defined for the NEXT sub-command
C	Erases the screen, continues output when 'screen full' (text files)				
STOP	Stops output				
\$S	Exits from FIND mode, erases screen if using a display				
\$\$\$	The same as \$\$ but no screen erase				

Notes

- The end of each frame is marked on the screen by the character ? in the top right-hand corner, or by E in the case of the last frame of a file.
- The FIND sub-mode may be terminated by any valid ELECTRIC command. This is treated as if the user had typed \$\$ followed by the command.

## PAGE LAYOUT FACILITIES

The layout commands and their associated parameter lists are entered as lines of text in an ELECTRIC file and control the layout of subsequent file entries.

COMMAND	DESCRIPTION	PARAMETERS			
		NAME	VALUE	DEFAULT	DESCRIPTION
.L	Switches on layout facility	L	integer	54	Number of lines per page
		W	1-120	65	Number of characters per line
		S	1,2,...	1	Spacing between lines
		M	X,U,C,Z	X	Layout mode
			L,R,LR		
		LM	1-120	1	Position of left-hand margin
		PM	1-120	1	Position of paragraph margin
		T1,T2, ...T9	1-120	11,21, ...91	Tab positions
		BOX	Y or N	N	Converts asterisks to box chars
		.P	Controls page numbering	P	H,F,X
N	X,U,C			X	Page number mode
	CS,L,R, LR,RL				
N	integer			1	Initial page number
.H	Heading	L	integer	0	Number of heading lines
		M	see .P	X	Mode of heading
		N	integer	1	Index of heading text
		TEXT	1-120 ch	No text	Text of heading
	LM and W as defined for .L				
.F	Footing	L,M,N,LM,W	and TEXT	as defined for .H	
.T	Tests for number of lines left on the page	N	1-56	0	Tests for N lines left
		T	S,C	S	Action if test is TRUE
		F	SS,SC	SC	Action if test is FALSE
			CS,SB	1	(S=Skip,C=Continue)

## Notes

- Text may be underlined by enclosing the text string within a pair of underline characters. Underlining is terminated at the end of each file entry.
- The 'tab' character may be used to space out text on a line. The tabbing operation obeys the FORTRAN T format conventions and backwards tabbing is allowed. Tabs are converted to spaces on laying out. With the TYPE, SL and SM commands, each tab character is converted to a single space, or to the value of TAB as set by the user.
- Values for the mode parameter associated with the .L instruction are as follows :  
 X - Layout not obeyed      U - Unaltered      C - Centred  
 L - Left adjusted      R - Right adjusted      LR - Left and Right adjusted  
 Z - Subsequent layout instructions ignored

## GRAPHICS OFF-LINE COMMANDS

These commands may be supplied as an ELECTRIC file to off-line jobs for concatenating (JB=HRMUG), printing and plotting (on the SC-4020 plotter at Atlas) (JB=HREXT).

COMMAND	DESCRIPTION	PARAMETERS			
		NAME	VALUE	DEFAULT	DESCRIPTION
OPEN	Concatenation opens a new file	FL	Name	None	New filename
(COPY) (MOVE)	Copies an old file - must be followed by FRMS or SECTIONS sub-commands	FL	Name.GEN	None	Old filename and generation number (default of 1)
CLOSE	Compulsory - closes new file				
PRINT	Printing Prints text file, followed by FRMS etc	FL	Name.GEN	None	Filename and generation no. (default 1)
CLOSE	As above				
PLOTHARD PLOTBOTH PLOT35M	SC4020 plotting Writes an SC-4020 tape, for 35m film, hard copy or both. Followed by FRMS etc.	FL	Name.GEN	None	Filename and generation no. (default 1)
CLOSE	As above				

## Sub-commands

FRMS	Frame numbers, or ranges to be copied, printed or plotted	N1,N2,N3 etc (frame numbers) N1,T0,N2,N3,T0,Wu etc (ranges) ALL (all frames)
SECTIONS	Names of sections	NAME1 (NEWNAME1 - optional), etc.

Parameters that must be supplied with JOBS HRMUG and HREXT - ID (identifier), ACCT (account no.), DATE - name of a file containing the above commands.

## GRAPHICS ARCHIVE AND RESTORE FACILITIES

## 1. Archiving

EXEC JB=ARCHIVE,ID=user identifier,FILE1='FILENAME.GEN',FILE2=etc  
- up to FILE5.

The standard archive tape is used as default.  
Optional parameters -

TAPE - private tape serial number  
NFILE - private tape file number  
DISP - NEW or MOD, tape disposition

## 2. Restoring

EXEC JB=RESTORE,ID=identifier,FILE1='FILENAME.GEN',DATE1='day/mnth/year',  
- up to FILE5, DATE5.

The date of archiving can be found by listing archived files with the LIST command and parameter TYPE=ARCH  
Optional parameters for private tapes - TAPE,NFILE.  
Parameter names may be shortened to FL1,FL2,... etc.

## ROUTING JOB OUTPUT FOR RETRIEVAL BY ELECTRIC

Users may 'route' the normal line printer output of jobs for subsequent retrieval at an ELECTRIC terminal. Routing is obtained by inserting a route card after the normal JOB card.

## Format of route card:

```

Cols 1 - 7 : /*ROUTE
      8 - 9 : Two blanks
     10 - 14 : PRINT
           15 : Blank
          16 - 23 : ELECTRIC
           24 : Blank
          25 - 80 : Optional keyword parameter settings for the parameters
                  JCL,ASSY,COMP,LINK,GO,HC,COND and BACKUP
  
```

The parameters allow the user to suppress parts of the output that are not of interest. They may be given in any order and must be separated by commas.

## Parameter Values

NAME	DEFAULT	VALUES	DESCRIPTION
JCL	1	0	Include JCL summary only
		1	Include JCL summary only, unless JCL error found
		2	Include complete JCL always
ASSY	1	0	Omit all Assembly routines
		1	Include Assembly routines with flagged errors
		2	Include all Assembly routines
COMP	1	0	Omit all Fortran routines
		1	Include Fortran routines with severity codes greater than COND
		2	Include all Fortran routines
COND	0	Any	Specifies an error level for use with the COMP parameter
LINK	1	0 or 1	Omit Maps or Cross-Reference tables from Link-edit steps
		2	Include everything from Link-edit steps
GO	1	0	Omit GO-step output starting from any E/// or S/// line
		1	Omit GO-step output lying between E/// and S/// lines if any
		2	Include all GO-step output
BACKUP	360	360	Backup printer is a printer on the Central Computer
		1130	Backup printer is the 1130 printer in Hall 3 at RHEL
		Rn	Backup printer is at Remote Station n (n=1 to 97)
HC	1	0	Never re-route job to backup printer
		1	Re-route complete job to backup printer only if core dump found or file space exceeded
		2	Always re-route complete job to backup printer

Routing of jobs submitted via ELECTRIC may also be achieved by giving the parameter setting ROUTE=ELECTRIC with the EXEC command. In this case ELECTRIC supplies the route card itself with default values for the optional parameters.