```
LLL                        IIIIIIIII
LLL                        IIIIIIIII
LLL                        IIIIIIIII        SSSSSSSSS              PPPPPPPPPPPP
LLL                        III             SSSSSSSSS              PPPPPPPPPPPPP
LLL                        III             SSSSSSSSS              PPPPPPPPPPPPP
LLL                        III         SSS         SSS           PPP         PPP
LLL                        III         SSS         SSS           PPP         PPP
LLL                        III         SSS         SSS           PPP         PPP
LLL                        III         SSS                       PPP         PPP
LLL                        III         SSS                       PPP         PPP
LLL                        III         SSS                       PPP         PPP
LLL                        III             SSSSSSSSS              PPPPPPPPPPPP
LLL                        III             SSSSSSSSS              PPPPPPPPPPPPP
LLL                        III             SSSSSSSSS              PPPPPPPPPPPPP
LLL                        III                         SSS       PPP
LLL                        III                         SSS       PPP
LLL                        III                         SSS       PPP
LLL                        III         SSS             SSS       PPP
LLL                        III         SSS             SSS       PPP
LLL                        III         SSS             SSS       PPP
LLLLLLLLLLLLLLL            IIIIIIIII           SSS             PPP
LLLLLLLLLLLLLLL            IIIIIIIII       SSSSSSSSS              PPP
LLLLLLLLLLLLLLL            IIIIIIIII       SSSSSSSSS              PPP
                                           SSSSSSSSS              PPP
```

DSK LISP   LISP   08:50:50

                                    FEB 02,1969

```
999999999       777777777777777
999999999       777777777777777
999999999       777777777777777
999         999                 777
999         999                 777
999         999                 777
999         999             777
999         999             777
999         999             777
    99999999999         777
    99999999999         777
    99999999999         777
            999     777
            999     777
            999     777
999         999 777
999         999 777
999         999 777
    999999999   777
    999999999   777
    999999999   777
```

```
001   004 013 TITLE LISP INTERPRETER
002
003                    ;CONDITIONAL ASSEMBLY FLAGS
004
005          TS==1     ;TIME-SHARING OPTIONS
006          RL==0     ;1 MEANS RELOCATABLE
007          PL==1     ;PLOTTER ROUTINES
008          VD==1     ;VISUAL DISPLAY ROUTINES (340CRT)
009          PKPKF==1           ;PICPAC ROUTINES
010          MPXRF==1           ;VIDISSECTOR, A/D, D/A, AND 760 ROUTINES
011          LAPPL==1           ;ROUTINES FOR LAP
012
013                    ;ACCUMULATOR USAGE
014          NIL=0     ;ATOM HEAD FOR NIL
015          A==1      ;ARG 1; VALUES MARKED FROM
016          B==2      ;ARG 2, MARKED FROM
017          C==3      ;ARG 3; MARKED FROM
018          AR1=4     ;ARG 4; MARKED FROM
019          AR2=5     ;ARG 5; MARKED FROM
020          T==6      ;USED WITH LSUBR CALLS; MARKED FROM
021          TT=7      ;TEMP; MARKED FROM
022          FP=10     ;FLONUM WORDS AC
023
024          R=11      ;NOT MARKED, USED BY PRINT,GC, ETC.
025          D=12      ;DITTO
026          ;13       ;UNUSED BY LISP
027          P==14     ;PDL AC; NOT MARKED
028          F=15      ;FREE-STORAGE AC
029          FF=16     ;FULL WORDS AC
030          SP=17     ;SPECIAL PDL AC
031          NACS=5
032          OBTSIZ==777     ;OBLIST LENGTH
033
034 001 004 IFE TS, RL==1
035 001 005 IFN RL,RELOCATABLE
036
037          DEFINE INFORM A,B
038 001 015 IF1,[PRINTX /A=B
039          /]
040          TERMIN
041
042 001 004 IFN TS,[PRINTX "MODIFIED 'FOR T.S.
043          "]
044 001 031 IRPS S,,RL PL VD PKPKF MPXRF OBTSIZ
045 001 037 INFORM S,\S
046          TERMIN
```

```
001          BSUP=140000
002
003 001 004 IFE TS,[
004          PLT=654
005          VID=754
006          MPXV=764
007          MPXP=744
008          CRK=710
009          KRC=714
010          PCHCHN==3
011          APRCHN==4
012          LPTCHN==5
013          TTYCHN==6
014          PLTCHN==6
015          DISCHN==7
016          FLGCHN==6
017          PRS==PI
018 002 001 MACSA=BSUP+37762
019 002 001 MACCH=BSUP+37777
020          ]
