STORAGE ALLOCATION.

| ADDRESS | LENGTH | BINARY CONTROL CARDS. | |
|---|---|---|---|
| 0 | 0 | IDENT | DISK4A |
| 0 | | END | |

ENTRY POINTS.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MAINCL | - | 3 | RO | - | 1 | HELPER | - | 10 | INIA | - | 16 |
| OPERCL | - | 2 | MYCODF | - | 1 | ACCTNT | - | 11 | INIT | - | 17 |
| ALLOC | - | 0 | RCAPS | - | 5 | RETRY | - | 12 | INIH | - | 20 |
| IPLIST | - | 50 | USRDSK | - | 5 | USERBUG | - | 13 | INIR | - | 21 |
| CTEMP | - | 4 | FRETRW | - | 6 | INID | - | 14 | INIB | - | 22 |
| RW | - | 0 | TERMIN | - | 7 | INIF | - | 15 | | | |

EXTERNAL SYMBOLS.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| FLDLEN | DISK4B | M.HLPCC | M.FRWCC | M.TRYCC | EC:RPAR | EC:COUT | EC:READ |
| ROL | M.ACTCC | M.DFILT | M.TRMCC | M.USRCC | EC:DSCP | EC:CCLS | |

```
                                        IDENT     DISK4A
0                                       ORG       0
0                               PARAMS  XTEXT
                                *
                                *
                                * DISK4.. CREATES CLASS CODES FOR ALL DISK SYSTEM SUBPROCESSES
                                *        AND SUBPROCESS CALL OPERATIONS FOR ALL DISK SYSTEM
                                *        CALLS, INCLUDING EXTENDED (FRETURN) READ/WRITE OPERATIONS
                                *
                                *
                          0     RPARMX  SET       0                   INITIALIZE RET PARM INDEX
                                *
                                * MACRO SETS UP RETURN OF A CAPABILITY
                                *
                                        MACRO     CAPR,LABEL,DNAME
                                LABEL   CAPBSS    1
                                        RMT
                                        DATA      0L,DNAME
                                        RMT
                                RPARMX  SET       RPARMX+1
                                        ENDM
                                *
                                *
0                               RWF     BSS       0                   START OF READ/WRITE AREA
                                *
                                *
                                        EXT       FLDLEN,ROL,DISK4B
                                        EXT       M.ACTCC,M.HLPCC,M.DFILT,M.FRWCC
                                        EXT       M.TRMCC,M.TRYCC,M.USRCC
                                        ENTRY     MAINCL,OPERCL,ALLOC,IPLIST,CTEMP
                                *
                                *
0                               SYSSUBP XTEXT
                                *
0   00000000000000000001                TYPE      1
2   03140123230000000000                NAMES     CLASS,ROOT,CALL,CL.DISK4,SF.DISK4
7   00000000000000000002                INTEGERS  50,FLDLEN,ENTER,FLDLEN
                                *
                                * MAP DESCRIPTION
                                *
15  23065704112313370000        RW      MAP       SF.DISK4,RWF,RWF,RWL,0
20  03065704112313370000        RO      MAP       CF.DISK4,ROF,ROF,ROL,1
23  77777777777777777777                MAPEND
                                *
                                * CLIST DESCRIPTION
                                *
24  11570114141703000000        ALLOC   CAP       I.ALLOC
25  03065704112313370000        MYCODF  CAP       CF.DISK4
26  03145717200522230000        OPERCL  CAP       CL.OPERS
27  03145715011116000000        MAINCL  CAP       CL.MAIN
30                              CTEMP   CAPBSS    1          SCRATCH CAPABILTY ENTRY
                                RCAPS   CAPBSS    0          START OF RETURN PARAMETERS
31                              USRDSK  CAPR      CC.USRDSK
```

```
                    FRETRW     CAPR      CC.FRETRW
                    TERMIN     CAPR      CC.TERMIN
                    HELPER     CAPR      CC.HELPER
                    ACCTNT     CAPR      CC.ACCTNT
                    RETRY      CAPR      CC.RETRY
                    ***************************
                    USERBUG    CAPR      CC.USERBUG
                    ***************************
                    INID       CAPR      DO.UDINIT        DISK USER-SERVICE INITIALIZATION CALL
                    INIF       CAPR      DO.FRINIT        FRETURN-HANDLER INITIALIZATION CALL
                    INIA       CAPR      DO.ACINIT        ACCOUNTANT INITIALIZATION CALL
                    INIT       CAPR      DO.TRINIT        TERMINATOR INITAILIZATION CALL
                    INIH       CAPR      DO.HLINIT        HELPER INITIALIZATION CALL
                    INIR       CAPR      DO.RTINIT        WRITE-RETRY INITIALIZATION CALL
                    ***************************
                    INIB       CAPR      UBUGINIT
