NUMBER: Digital - 4 - 11 - U

NAME: RIM Puncher

AUTHOR: J. M. Graetz - DEC

DATE: September 28, 1962

SPECS: 103_8 registers: 100-~~102~~ 202

            7000-~~7002~~ 7202

      Tapes: FIO-DEC
          RIM, SA 100
          RIM, SA 7000

NEEDED: RIM Loader (I-1)

PURPOSE: To punch a Readin-Mode tape from any

area of core memory.

The RIM puncher will punch a readin-mode tape with start block from any area of core. The tape format of the output consists of thirty inches or about 3 1/2 fanfold units (ffu) of leader, data blocks in readin-mode format, a start block consisting of a jump instruction and a blank dummy word to stop the tape reader, and a few inches of trailer.

Usage:

1. Read in the desired version (high or low) of RIM Puncher.

2. AC Switch zero must be down. Set the first address of the block to be punched in the AC Switches and press continue.

3. When program stops, set the final address of the block in the ACS and press continue. (If ACS_0 is up at this point, the program will refuse to proceed.) caution.

4a. If ACS_0 is down when the program stops punching, pressing continue at this point will cause the address now in the ACS to be taken as the first address of a new block of data to be punched. In this case, the procedure is repeated from step 2. pressing continue indicates that

4b. If ACS_0 is up, the address in the ACS will be taken as a starting location and a start block followed by trailer will be punched.

5. If a new tape is desired after the start block has been punched, put ACS_0 down and repeat from step 2.

Error Stops:

There are no error stops in RIM Puncher. The only halts are those indicated above.

RIM PUNCHER MK IIIa   28-9-62

```
/ACS-0 down, first address in ACS and continue.
/On halt, last address in ACS and continue
/On halt, ACS-0 down if new block, up if start block.  Address
/in ACS and continue.
/For new tapes, repeat procedure from the top.

/Two versions:  low--SA 100; high--SA 7000

rimp,       hlt
            lam -400
            jms feed                /feeds 3-1/2 ffu of tape
            las                     /first address from ACS
rim2,       xor (dac
            dac bfst
            hlt
            las                     /last address from ACS
            spa
            jmp rim2 2              /will not proceed unless ACS-0 is down
            add (dac 1
            dac blast
pch,        lac bfst
            sad blast
            jmp psb
            jms p1b                 /RIM word
            lac bfst 1
            jms p1b                 /data word
            isz bfst
            jmp pch
psb,        lam -20
            jms feed
            hlt
            las                     /next address
            sma
            jmp rim2                /if new data block
            xor (200000            /if start block
            jms p1b
            cla
            jms p1b                 /dummy word to stop tape
            lam -131
            jms feed
            jmp rimp


feed,       0
            dac hold
            pls 10
            psf
            jmp .-1
            isz hold
            jmp feed 2
            jmp feed 1
```

```
p1b,      0
          dac temp
          lam -2
          dac chrc
plin,     lac temp
          rtl              rtl           rtl
          dac temp
          ral
          and (77
          add (200
          pls
          psf
          jmp .-1
          isz chrc
          jmp plin
          jmp p1b 1

bfst,     0
blast,    0
chrc,     0

temp=feed
hold=p1b

chrc/

start rimp
```