## NODE TEST

NODTST (for NODe TeST)

Node test (NODTST) is a program which allows
a user to test any node on the 516 I/O loop from any
teletype-like terminal logged into 516 TSS. It is entered
by typing NODTST,N at system level, where N is the <u>octal</u>
number of the node to be tested. If the argument N is
omitted, NODTST will ask for a node number. When NODTST
has the node number it will automatically read the status
of that node and test the power-on bit (most significant
bit) of the node status. If the power-on bit is zero
(node power off) the message "TURN ON THE NODE" will be
typed. No message indicates that node power is on and
tests may begin. A request to test a nonexistent node also
yields the message "TURN ON THE NODE". When the node is
turned on and ready to test the following set of commands
can be used to test and manipulate the node and the attached
device, if any.

<u>S</u>   (READ STATUS)

Sends a "read status" to the node and types the returned
16 bit node status in octal.

STATUS	1	1	1	1	1	1	4 bits	6 bits
	Power		Break				Interrupt Status	Device Code
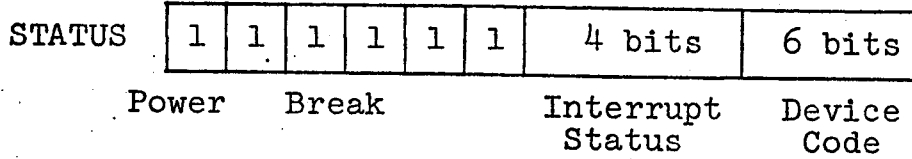
R (READ DATA)

Sends a "read data" to the node and types the returned 16 bit node data in octal.

C,ØD (WRITE COMMAND)

Sends a "write command" to the node using the 16 bit octal data argument (ØD) as the command.

W,ØD (WRITE DATA)

Sends a "write data" to the node using the 16 bit octal data argument (ØD) as data.

L,N (LØØP)

Causes the last N commands to be executed in a loop. N is decimal, and $1 \leq N \leq 31$. The loop is stopped when the user types "control C" or if transmission errors are noticed. The commands will execute approximately one every 100 microseconds.

T,X,ØD (Test Loop)

Sends the command X (X = S,R,C, or W) repetitively to the node using the 16 bit octal argument ØD if the command is C(write command) or W(write data). The user may stop the loop by typing control C. Transmission errors are ignored.

<u>I</u> (Interrupt Test)

Sets up an interrupt handler for the node and waits for an interrupt. When the node issues an interrupt the node status will be read and typed out. If no interrupt occurs, control C will abort the test.

<u>N,N</u> (New Node)

Switches to a new node specified by the <u>octal</u> node number N. Again, as when entering NODTST, an automatic "read status" is sent to that node.

<u>X</u> (Exit NODTST)

Exits back to 516 TSS system level.