                    ***************************
777777777777777777                CAPEND
```

```
                                *
                                * SCRATCH AREA
                                *
50                              IPLIST    BSSZ      16
                                *
                                *
70  0000000000                  FRET      PS
                                *
71                              SYSERR    BSSZ      1
72  0000000000                            PS
                                *
                                *
73                              RWL       BSS       0                END OF READ/WRITE AREA
```

```
 73                         ROF       BSS       0                    START OF READ-ONLY AREA
                            *
                            *
 73                         SYSCALL   XTEXT
                            *
                                      MACSET    OPERCL,IPLIST,ECS
                            *
                            *
                            *
                            * ENTER AND INITIALIZE SCRATCH AREA
                            *
 73  7160000002             ENTER     READ      MYCODF,RWF,RWF,RWL-RWF,FRET
                            *
                            * CREATE DISK SYSTEM CLASS CODES
                            *
104  7160000002                        CRCLCD    USRDSK
111  7160000002                        CAPOUT    MAINCL,M,USRCC,USRDSK
120  7160000002                        CRCLCD    FRETRW
125  7160000002                        CAPOUT    MAINCL,M,FRWCC,FRETRW
134  7160000002                        CRCLCD    TERMIN
141  7160000002                        CAPOUT    MAINCL,M,TRMCC,TERMIN
150  7160000002                        CRCLCD    HELPER
155  7160000002                        CAPOUT    MAINCL,M,HLPCC,HELPER
164  7160000002                        CRCLCD    ACCNT
171  7160000002                        CAPOUT    MAINCL,M,ACTCC,ACCNT
200  7160000002                        CRCLCD    RETRY
205  7160000002                        CAPOUT    MAINCL,M,TRYCC,RETRY
                            ***************************
214  7160000002                        CRCLCD    USERBUG
                            ***************************
                            *
                            * CALL DISK4B SUBROUTINE TO CREATE DISK SYSTEM CALL OPERATIONS
                            *
221  7160000002                        DISPCAP   (MAINCL,M,DFILT)
227  43652                             MX6       60-18
          15176                        BX1       -X6*X7               EXTRACT TYPE FIELD
               6170000231              SB7       BACK
230  0200000000 X                      JP        DISK4B               MAKE OPERATIONS
                            *
                            * RETURN WITH PARAMETERS
                            *
231  5110000240             BACK      SA1       DSPEC                SPECIFY DATA PARAMETERS
               5120000241              SA2       CSPEC                SPECIFY CAPABILITY PARAMETERS
232  7160000002                        RETPAR    (,X1),(,X2)          RETURN WITH PARAMETERS
                            *
                            * DATA INVOLVED WITH RETURN PARAMETERS
                            *
                       17   NDATS     EQU       RPARMX+1             NO. OF DATA (INCL END-MARKER)
240  0000000017000000242    DSPEC     VFD       30/NDATS,30/RNAMES   DATA SPECIFICATION
                            *
                       16   NCAPS     EQU       RPARMX               NO. OF CAPS
241  0000000016000000005    CSPEC     VFD       30/NCAPS,30/RCAPS    CAPABILITY SPECIFICATION
                            *
```

```
 242                          RNAMES    BSS       0
                                        HERE
 260  0000000000000000000               DATA      0                    END-MARKER
                              *
                              *
   0                                     END

                     42111    STORAGE USED          793 STATEMENTS      130 SYMBOLS
                              6600 ASSEMBLY       8.334 SECONDS         297 REFERENCES
```

SYMBOLIC REFERENCE TABLE.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| ACCTNT | 11 | | 3/05 D | 5/25 | 5/26 | | | | | |
| ALLOC | 0 | | 2/30 E | 2/48 D | | | | | | |
| BACK | 231 | | 5/37 | 5/42 L | | | | | | |
| CAPX | 23 | | 2/38 D | 2/50 D | 2/52 D | 3/03 | 3/05 | 3/10 D | 3/13 | 3/15 |
| | | | 2/48 | 2/50 | 2/52 | 3/03 D | 3/06 | 3/10 | 3/13 D | 3/17 |
| | | | 2/48 D | 2/51 | 3/01 | 3/03 | 3/06 D | 3/11 | 3/13 | 3/17 D |
| | | | 2/48 | 2/51 D | 3/01 D | 3/04 | 3/06 | 3/11 D | 3/14 | 3/17 |
| | | | 2/49 | 2/51 | 3/01 | 3/04 D | 3/08 | 3/11 | 3/14 D | 3/18 |
| | | | 2/49 D | 2/52 | 3/02 | 3/04 | 3/08 D | 3/12 | 3/14 | |
