



DECUS

PROGRAM LIBRARY

DECUS NO.	5/8-173
TITLE	TIC 5/8
AUTHOR	Jim Gillespie
COMPANY	Lawrence Radiation Laboratory Berkeley, California
DATE	November 3, 1968
SOURCE LANGUAGE	LRL PDP Assembly Language (Schaeffer Assembler)

DECUS

1911-1912



TIC 5/8 (Scope Version)

DECUS Program Library Write-up

DECUS No. 5/8-173

TIC 5/8 plays a master game of Tic-Tac-Toe on the display scope. By hitting two keys on the Teletype. The program can be made completely stupid and will begin to learn winning strategies from each game that it loses until it has become a master player again. It is completely compatible with the PDP-5 and PDP-8 family. This program uses the interrupt facility.

DESCRIPTION:

TIC 5/8 was originally designed to test some unique programming ideas and tricks. The features of the program are as follows:

1. Suppression of Teletype echo on illegal Teletype requests.
2. A nondestructive program format. Constants, if accidentally executed as instructions, are harmless and are executed as AND operations or Halts.
3. Use of the program interrupt facility to time-shared Teletype input-output with display functions.
4. Program modifies responses based on previous losing configurations of the game. (A conditional probability program.)
5. Compatability with PDP-5 and PDP-8 include machine indentification.
6. Minimum use of counters and maximum use of unique numbers and software flags.

LOADING AND USES

The program occupies locations 1-3 and 41-3000.

Start at 200.

Program will identify machine when first started.

Matrix appears on scope.

Your moves are X's.

Type in the number for your play.

To reset to a learning game, hold down "CTRL" and hit the "D" key.

All games must be finished.

To clear the board for a new game, hit any key.

1	2	3
4	5	6
7	8	9

RESTRICTIONS

Do not make a copy of the program if it has been used.

