RECOMP II USERS' PROGRAM NO. 1083

PROGRAM TITLE: AGC-148R MEMORY PRINT (Relocatable by RUG-1057)

PROGRAM CLASSIFICATION: Service Routine

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PURPOSE: To type the contents of a specified portion
                        of memory in either command or floating point
                        format, with locations given for each line.

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TITLE:	AGC-148R MEMORY PRINT (Relocatable by RUG-1057)
LOCATIONS USED:	7000-7105

INTRODUCTION:

The contents of memory from location "First" to location "Last" will be printed out in rows having five entries. The first entry will be a four octal digit location. The next four entries will be the contents of four consecutive memory locations in command format if Sense Switch C is on, or the contents of eight consecutive memory locations in floating point format if Sense Switch C is off. The final row may contain less than five entries. Whenever the format (Sense Switch C) is changed, a new row is begun.

METHOD:

The location is dissected and made into a BCD word, which is then typed. If Sense Switch C is on, four consecutive words are brought into the accumulator, one at a time, and printed in command format. The carriage is returned and the location increased by four. This process is continued until Sense Switch C is turned off or the last word has been typed. If Sense Switch C is off, eight consecutive words are brought into the A&R registers, two at a time, and printed in floating point form by AN-014, as stored in P^3-2 (locations 0530-0767). The carriage is returned and the location increased by eight. This is continued until Sense Switch C is turned on or the last word has been typed.

RESTRICTIONS:

If floating point format is desired, AN-014 must be in locations 0530-0767 (as stored in P^3-1 and P^3-2). There should be a minimum of 81 spaces between the left and right typewriter margins.

USAGE:

Read AGC-148R into memory. Read RUG-1057 into memory. The location counter should be set to 75000 and the machine should be in command mode. Enter on the console:

$$+ \ 00 \ 70000 + 00 \ (YYYY)_F 0 \quad \text{Enter}$$

where $(YYYY)_F$ is the location of the first word of the relocated program. Set the sense switches (B on to punch tape, C on to store in memory, D on to end tape) and depress the start button. If further details concerning relocation are wanted, see RUG-1057.