| | | | 2/49 | 2/52 D | 3/02 D | 3/05 | 3/08 | 3/12 D | 3/15 | |
| | | | 2/50 | 2/52 | 3/02 | 3/05 D | 3/10 | 3/12 | 3/15 D | |
| CSPEC | 241 | | 5/43 | 5/52 L | | | | | | |
| CTEMP | 4 | | 2/30 E | 2/52 D | | | | | | |
| DISK4B | 0 | EXTERNAL* | 5/38 | | | | | | | |
| DSPEC | 240 | | 5/42 | 5/49 L | | | | | | |
| EC:CCLS | 0 | EXTERNAL* | 5/17 | 5/19 | 5/21 | 5/23 | 5/25 | 5/27 | 5/30 | |
| EC:COUT | 0 | EXTERNAL* | 5/18 | 5/20 | 5/22 | 5/24 | 5/26 | 5/28 | | |
| EC:DSCP | 0 | EXTERNAL* | 5/35 | | | | | | | |
| EC:READ | 0 | EXTERNAL* | 5/13 | | | | | | | |
| EC:RPAR | 0 | EXTERNAL* | 5/45 | | | | | | | |
| ENTER | 73 | | 2/38 | 5/12 L | | | | | | |
| FLDLEN | 0 | EXTERNAL* | 2/36 | 2/38 | | | | | | |
| FRET | 70 | | 4/07 L | 5/13 | | | | | | |
| FRETRW | 6 | | 3/02 D | 5/19 | 5/20 | | | | | |
| HELPER | 10 | | 3/04 D | 5/23 | 5/24 | | | | | |
| INIA | 16 | | 3/12 D | | | | | | | |
| INIB | 22 | | 3/17 D | | | | | | | |
| INID | 14 | | 3/10 D | | | | | | | |
| INIF | 15 | | 3/11 D | | | | | | | |
| INIH | 20 | | 3/14 D | | | | | | | |
| INIR | 21 | | 3/15 D | | | | | | | |
| INIT | 17 | | 3/13 D | | | | | | | |
| IPLIST | 50 | | 2/30 E | 4/04 L | 5/06 | | | | | |
| IP::LIST | 50 | | 5/06 D | 5/17 | 5/20 S | 5/22 S | 5/24 S | 5/26 S | 5/28 | 5/45 S |
| | | | 5/13 S | 5/18 S | 5/20 S | 5/22 S | 5/24 S | 5/26 | 5/30 S | 5/45 |
| | | | 5/13 S | 5/18 S | 5/20 S | 5/22 S | 5/24 | 5/27 S | 5/30 S | |
| | | | 5/13 S | 5/18 S | 5/20 S | 5/22 | 5/25 S | 5/27 S | 5/30 | |
| | | | 5/13 S | 5/18 S | 5/20 | 5/23 S | 5/25 S | 5/27 | 5/35 S | |
| | | | 5/13 S | 5/18 | 5/21 S | 5/23 S | 5/25 | 5/28 S | 5/35 S | |
| | | | 5/13 | 5/19 S | 5/21 S | 5/23 | 5/26 S | 5/28 S | 5/35 | |
| | | | 5/17 S | 5/19 S | 5/21 | 5/24 S | 5/26 S | 5/28 S | 5/45 S | |
| | | | 5/17 S | 5/19 | 5/22 S | 5/24 S | 5/26 S | 5/28 S | 5/45 S | |
| L:CLIST | 23 | | 2/38 | 3/18 D | | | | | | |
| L:LMAP | 2 | | 2/37 | 2/43 D | | | | | | |
| MAINCL | 3 | | 2/30 E | 5/18 | 5/22 | 5/26 | 5/35 | | | |
| | | | 2/51 D | 5/20 | 5/24 | 5/28 | | | | |
| MAPX | 2 | | 2/38 D | 2/42 | 2/42 | 2/43 | 2/43 | | | |
| | | | 2/42 | 2/42 D | 2/43 | 2/43 D | | | | |
| MYCODF | 1 | | 2/49 D | 5/13 | | | | | | |
| M.ACTCC | 0 | EXTERNAL* | 5/26 | | | | | | | |
| M.DFILT | 0 | EXTERNAL* | 5/35 | | | | | | | |
| M.FRWCC | 0 | EXTERNAL* | 5/20 | | | | | | | |
| M.HLPCC | 0 | EXTERNAL* | 5/24 | | | | | | | |

SYMBOLIC REFERENCE TABLE.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| M.TRMCC | 0 | EXTERNAL* | 5/22 | | | | | | | |
| M.TRYCC | 0 | EXTERNAL* | 5/28 | | | | | | | |
| M.USRCC | 0 | EXTERNAL* | 5/18 | | | | | | | |
| NCAPS | 16 | | 5/51 D | 5/52 | | | | | | |
| NDATS | 17 | | 5/48 D | 5/49 | | | | | | |
| OPERCL | 2 | | 2/30 E | 2/50 D | 5/06 | | | | | |
| OP::::CL | 2 | | 5/06 D | 5/17 | 5/20 | 5/23 | 5/26 | 5/34 | | |
| | | | 5/12 | 5/18 | 5/21 | 5/24 | 5/27 | 5/44 | | |
| | | | 5/16 | 5/19 | 5/22 | 5/25 | 5/29 | | | |
| RCAPS | 5 | | 2/52 D | 5/52 | | | | | | |
| RETRY | 12 | | 3/06 D | 5/27 | 5/28 | | | | | |
| RNAMES | 242 | | 5/49 | 6/01 L | | | | | | |
| RO | 1 | | 2/43 D | | | | | | | |
| ROF | 73 | | 2/43 | 2/43 | 5/01 L | | | | | |
| ROL | 0 | EXTERNAL* | 2/43 | | | | | | | |
| RPARMX | 16 | | 2/11 D | 3/02 | 3/04 | 3/06 | 3/10 | 3/12 | 3/14 | 3/17 |
| | | | 3/01 D | 3/03 D | 3/05 D | 3/08 D | 3/11 D | 3/13 D | 3/15 D | 5/48 |
| | | | 3/01 | 3/03 | 3/05 | 3/08 | 3/11 | 3/13 | 3/15 | 5/51 |
| | | | 3/02 D | 3/04 D | 3/06 D | 3/10 D | 3/12 D | 3/14 D | 3/17 D | |
| RW | 0 | | 2/42 D | | | | | | | |
| RWF | 0 | | 2/24 L | 2/42 | 2/42 | 5/13 | 5/13 | 5/13 | | |
| RWL | 73 | | 2/42 | 4/13 L | 5/13 | | | | | |
| SYSERR | 71 | | 4/09 L | | | | | | | |
| TERMIN | 7 | | 3/03 D | 5/21 | 5/22 | | | | | |
| USERBUG | 13 | | 3/08 D | 5/30 | | | | | | |
| USRDSK | 5 | | 3/01 D | 5/17 | 5/18 | | | | | |

STORAGE ALLOCATION.

| ADDRESS | LENGTH | BINARY CONTROL CARDS. | |
|---|---|---|---|
| 0 | 4450 | IDENT | DISK4B |
| 4450 | | END | |

ENTRY POINTS.

DISK4B - 0 ROL - 4450 FLDLEN - 4450

EXTERNAL SYMBOLS.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| IPLIST | RETRY | DF:DSBN | DF:ARSV | DF:ZRM | DF:OPRW | INIR | DF:WRIT |
| OPERCL | USERBUG | DF:DSUB | DF:ABSV | DF:MELT | DF:OPRO | INIA | EC:WRIT |
| MAINCL | DF:XOPN | DF:DBUG | DF:RLSE | DF:FREZ | DF:MBLK | HELPER | DF:READ |
| CTEMP | DF:DSFN | DF:DONE | DF:SCLM | DF:DTCH | DF:DBLK | INIH | EC:COUT |
| ALLOC | DF:DSF | DF:CFLG | DF:ECLM | DF:ATCH | DF:CBLK | INIT | EC:FDAT |
| USRDSK | DF:SCLF | DF:SHAZ | DF:CLKS | DF:CLUP | DF:DFIL | DF:FINI | EC:UDAT |
| FRETRW | DF:ECLF | DF:PROB | DF:CMRW | DF:CAOF | DF:PCFL | EC:UCAP | EC:READ |
| TERMIN | DF:FUND | DF:AUDT | DF:CMRO | DF:PCLS | DF:CFIL | INIF | EC:ADOR |
| CLOSER | DF:EOCC | DF:LBUF | DF:MMRW | DF:CLOS | EC:BDAT | INID | |
| ACCTNT | DF:DIRT | DF:DACF | DF:MMRO | DF:CLO | INIB | EC:COPR | |

```
                                  IDENT     DISK4B
