

UNIVERSITY OF QUEENSLAND

Prentice Computer Centre

NEWSLETTER

authorization: Director of the Centre

1 IMPROVED FACILITIES FOR PAPER TAPE AND CASSETTE DEVICES  
ATTACHED TO TERMINALS

A new command is now available on the system concerned with the copying of ASCII files to or from paper tape or cassette devices attached to some terminals. The command is used as follows:

.TAPE destination specification = source specification  
where each 'specification' is typically either  
TTYnnn: (omitting the nnn defaults to the current  
terminal)  
or  
filename.ext[p,pn]  
followed (optionally) by any of the following switches  
(on the TTY side):

/NOPRINT suppresses printing while copying from tape device to  
file on all terminals and from file to tape device on  
terminals which support this feature (e.g. GE Terminet).

/NOLEADER suppresses punching of blank leader and trailer tape on  
paper tape terminals.

/HEADER block punch filename and extension as a readable  
identification on the leader of paper tape.

/IMAGE accepts all ASCII character set including ↑C and ↑Z.  
Termination is by timeout for lack of input.

/HELP print summary of .TAPE instructions.

/VERBOSITY: LOW controls the amount of information and error  
STANDARD text to be printed. Additionally, specifying  
HIGH /VERBOSITY:HIGH prints instructions on the  
setting up of the terminal for use by .TAPE.  
The default VERBOSITY is STANDARD.

`/TYPE:type` specifies the type of terminal and device being used in the operation. This switch may be given to override the automatic terminal identification. If this automatic identification has yet to be installed and no `/TYPE` switch is given initially the message  
%TAPCDD, CANNOT DETERMINE DESTINATION TTY TYPE  
CDS } SOURCE

ENTER TTY TYPE:

is given and the expected response is the appropriate `TYPE` switch BUT WITHOUT THE LEADING SLASH!

e.g. Enter `TTY TYPE:TYPE:TIADM`

Currently recognized values of 'type' are:

TTAPT - Teletype 33 with paper tape reader and punch.  
OLAPT - Olivetti with paper tape reader and punch.  
TIASM - Texas Instruments 733 with single cassette.  
TIADM - Texas Instruments 733 with dual cassettes.  
GEASM - G.E.Terminet with single cassette (TCA).

#### Examples of using .TAPE

`.TAPE TTY:=FILE.EXT` copy file FILE.EXT to tape device

`.TAPE FILE.EXT=TTY63/NOPRINT` copy from tape device to file FILE.EXT and suppress printing

`.TAPE TTY:/TYPE:TTAPT/HEADER/NOLEADER=FILE.EXT`  
copy from file FILE.EXT to tape device. The terminal is explicitly specified as an ASR33 with paper tape facilities. The letters FILE.EXT will be block punched into the beginning of the tape but no blank leader will be punched.

`.TAPE/HELP` print summary of instructions

`.TAPE/VERBOSITY:HIGH TTY63:=TTY65:`  
copy from one terminal's device to another terminal's device. These terminals must be assigned if they are different from the one currently in use. Instructions on setting up the terminals will be printed.

### Preparing tapes for .TAPE

Tapes may be prepared offline (in local mode) ready for reading onto a file via the TAPE command. This may be accomplished as follows:

1. Place the terminal in local mode. (Set KEYBOARD,PLAYBACK, RECORD and PRINTER switches to LOCAL on T.I. terminals).
2. Position tape to desired position for recording (cassettes only).
3. Select recording or punching mode (ON button - paper tape punch  
LINE mode }- T.I. terminals  
RECORD on }  
WRITE button - G.E.terminet)
4. Leave at least 30cm of blank leader tape.
5. Type in the information. Lines must be ended by both carriage return AND line feed.
6. When finished type the correct end-of-file sequence for the type of terminal being used:  
paper tape terminals: Control Z Control S  
Texas Instruments terminals: Control Z Control S Control@Carriage  
Return  
G.E. Terminet: Control\Carriage return Line feed  
Control S
7. Leave at least 30cm of blank trailer tape.

