

QUALITY SOFTWARE

DATE: January 1968
ID CODE: BMT - Revision B
DRAWING: 390364
LABEL: PTB
AUTHOR: JMMC
SOURCE: Not applicable
OBJECT: Not applicable

PURPOSE

With PTB an operator can load an absolute paper tape from the teleprinter or high speed paper tape reader into a 703 computer which has no operating system in memory.

USAGE

Turn the display selector to MB before following the operating procedure. The operating procedure for PTB is shown below:

- 1) Push compute RESET button.
- 2) Enter memory locations 0-A as shown under "Method".
- 3) Push computer RESET button.
- 4) Set the index register to the byte origin of the program minus 12_{10} (C_{16}) bytes. The byte origin is twice the program word origin.
- 5) Enter the tape into the paper tape reader.
- 6) Push computer RUN button.
- 7) If the paper tape reader is the teletype, turn on the reader.

Note: The index register should increment as the program is loaded.

- 8) When the program has been loaded, push the computer HALT and RESET buttons

RESTRICTIONS

This paper tape bootstrap is for a 703 computer. PTB will load only absolute paper tapes. There is no card deck or paper tape of PTB as it is entered via the computer console. PTB operates with interrupt level 0.

METHOD

Below is a listing of PTB for teletype input:

<u>LOC</u>	<u>Contents</u>	<u>Symbolic</u>	<u>Comments</u>
0	0020	ENB 0	Enable interrupt 0
1	8004	LDW SERV	Interrupt service address
2	03E9	DOT 14, 9	Start tape
3	1003	JMP \$	Wait for interrupt
4	02ED SERV	DIN 14, 13	Input frame
5	0800 TEST	SAZ	Non-zero?
6	0401	IXS 1	Yes, load next frame
7	0010	INR 0	No, restore interrupt
8	0638	LLB X'38'	Change test to STB*0
9	300A	STB /TEST	
A	0010	INR 0	

If the input device is a high speed paper tape, the following changes should be made to the above sequence:

<u>LOC</u>	<u>Contents</u>	<u>Symbolic</u>	<u>Comments</u>
2	03D9	DOT 13, 9	Start tape
4	02DD SERV	DIN 13, 13	Input frame