0                        SYSCALL  XTEXT
0                        PARAMS   XTEXT
0                        OBBITS   XTEXT
0                        TYPES    XTEXT
0                        ACTNUMS  XTEXT
                         *
                         *
                                  EXT       IPLIST,OPERCL
                         *
                                  MACSET    OPERCL,IPLIST,ECS
                         *
                         *
                                  LIST      X
0                        DSKOPR   XTEXT
                         *                                                        DSKOPR    1
                         *                                                        DSKOPR    1
                         *                                                        DSKOPR    1
                         *                         OPERATION CREATING MACROS      DSKOPR    1
                         *                                                        DSKOPR    1
                         *                TO CREATE OPERATION GIVE                DSKOPR    1
                         *                         1)INDEX IN LOCAL C-LIST FOR COMPLETED OPERDSKOPR    1
                         *                                                        DSKOPR    1
                         *                         2)NUMBER OF PARAMETERS         DSKOPR    1
                         *                         3)C-LIST INDEX (MAY BE INDIRECT) FOR SUBPRDSKOPR    1
                         *                                                        DSKOPR    1
                         *                       4)SEQUENCE OF PARAMETER SPECIFICATIONS   DSKOPR    1
                         *                          ↑UDAT↑                  ..USER DATUM DSKOPR    1
                         *                          (↑FDAT↑,VALUE)          ..FIXED DATUMDSKOPR    1
                         *                                                        DSKOPR    1
                         *                          (↑UCAP↑,TYPE,OPTIONS)   ..USER CAP   DSKOPR    1
                         *                             OPTIONS GOES IN A ↑VFD  42/OPTIONS,1DSKOPR    1
                         *                                                        DSKOPR    1
                         *                          (↑BLKD↑,MAX)            ..BLOCK DATA DSKOPR    1
                         *                                                        DSKOPR    1
                         *                       NOTE:↑OPERATE↑ DESTROYS A5/X5,A6/X6,A7/X7 DSKOPR    1
                         *                                                        DSKOPR    1
                         *                                                        DSKOPR    1
                         *                                                        DSKOPR    1
0                        OPNUM    SET       0                INITIALIZE OPERATION NUMBER   DSKOPR    1
                         *                                                        DSKOPR    1
                         *                                                        DSKOPR    1
                         UDAT     MACRO     OPER,INDEX       USER DATUM           DSKOPR    1
                                  USRDAT    OPER,INDEX                            DSKOPR    1
                                  ENDM                                            DSKOPR    1
                         *                                                        DSKOPR    1
                         FDAT     MACRO     OPER,INDEX,VALUE FIXED DATUM          DSKOPR    1
                                  USRDAT    OPER,INDEX                            DSKOPR    1
                                  FIXDAT    OPER,INDEX,VALUE                      DSKOPR    1
                         INDEX    SET       INDEX-1          FIXED PARAM DISAPPEARS DSKOPR    1
                                  ENDM                                            DSKOPR    1
                         *                                                        DSKOPR    1
                         UCAP     MACRO     OPER,INDEX,TYPE,OPTIONS     USER CAPABILITY DSKOPR    1
```

```
                LOCAL     L1,L2                                                DSKOPR   1
                JP        L2                                                   DSKOPR   1
L1              VFD       60/OPTIONS                                           DSKOPR   1
L2              SAS       L1                                                   DSKOPR   1
                USRCAP    OPER,INDEX,(TYPE),(,X5)                              DSKOPR   1
                ENDM                                                           DSKOPR   1
*                                                                              DSKOPR   1