With the relocated program in memory, set the location counter to $(YYYY)_F 0$. Enter on the console:
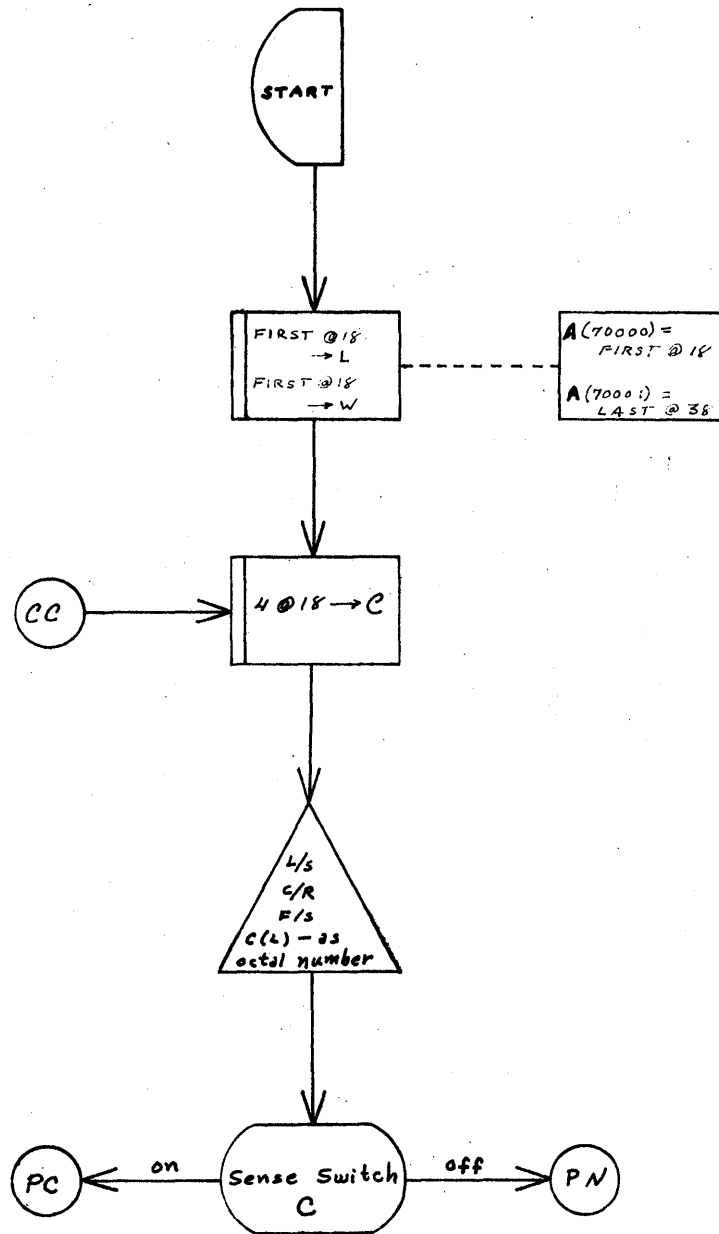
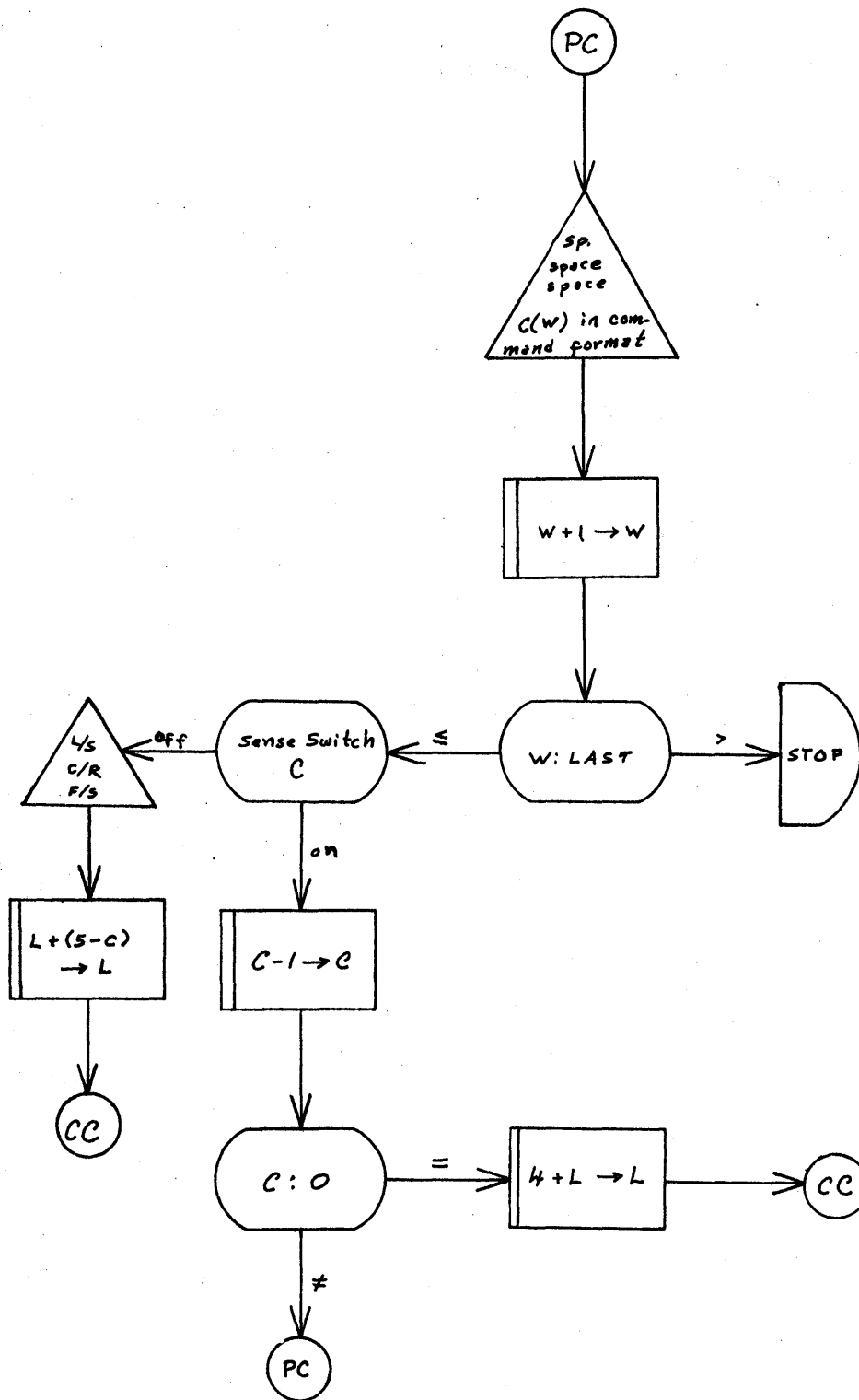$$C + \ 00 \ (XXXX)_F 0 + 00 \ (XXXX)_L 0 \quad \text{Enter}$$

