## PDP-1 COMPUTER ELECTRICAL ENGINEERING DEPARTMENT M.I.T. CAMBRIDGE, MASSACHUSETTS

PDP-25-1

MYSTIC

(ADMINISTRATIVE ROUTINE)

The administrative routine program, otherwise known as MYSTIC, was modified 9/12/65 to be used for placement of utility and conversion programs for the user's service. When a user turns his CONSOLE SWITCH ON to indicate his desire to use the facility, MYSTIC is placed at his disposal so that he may obtain the services of a program editor, assembly program, or debugger according to his needs.

Commands are available in MYSTIC to simplify running a program that has already been debugged or to call the utility programs. MYSTIC has been written so that the entire command need not be typed by the user; only enough to uniquely define the command must be typed. If the letters typed are not enough to uniquely define the command, "amb" (for ambiguous) is typed out; if the letters typed are not the beginning of any command, "ind" (for indefinite) is typed out. Errors in typing a command may be deleted by typing a "x" (multiplication sign) before the carriage return. The commands must be terminated by a carriage return. The commands are:

COMMAND

ddt

MEANING

place an ID program at the services of the user, if it is not possible to assign an ID program because of lack of an available field, "sorry, no room" is typed out. If a user is assigned an ID field, call button, illegal instructions, and dsm instructions will trap to ID, not MYSTIC. To dismiss the ID program and return to MYSTIC, type "OF".

noddt

deassign the ID field from the user.
Call button, illegal instructions,
and dsm instructions will trap to MYSTIC.

possible

place a copy of POSSIBLE at the services of the user. To dismiss POSSIBLE, type "b" or "m"; "b" will return the user to ID, if the user has an ID field assigned, or to MYSTIC, if there is no ID field; "m" will return the user to the expensive typewriter program, which still contains his source program.

edit

place a copy of expensive typewriter at the services of the user. The text buffer area will be cleared. To dismiss the expensive typewriter program, type "b"; this will return the user to ID, if the user has an ID field assigned, or to MYSTIC, if there is no ID field. COMMAND

MEANING

reedit

place at the services of the user a copy of expensive typewriter and all the fields previously assigned to him for the text buffer area, containing his previously edited source program.

yank

cause MYSTIC to yank a standard block format tape into memory. This is equivalent to "Y" in ID.

rim

cause MYSTIC to read into memory read-in mode tapes or tapes with their own input routines.

start N

cause the user's program to start running at location N. This command is equivalent to "NG" in ID.

examine N

cause the contents of location N to be typed out. This is equivalent to "N/" in ID.

deposit N,M

cause M to be placed in register N. This is equivalent to modifying a register in ID.

proceed

after leaving a program by the <u>call</u> <u>button</u>, this instruction is used to continue operation of the user's program from the point where the call button was pressed.

COMMAND

MEANING

continue

continues operation of the user's program with the instruction following the

break (used after illegal and halt

instructions).

status

types out the status of the user's program including flags, ac, pc, io,

and the next instruction.

BLOCK DIAGRAM OF SYSTEM