BLKD            MACRO     OPER,INDEX,MAX       BLOCK DATA                      DSKOPR   1
                BLKDAT    OPER,INDEX,MAX                                       DSKOPR   1
                ENDM                                                           DSKOPR   1
*                                                                              DSKOPR   1
*                                                                              DSKOPR   1
*                         PROCESS ONE PARAMETER (CALL PROPER MACRO)            DSKOPR   1
*                                                                              DSKOPR   1
PARAM           MACRO     OPER,INDEX,SPEC,P1,P2,P3                             DSKOPR   1
                SPEC      OPER,INDEX,(P1),(P2),(P3)                            DSKOPR   1
                ENDM                                                           DSKOPR   1
*                                                                              DSKOPR   1
*                                                                              DSKOPR   1
*                         PROCESS ALL PARAMETERS (UP TO NULL PARAM)            DSKOPR   1
*                                                                              DSKOPR   1
PSPEC           MACRO  CT,OPER,P1,P2,P3,P4,P5,P6,P7,P8,P9,P10                  DSKOPR   1
X               IFC       NE,/P1//                                             DSKOPR   1
                PARAM     OPER,CT,P1                                           DSKOPR   1
CT              SET       CT+1                                                 DSKOPR   1
                PSPEC  CT,OPER,(P2),(P3),(P4),(P5),(P6),(P7),(P8),(P9),(P10)   DSKOPR   1
X               ENDIF                                                          DSKOPR   1
                ENDM                                                           DSKOPR   1
*                                                                              DSKOPR   1
*                                                                              DSKOPR   1
*                                                                              DSKOPR   1
*                                                                              DSKOPR   1
*                         CONSTRUCT AN OPERATION                               DSKOPR   1
*                                                                              DSKOPR   1
OPERATE         MACRO     CX,NUMPAR,SUBP,P1,P2,P3,P4,P5,P6,P7,P8,P9,P10        DSKOPR   1
*                                                                              DSKOPR   1
                LOCAL     CT                                                   DSKOPR   1
CT              SET       0                                                    DSKOPR   1
*                                                                              DSKOPR   1
                CREOPER   ALLOC,CX,B0,(SUBP),NUMPAR                            DSKOPR   1
*                                                                              DSKOPR   1
                PSPEC CT,CX,(P1),(P2),(P3),(P4),(P5),(P6),(P7),(P8),(P9),(P10)DSKOPR   1
*                                                                              DSKOPR   1
*                                                                              DSKOPR   1
                ENDM                                                           DSKOPR   1
*                                                                              DSKOPR   1
*                                                                              DSKOPR   1
*                                                                              DSKOPR   1
*                         ADD ORDER TO EXISTING OPERATION                      DSKOPR   1
*                                                                              DSKOPR   1
EXTOPER MACRO OLDC,NOLDP,NEWC,NNEWP,SUBP,P1,P2,P3,P4,P5,P6,P7,P8,P9,P10 DSKOPR   1
        LOCAL     CT                                                           DSKOPR   1
CT      SET       NOLDP                                                        DSKOPR   1
```

```
          ADDORD   (ALLOC),NEWC,(OLDC),(SUBP),NNEWP                          DSKOPR    1
          PSPEC CT,NEWC,(P1),(P2),(P3),(P4),(P5),(P6),(P7),(P8),(P9),(P10)DSKOPR    1
,                                                                            DSKOPR    1
          ENDM                                                               DSKOPR    1
*                                                                            DSKOPR    1
*                                                                            DSKOPR    1
*                    CREATE A DISK SYSTEM CALL OPERATION                     DSKOPR    1
*                                                                            DSKOPR    1
