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SUBJECT: USE OF TERMINET 300'S AND NON-STANDARD TTY37'S WITH MULTICS

The following document is useful for Multics users who have the above non-standard terminals.

Your comments and criticism would be appreciated.

D R A F T

J. W. Gintell
3/22/70

USE OF TERMINET 300 OR NON STANDARD TTY37'S WITH MULTICS

Multics typewriter software makes several assumptions about the options available on the devices it handles. It expects an answerback drum, "coupled" linefeed/carriage return, and tab settings at columns 1, 11, 21, 31, Non-standard terminals can be used if appropriate care is taken.

TTY37

The TTY37 is a standard Multics terminal.

1. Answerback drum

The answerback drum is "read" during the terminal identification sequence after dialup. If an answerback drum is absent, periodic (1 second) depression of linespace key will simulate this feature. Occasionally this will cause a misidentification which results in gibberish being typed. If this should happen the user should hang up and try again.

If the answerback drum is present, the last character must be a linefeed character.

2. "Coupled" linefeed/carriage return

Multics expects that the depression of the linespace key causes a carriage return in addition to a linefeed. If this option is absent, the local return button should be used after each linespace to return the carriage. On output, Multics sends a return character after each linefeed to resolve this problem. For terminals with "coupled" options, this return has no effect.

3. Tab settings

If the tab settings are non-standard (the default is usually non-standard) the timing may cause bad quality printing, and lines with many tabs will be over-printed at the end of the line.

4. Line length

Multics expects the line length to be 85. Type the following command to change the value of the line length:

```
line_length j
```

where j is the value of the desired line length.

Terminet 300

To use a Terminet 300 as if it were a TTY37, set transparency off, inhibit norm, rate 15, and auto lf on.

1. Answerback option

If the answerback option is absent, periodic depression of the return button will allow the terminal to be used. See comment about answerback drums on TTY37's.

2. Use of the nak character

Multics sends a nak character at various times which causes the interrupt light to be lit. Depression of the interrupt button clears the condition.

3. Interaction during login sequence

During the dialup sequence, if Multics does not turn on the terminal, the on line button should be used to turn it on.

Multics uses ack and nak characters to turn off and on the printer after asking for a password. To turn off the printer on the Terminet 300, the inhibit switch should be switched from norm to print and then back after typing a password. After the login sequence the printer remains off and after the message of the day is printed this switch should be flicked again to reset this state.

4. Horizontal tab option

If the horizontal tab option is absent, some output for commands which use tabs will be bunched up at the end of the line. If tabs are present they should be set to 1, 11, 21, ... etc.

5. Line length

The line length command can be used to set the line length to the value appropriate to the paper size. See the related comment in the TTY37 section.