### Additional Notes

.TAPE can be stopped in the usual way by typing Control C, but when reading from the tape device it may not be possible to send the Control C character from the keyboard as the terminal is fully engaged sending characters from the tape to the computer. Hence it may be necessary to physically stop the tape device before typing the Control C.

The TAPE command cannot be .CONTINUED so ensure there is ample blank tape available for the data before commencing the copy.

Paper tapes not prepared explicitly by or for .TAPE can be copied by the command but as they do not contain the correct end-of-file sequence, they must be stopped by hand at the appropriate spot and a Control Z (Control\for GE terminet) typed to terminate the copy correctly.

At the end of a copy certain control characters may be printed. They are part of the device control sequence and should be ignored.

There is usually a brief pause between typing the command and the commencement of the copy. This is due to the delay necessary to determine if the terminal has the automatic identification feature installed.

## 2 MANUALS

### 2.1 MNT-3 Statistical Packages Manual

This manual is now for sale at the Computer Centre for the price of \$1.00.

It contains detailed instructions for the use of the statistical packages available at the Centre. The packages are described and methods of running jobs interactively or through batch are detailed. The main packages in use are: SPSS (Statistical Package for the Social Sciences), BMD (Biomedical Computer Programs) and SSP (Scientific Subroutine Package).

NOTE: The '\$SPSS' card is not yet available and users should not attempt to use it as in examples 4.4(a) and 4.4(b).

Instead of 4.4(a) use -

```
$SEQUENCE
$JOB [60,105]/NAME:SMITH/COST:$5.00
$DECK MYFILE.SPS
.
.   SPSS program (including data)
.
$EOD
.RUN STA:SPSS
*MYFILE.SPS
.IF(ERROR) .CLOSE
.PRINT MYFILE.LST
$EOJ
```

Instead of 4.4(b) use -

```
$SEQUENCE  
$JOB etc  
$DECK INDOT.DAT  
.  
  (actual input data)  
.  
$EOD  
$DECK MYFILE.SPS  
.  
  (input medium INDOT.DAT)  
.  
$EOD  
.RUN STA:SPSS  
*MYFILE.SPS  
.IF(ERROR) .CLOSE  
.PRINT MYFILE.LST  
$EOJ
```

## 2.2 SPSS Update Manuals

The following manuals are now available for sale:

SPSS Update Manual, April 1971:	\$4.00
SPSS Update Manual, April 1972:	\$4.00
SPSS Update Manual, July 1973:	\$4.00

These manuals are updates to -

NIE N., BENT D.H. and HULL C.H.  
"SPSS Statistical Package for the Social Sciences"  
McGaw-Hill, U.S.A. (1970)

These revisions are sold separately for the convenience of those who may already have earlier sections.

## 3 ADVANCED FORTRAN SEMINARS

A series of seminars intended for people with a working knowledge of basic Fortran will be conducted by the Centre in Room 2.14 Hawken Building during the August vacation. Some of the areas discussed are likely to be specific to either F40 or Fortran-10 and therefore may not be of great use to people working on computers other than the PDP-10. Registration is not required.

The seminars planned are -

- a) Fortran File Handling Monday, August 18, 2 p.m.  
will deal with formatted and unformatted I/O, random access, OPEN, CLOSE statements, END=, ERR= returns, runtime formats.
- b) Plotting from Fortran Wednesday, August 20, 2 p.m.  
will deal with the basic Fortran plotting software.
- c) Advanced Fortran Capabilities Friday, August 22, 2 p.m.  
will deal with use of COMMON, IMPLICIT, multiple returns from subroutines, DATA statements, EQUIVALENCE, ENCODE, DECODE, EXTERNAL, array names in I/O lists, adjustable dimensions complex, double precision arithmetic, library subroutines.
- d) Debugging Tuesday, August 26, 2 p.m.  
will deal with program design, static debugging, dynamic debugging and FORDDT, execution error messages and their meaning.

4 STATISTICAL PACKAGES SEMINAR

A seminar on the use of statistical packages will be held on THURSDAY, AUGUST 28, at 2 p.m. in Room 2.14 of the Hawken Building. Registration is not required.

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