*                                                                            DSKOPR    1
DSKOPER   MACRO      NAME,SUBP,NUMPAR,PS1,PS2,PS3,PS4,PS5,PS6,PS7,PS8,PS9DSKOPR    1
,                                                                            DSKOPR    1
          OPERATE     CTEMP,NUMPAR+1,(SUBP),(FDAT,OPNUM),(PS1),(PS2),(PSDSKOPR    1
,3),(PS4),(PS5),(PS6),(PS7),(PS8),(PS9)                                      DSKOPR    1
*                                                                            DSKOPR    1
          CAPOUT     OPERCL,=T::DISK=NAME,CTEMP                              DSKOPR    1
OPNUM     SET        OPNUM+1                                                 DSKOPR    1
          ENDM                                                               DSKOPR    1
*                                                                            DSKOPR    1
*                    EXTEND AN ECS CALL OPERATION TO A DISK CALL             DSKOPR    1
*                                                                            DSKOPR    1
XDSKOPER  MACRO      OLD,NOLDP,NEW,SUBP,NNEWP,P1,P2,P3,P4,P5,P6,P7,P8,P9 DSKOPR    1
          EXTOPER    (OPERCL,=T::ECS=OLD),NOLDP,CTEMP,NNEWP+1,(SUBP),(FDADSKOPR    1
,T,OPNUM),(P1),(P2),(P3),(P4),(P5),(P6),(P7),(P8),(P9)                       DSKOPR    1
          CAPOUT     OPERCL,=T::DISK=NEW,CTEMP                               DSKOPR    1
OPNUM     SET        OPNUM+1                                                 DSKOPR    1
          ENDM                                                               DSKOPR    1
*                                                                            DSKOPR    1
*                                                                            DSKOPR    1
*                    CREATE AN INITIALIZATION OPERATION                      DSKOPR    1
*                                                                            DSKOPR    1
*                                                                            DSKOPR    1
IDSKOPER  MACRO      NAME,SUBP,NUMPAR,PS1,PS2,PS3,PS4,PS5,PS6,PS7,PS8,PS9DSKOPR    1
,                                                                            DSKOPR    1
          OPERATE    =X,NAME,NUMPAR+1,(SUBP),(FDAT,OPNUM),(PS1),(PS2),(PSDSKOPR    1
,3),(PS4),(PS5),(PS5),(PS6),(PS7),(PS8),(PS9)                                DSKOPR    1
OPNUM     SET        OPNUM+1                                                 DSKOPR    1
          ENDM                                                               DSKOPR    1
*
* CREATE DISK SYSTEM CALL OPERATIONS
*
          EXT        MAINCL,OPERCL,CTEMP,ALLOC,IPLIST
          EXT        USRDSK,FRETRW,TERMIN,CLOSER,ACCTNT,RETRY
***************************
          EXT        USERBUG
***************************
          ENTRY      DISK4B,ROL,FLDLEN
*
*
0         DISK4B     BSS        0                    ENTER HERE
*
0         DSKOPS     XTEXT
          LIST       X                                                       DSKOPS    1
*                                                                            DSKOPS    1
```

```
                        *  LIST OF ALL CALLS ON DISKSYS (USED BY INITIALIZATION AND ENTRY)      DSKOPS    1
                        *                                                                       DSKOPS    1
                        *                                                                       DSKOPS    1
                        *                                                                       DSKOPS    1
                        * READ FILE (POSSIBLE FRETURN)                                          DSKOPS    1
                        *                                                                       DSKOPS    1
   0  7160000000 X                 XDSKOPER  READ,4,READ,=XFRETRW,0                            DSKOPS    1
                        *                                                                       DSKOPS    1
                        *                                                                       DSKOPS    1
                        * WRITE FILE (POSSIBLE FRETURN)                                         DSKOPS    1
                        *                                                                       DSKOPS    1
  36  7160000000 X                 XDSKOPER  WRIT,4,WRIT,=XFRETRW,0                            DSKOPS    1
                        *                                                                       DSKOPS    1
                        *                                                                       DSKOPS    1
                        *                                                                       DSKOPS    1
                        * DISK USER-SERVICE SUBPROCESS INITIALIZATION CALL                      DSKOPS    1