where $(XXXX)_F$ is the first location to be typed and $(XXXX)_L$ is the last location to be typed. Set Sense Switch C (on for command, off for floating point format). AN-014 must be in locations 0530-0767 if the floating point format will be used. Press the start button.
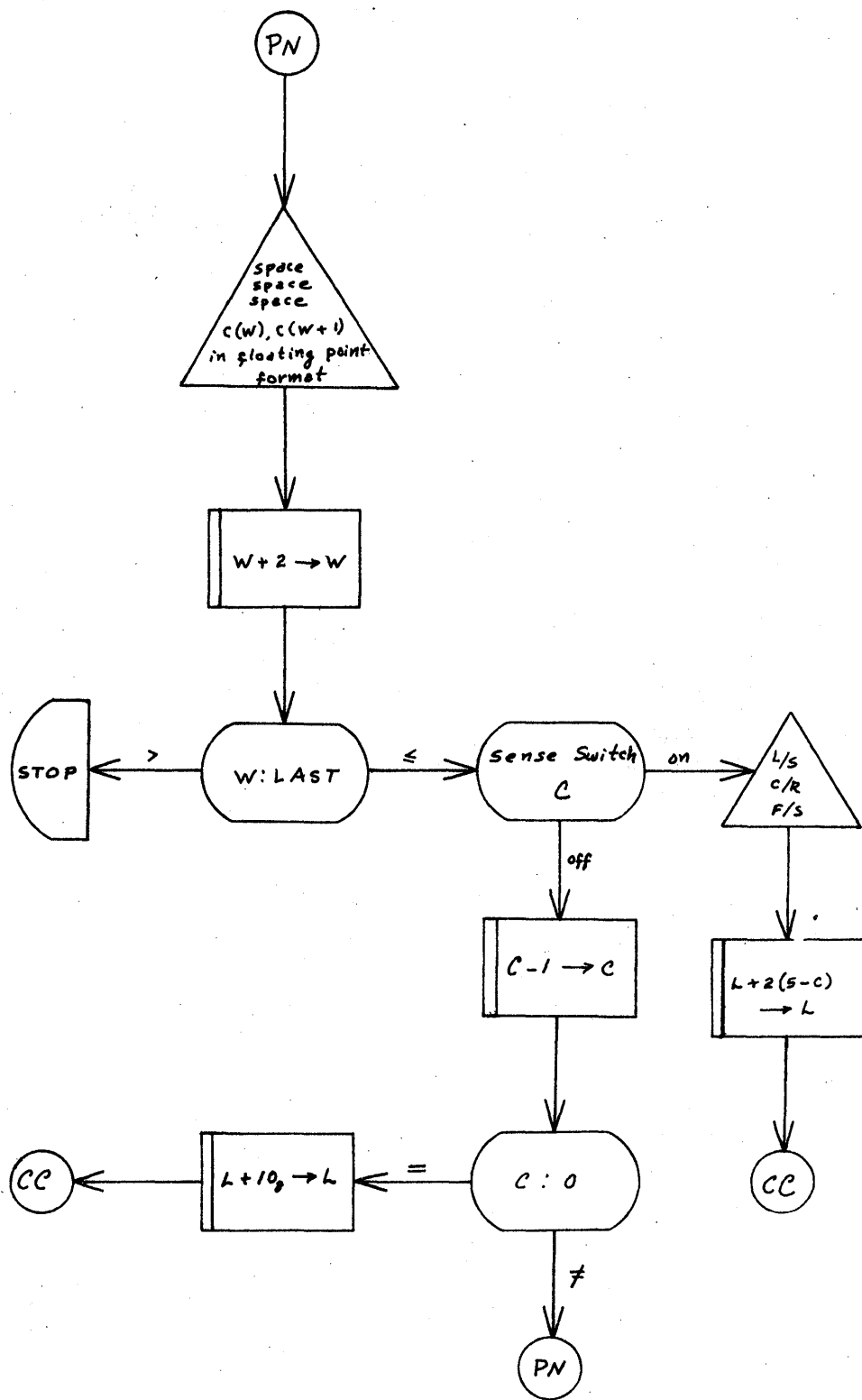
Sense Switch C may be changed while typing is in progress. There are no problems going from floating point format to command format. Care must be taken, however, in switching from command format to floating point format so that the next word is the fractional part of a floating point number.

