



PERMANENT  
MEMORANDUM

M-1127

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DATE

September 26, 1961

SUBJECT Program Format for PDP-1 Maintenance Programs  
TO PDP Distribution List

ABSTRACT

This is a description of symbol standards and program format for PDP-1 Maintenance programs.

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The need for standization of symbols has arisen due to the large number of persons involved in writing maintenance and checkout programs. Therefore, the following symbols shall be used when writing small routines in FRAP language:

be (xx)	beginning of program
fi (xx)	end of program
eh (xx)	error halt
ph (xx)	program halt*
t (xx)	temporary storage
p (xx)	reference symbol
tb (xx)	beginning of table

\*ph (xx) may be defined by fi (xx) if it is end of program.

The following format shall be used at the beginning and end of all diagnostic routines:

```
,name of test
,date
,name
bel      szs 10
        hlt
        ----
        ----
        ----          program
        ----
        ----
        ----
fil      szs 20
        jmp bel
        rpb
        dio c & 3
        spi *
        rpb
        0
        jmp fil
```

Sample program:

,Test for all lac dac idx and addl sas also uses jmp hlt  
,9/15/61  
,G.B. & S.L.

```
be2          szs 10
phl          hlt
            lac t1
            dac p2
            cla
            dac t3
            dac t4
            jmp p2
pl           idx t4
            lac t3
            add tb3 & 1
            dac t3
            sas t4
ehl         hlt
            sza *
            jmp p3
p2          sas
            jmp pl
            idx p2
            jmp pl
t3          0
t4          0
tb3         0
            1
            3
            7
            17
            37
            77
            177
            377
            777
            1777
            3777
            7777
            17777
            37777
            77777
            177777
            377777
            777777
```

```
t1      sas tb3
t2      sas tb3 & 21
p3      lac p2
        sas t2
        hlt
fi2     szs 20
        jmp be2
        rpb
        dio  $\phi$  & 3
        spi *
        rpb
        0
        jmp fi2

end .
```