                        *                                                                       DSKOPS    1
  74  7160000000 X                 IDSKOPER  INID,=XUSRDSK,0                                   DSKOPS    1
                        *                                                                       DSKOPS    1
                        *                                                                       DSKOPS    1
                        * FRETURN HANDLER SUBPROCESS INITIALIZATION CALL                        DSKOPS    1
                        *                                                                       DSKOPS    1
 122  7160000000 X                 IDSKOPER  INIF,=XFRETRW,0                                   DSKOPS    1
                        *                                                                       DSKOPS    1
                        *                                                                       DSKOPS    1
                        *  FRETURN INNITIALIZATION FROM USER DISK                               DSKOPS    1
                        *                                                                       DSKOPS    1
 150  7160000000 X                 DSKOPER   FINI,=XFRETRW,3,(UCAP,T,FILE,OB,RDFIL),UDAT,UDAT  DSKOPS    1
                        *                                                                       DSKOPS    1
                        *                                                                       DSKOPS    1
                        * TERMINATOR SUBPROCESS INITIALIZATION CALL                             DSKOPS    1
                        *                                                                       DSKOPS    1
 233  7160000000 X                 IDSKOPER  INIT,=XTERMIN,0                                   DSKOPS    1
                        *                                                                       DSKOPS    1
                        *                                                                       DSKOPS    1
                        * HELPER SUBPROCESS INITIALIZATION CALL                                 DSKOPS    1
                        *                                                                       DSKOPS    1
 261  7160000000 X                 IDSKOPER  INIH,=XHELPER,0                                   DSKOPS    1
                        *                                                                       DSKOPS    1
                        *                                                                       DSKOPS    1
                        * ACCOUNTANT SUBPROCESS INITIALIZATION CALL                             DSKOPS    1
                        *                                                                       DSKOPS    1
 307  7160000000 X                 IDSKOPER  INIA,=XACCTNT,0                                   DSKOPS    1
                        *                                                                       DSKOPS    1
                        *                                                                       DSKOPS    1
                        * WRITE-RETRY SUBPROCESS INITIALIZATION CALL                            DSKOPS    1
                        *                                                                       DSKOPS    1
 335  7160000000 X                 IDSKOPER  INIR,=XRETRY,0                                    DSKOPS    1
                        ****************************************                                DSKOPS    1
                        *                                                                       DSKOPS    1
                        * USER-BUG INITAILIZATION CALL                                          DSKOPS    1
                        *                                                                       DSKOPS    1
 363  7160000000 X                 IDSKOPER  INIB,=XUSERBUG,0                                  DSKOPS    1
```

```
                                *                                                       DSKOPS    1
                                ******************************************              DSKOPS    1
                                *                                                       DSKOPS    1
                                *                                                       DSKOPS    1
                                *                                                       DSKOPS    1
                                *                                                       DSKOPS    1
                                *                                                       DSKOPS    1
                                * CREATE DISK FILE                                      DSKOPS    1
                                *                                                       DSKOPS    1