TIME: Thirteen floating point numbers/minute.
Nineteen command pairs/minute.

START

FIRST @18
→ L
FIRST @18
→ W

A (70000) =
FIRST @18

A (70001) =
LAST @38

CC → 4 @18 → C

L/S
C/R
F/S
C(L) — as
octal number

PC ←—on—— Sense Switch
C ——off—→ PN

PC

sp.
space
space

C(w) in com-
mand format

$W + 1 \rightarrow W$

$\frac{4}{5}$
c/R
F/s

Sense Switch
C

$W : LAST$

STOP

off

$\leq$

$>$

on

$L + (5-c)$
$\rightarrow L$

$C - 1 \rightarrow C$

CC

$C : O$

$=$

$4 + L \rightarrow L$

CC

$\neq$

PC

PN

space
space
space

c(w), c(w+1)
in floating point
format

$W + 2 \rightarrow W$

STOP > W : LAST ≤ Sense Switch C on L/S c/R F/S

off

$C - 1 \rightarrow C$

$L + 2(5-c) \rightarrow L$

CC

$L + 10_g \rightarrow L$ = C : 0

≠

PN

CC

L70000	C-4000000-4000000	+4270110+4270420	+4270620-4100240	+0170130+4270760
L70040	C+4270770+0070150	+6070120-7200370	-7200100-7200330	+6470200+6670300
L70100	C-5777600+0000000	-4000000-4000000	-4000000-4000000	-0000000-0000000
L70140	C+0000010-0000000	+0000020-0000000	+0000040-0000000	+0000050-0000000
L70200	C+0000100-0000000	-0000000-0000000	+0070110-3377740	-4100050-0177730
L70240	C-6077730+0070110	-3377750-4100040	-0177730-6077730	+0070110-3377760
L70300	C-4100030-0177730	-6077730+0070110	-3377770-4100020	-0177730-6077730
L70340	C-1277731+5770400	-0000000-0000000	+0000031+0000000	+0070000-0000000
L70400	C+0007000-0000000	+0000700-0000000	+0000070-0000000	-0000000-0000000
L70440	C+5570601-7200040	-7200040-7200040	-3000000-5705300	-0000130+0070420
L70500	C+0170140+4270420	+4270620+0370770	+5170470+7770000	+5570540+0070120
L70540	C+0370130+6070120	+5070520+5770410	+0070170+0170110	+6070110+5770041
L70600	C-7200370-7200100	-7200330+0070160	+0370120-4100010	+0170110+6070110
L70640	C+5770041-7200040	-7200040-7200040	-1200000+0070620	+0170130+4270620
L70700	C+4270420+0370760	+5170660+7770000	+5570721-7200370	-7200100-7200330
L70740	C+0070160+0370120	+0170110+6070110	+5770041+0070120	+0370130+6070120
L71000	C+5070750+5770601	+0070150+5770521	-1200000+0070620	-3000000-5705300
L71040	C-0000000-0000000	-0000000-0000000		

H