021
022          CALLF=76000,,
023          JCALLF=77000,,
024          CALL=74000,,
025          JCALL=75000,,
026
027          LERR=1000,,     ;ORDINARY LISP ERROR
028          LER2=2000,,     ;NO STRG LEFT OR PDL OVFL
029          LER3=3000,,     ;I/O ERROR - MUST RESET I/O SWITCHES.
030          STRT=4000,,     ;STRING TYPEOUT
031
032          UUOMAX==4       ;NO OF ERROR-TYPE UUO'S
033
034 001 004 IFN TS,[        ;MAGIC NUMBER FOR ITS INTERRUPT ENABLE
035          ITSMSK=220661   ;NO. OF ASCII BYTES PER WORD
036          BYTSWD==5
037          ]
038
039          ZZ==1
040 001 014 IRP A,,[TYIC,TYOC,UTIC,UTOC,LPTC,VIDC,PLTC
             NVDC,IMXC,DMXC,BVDC,DISC,NOFCH]
041 002 047          A==ZZ
042 002 039          ZZ==ZZ+1
043 002 039 TERMIN
044          ]
045
046
047 002 047 BVDC==BVDC
```

```
001
002 001 004 ALLOC*: IFE TS..CONO 200000
003 152 024 IFN TS.[.OPEN TYOC.ATYO
004         .VALUE
005 152 021     .OPEN TYIC.ATYI
006         .VALUE
007
008 152 046    ]   MOVEI P,ALLPDL-1
009 152 004        PUSHJ P,ALLTYO
010 004 013        ASCIZ /LISP /
011 001 017        MOVE AR1.[.FNAM2]
012 001 016 ALLOCB: MOVEI C,0
013 001 016        LSHC C,6
014 153 018        JUMPE C,ALLOCA
015 001 015        ADDI C,40
016 152 016        PUSHJ P,ALLTYC
017 153 012        JRST ALLOCB
018 152 004 ALLOCA: PUSHJ P,ALLTYO
019             ASCII /
020 153 002 ALLOC7: /
021 152 012        PUSHJ P,ALLTYI
022 001 016        CAIGE C,*0
023 153 078        JRST ALLOCO
024 152 004        PUSHJ P,ALLTYO
025 001 004 IFE TS.[     ASCII /
026         MEMTOP=/
027 152 034        PUSHJ P,ALLNUM
028 001 014        SKIPG A
029 002 001        MOVEI A,37170+IFE TS.BSUP
030 153 067        HRRM A,ALLCO1]
031 001 004 IFN TS.[ASCII /
032         CORE= /
033 152 034        PUSHJ P,ALLNUM
034 001 014        CAIGE A,20
035 001 014        MOVEI A,20
036 001 014        HRLI A,[.CORE]
037 153 069        MOVEM A,ALCOR
038 001 015        MOVEI B,1(A)
039 021 013        HRRM B,BCORE
040 001 015        HRRZM B,VCORE
041 001 014        LSH A,10.
042 001 014        SOS A
043 153 067        HRRM A,ALLCO1
044 016 003    ]   MOVE B,[JRST TYIN+3]
045 001 014 IFE TS.[     CAILE A,37777
046 018 003        MOVEM B,TYIN
047 152 004    ]   PUSHJ P,ALLTYO
048             ASCII /
049         FULL WDS=/
050 152 034        PUSHJ P,ALLNUM
051 001 014        SKIPGE A
052 001 014        MOVEI A,400
053 153 108        HRRM A,ALLCO2
054 152 004        PUSHJ P,ALLTYO
055             ASCII /
056         BIN.PROG.SP=/
057 152 034        PUSHJ P,ALLNUM
058 001 014        SKIPGE A
059 001 014        MOVEI A,1000
060 153 094        HRRM A,ALLC10
```

```
061 152 004        PUSHJ P,ALLTYO
062             ASCII /
063         SPEC.PDL=/
064 152 034        PUSHJ P,ALLNUM
065 001 014        SKIPGE A
066 001 014        MOVEI A,1000
067 153 102        HRRM A,ALLC20
068 001 014        MOVNS A
069 153 103        HRRM A,ALLC21
070 152 004        PUSHJ P,ALLTYO
071             ASCII /
072         REG. PDL=/
073 152 034        PUSHJ P,ALLNUM
074 001 014        SKIPGE A
075 001 014        MOVEI A,1000
076 153 111        HRRM A,ALLC30
077             MOVEI A,LISPGO
078 003 024 ALLOCO: IFE TS.[100
079 001 014        HRRM A,100
080    ]         MOVSI A,[JFCL]
081 001 014 IFN TS.[     MOVEM A,LISPGO
082 003 024        MOVEM A,LISPGO
083    ]         PUSHJ P,ALLTYO
084 152 004        ASCII /
085             ASCII /
086    /     IFE TS.MOVEI A,37170+BSUP
087 002 001 ALLCO1: IFE TS.MOVEI A,37777
088 001 014        IFN TS.MOVEI A,37777
089 001 004 IFN TS.[ALCOR:  .CORE 20
090 153 002        JRST ALLOC
091    ]         HRRM A,BPSH
092 032 049        MOVEM A,VBPE1
093 151 046 ALLC10: SUBI A,1000    ;ADDR MAY BE CHANGED BY ALLOC
094 001 014        HRRM A,BPSL
095 032 050        MOVEM A,VBPL
096 001 004 IFN TS.[     LDB B,[121000..A]
097 001 014        ADDI B,2
098 001 015        HRRM B,ACORE]
099 021 003        MOVEM A,VBP1
100 151 045        SOS A
101 001 014 ALLC20: SUBI A,1000
102 001 014 ALLC21: HRLI A,-1000
103 001 014        MOVEM A,BC2
104 005 057        SUBI A,FS
105 146 003        HRRZS B,A
106 001 014        ASH A,-4
107 001 014 ALLC02: ADDI A,400
108 001 014        MOVE C,B
109 001 015        ASH C,-6
110 001 016        ADDI C,1000
111 001 016 ALLC30: ADDI C,1000
```