## AUXILITARY <br> LIBRARY ROUTINE P 7-124

TITLE:
TYPE:
NUMBER OF WORDS:
TEMPORARY STORAGE:
PURPOSE:

Letter Printing
Closed with one program parameter
32
0, 1
This is a closed subroutine to simplify the printing of groups of letters and to conserve memory space when a
large number of letters are to be printed. There are three ways to enter it。

When entered by means of the orders

| $p$ | 40 aF <br> 50 p |
| :--- | :--- |
|  | 26 |

the routine will read 5 hole characters from the tape and store them in compacted form, 8 characters to a register, starting at location a. The reading and storing will continue until a terminating symbol, consisting of only a fifth hole, is read and stored.

When entered by means of the orders

| p | JO aF |
| :--- | :--- |
|  | 50 p |
|  | 26 |

the routine will print characters which have previously been read and stored by the routine at locations starting with a. All the letters previously stored at these locations will be printed with the exception of the terminating symbol.

In this way groups of letters may be read and stored in the memory and at some later time certain of these groups may be printed depending on the results of calculations. When entered by means of the orders

| p | 50 F |
| :--- | :--- |
|  | 50 p |
|  | 26 |

the routine will read 5 hole characters from the tape and print them immediately without storing them. This process will continue until the terminating symbol is encountered. The terminating symbol will not be printed. After all reading of letters from the tape has taken place the last 19 words (starting with word 13) of the routine may be overwritten.

| RT: $3 / 8 / 60$ |
| :--- |
| DATE $\frac{\text { December } 15,1953}{}$ |
| CODED BY D. E. Muller |
| APPROVED BY_ J. P. Nash |


| LOCATION | ORDER | NOTES | PAGE. 2 | P7 |
| :---: | :---: | :---: | :---: | :---: |
| 0 | OOK(P7) |  |  |  |
|  | K5 F |  |  |  |
|  | 42 4I |  |  |  |
| 1 | 3624 L |  |  |  |
|  | 4621 |  |  |  |
| 2 | L5 F |  |  |  |
|  | 40 F |  |  |  |
| 3 | 197 F |  |  |  |
|  | 401 F |  |  |  |
| 4 | L3 F |  |  |  |
|  | 32 F |  |  |  |
| 5 | L5 F |  |  |  |
|  | 10 5F |  |  |  |
| 6 | 40 F |  |  |  |
|  | 01 1F |  |  |  |
| 7 | 42 9L |  |  |  |
|  | 01 10F |  |  |  |
| 8 | F4 9L |  |  |  |
|  | 429 L |  |  |  |
| 9 | 00 IF |  |  |  |
|  | 93 F |  |  |  |
| 10 | 50 lF |  |  |  |
|  | 0140 F |  |  |  |
| 11 | 3234 |  |  |  |
|  | 19 18F |  |  |  |
| 12 | L4 2 L |  |  |  |
|  | 22 U |  |  |  |
| 13 | 914 F |  |  |  |
|  | 32145 |  |  |  |
| 14 | LO 15L |  |  |  |
|  | L4 15L |  |  |  |
| 15 | 10 5F |  |  |  |
|  | Sl 16F |  |  |  |
| 16 | 32 4L |  |  |  |
|  | 01 F |  |  |  |


| LOCAITIOM | ORDER | HOTES | PAGE 2 | P 7 |
| :---: | :---: | :---: | :---: | :---: |
| 17 | L4 F |  |  |  |
|  | 40 F |  |  |  |
| 18 | 40 F |  |  |  |
|  | L5 16L |  |  |  |
| 19 | L4 5L |  |  |  |
|  | 42161 |  |  |  |
| 20 | FO 10L |  |  |  |
|  | 00 23F |  |  |  |
| 21 | $3613 L$ |  |  |  |
|  | 19 18F |  |  |  |
| 22 | L4 18L |  |  |  |
|  | 4618 L |  |  |  |
| 23 | 43 16L |  |  |  |
|  | 2217 L |  |  |  |
| 24 | 4618 L |  |  |  |
|  | 00 42F |  |  |  |
| 25 | 36 23L |  |  |  |
|  | 26 28L |  |  |  |
| 26 | F4 35 |  |  |  |
|  | 42 27L |  |  |  |
| 27 | 2227 L |  |  |  |
|  | 93 F |  |  |  |
| 28 | 5031 L |  |  |  |
|  | 914 F |  |  |  |
| 29 | 104 F |  |  |  |
|  | 74314 |  |  |  |
| 30 | 3626 L |  |  |  |
|  | 23 4L |  |  |  |
| 31 | 00 F |  |  |  |
|  | 001024 F |  |  | , |

