Instructions for using the ATHENA KEYPUNCH

The Differential Analyzer Punch Unit has been modified to punch 7level paper tape in ATHENA format. Using this, you can manually punch program tapes for the UNIVAC ATHENA.

The basic modification to the punch unit is the addition of four buttons labeled: REP, INS, BLK, ADD. These stand for, respectively: Repeat, Instruction, Block, Address. They are located to the right of the punch's keyboard, mounted on a small grey mini-box. These buttons, in combination with the punch's keyboard allow you to set up the correct paper tape codes for ATHENA instructions, block identifications, and instructions.

Each program you punch must have a block identification which allows you to select which program you want. This way you may put several programs on one tape and select which one you want from the console. At the beginning of each series of instructions you must give the loading address which is the drum address in which the first instruction is stored. All following instructions are stored in sequential order after this address.

To use the keypunch you do as follows:

- 1. Punch leading feed holes.
 - A. Hold down REP button
 - B. Press SPACE once.
 - C. Allow about six feet of feed holes to be punched
- 2. Enter block identification.
 - A. Press BLK button once.
 - B. Press 0 on keyboard.
 - C. Enter four digit address Block number on keyboard.
- 3. Enter loading address.

A. Press ADD button once.

B. Enter five digit address number on keyboard.

- 4. Enter instructions.
 - A. Press INS button once.
 - B. Enter six digit instruction number on keyboard.
 - C. More instructions to go? go to 4A
 - D. Another loading address? go to 3A
- 5. Enter end of block stop code.
 - A. Press ADD button once.
 - B. Press 4 on keyboard.
 - C. Press SPACE ten times.
 - D. Do you wish to add another block of
 - instructions?
 - YES go to 2
 - NO go to 6
- 6. Enter end of tape code.
 - A. Press BLK button once.
 - B. Press 2 on keyboard.
- 7. Punch trailing feed holes.
 - A. Hold down REP button.
 - B. Press SPACE once.
 - C. Allow about six feet of feed holes to be punched

CONGRADULATIONS! YOU HAVE JUST SUCCESSFULLY PUNCHED AN ATHENA PROGRAM TAPE.