  411  7160000000 X                     DSKOPER    CFIL,=XUSRDSK,2,UDAT,(BLKD,NUMLEV)  DSKOPS    1
                                *                                                       DSKOPS    1
                                *                                                       DSKOPS    1
                                *  PRIVLEDGED FILE CREATE                               DSKOPS    1
                                *                                                       DSKOPS    1
  463  7160000000 X                     DSKOPER   PCFL,=XUSRDSK,3,UDAT,(BLKD,NUMLEV),UDAT DSKOPS  1
                                *                                                       DSKOPS    1
                                *                                                       DSKOPS    1
                                *  DESTROY DISK FILE                                    DSKOPS    1
                                *                                                       DSKOPS    1
  543  7160000000 X                     DSKOPER    DFIL,=XUSRDSK,1,(UCAP,(,X1),OB,DSTRY) DSKOPS  1
                                *                                                       DSKOPS    1
                                *                                                       DSKOPS    1
                                *  CREATE FILE BLOCK(S)                                 DSKOPS    1
                                *                                                       DSKOPS    1
  612  7160000000 X                     DSKOPER    CBLK,=XUSRDSK,3,(UCAP,T,FILE,OB,DCRBL),UDAT,UDAT DSKOPS 1
                                *                                                       DSKOPS    1
                                *                                                       DSKOPS    1
                                *  DESTROY FILE BLOCK(S)                                DSKOPS    1
                                *                                                       DSKOPS    1
  675  7160000000 X                     DSKOPER    DBLK,=XUSRDSK,3,(UCAP,T,FILE,OB,DDLBL),UDAT,UDAT DSKOPS 1
                                *                                                       DSKOPS    1
                                *                                                       DSKOPS    1
                                *  MOVE BLOCK                                           DSKOPS    1
                                *                                                       DSKOPS    1
  760  7160000000 X                     DSKOPER    MBLK,=XUSRDSK,4,(UCAP,T,FILE,OB,RDFIL+OB,DDLBL),UDADSKOPS 1
                                ,T,(UCAP,T,FILE,OB,WFILE+OB,UCRBL),UDAT                 DSKOPS    1
                                *                                                       DSKOPS    1
                                *                                                       DSKOPS    1
                                *  OPEN READ ONLY                                       DSKOPS    1
                                *                                                       DSKOPS    1
 1055  7160000000 X                     DSKOPER    OPRO,=XUSRDSK,1,(UCAP,(,X1),OB,OPEN+OB,RDFIL) DSKOPS 1
                                *                                                       DSKOPS    1
                                *                                                       DSKOPS    1
                                *  OPEN READ WRITE                                      DSKOPS    1
                                *                                                       DSKOPS    1
 1124  7160000000 X                     DSKOPER    OPRW,=XUSRDSK,1,(UCAP,(,X1),OB,OPEN+OB,RDFIL+OB,WFIDSKOPS 1
                                ,LE)                                                    DSKOPS    1
                                *                                                       DSKOPS    1
                                *                                                       DSKOPS    1
                                *  CLOSE FILE  (ECS FILE CAP)                           DSKOPS    1
                                *                                                       DSKOPS    1
 1173  7160000000 X                     DSKOPER   CLO,=XUSRDSK,1,(UCAP,T,FILE,OB,CLOSE) DSKOPS    1
                                *                                                       DSKOPS    1
```

```
                                *                                                                   DSKOPS    1
                                *   CLOSE FILE (DISK FILE CAP)                                      DSKOPS    1
                                *                                                                   DSKOPS    1
 1242  7160000000 X                     DSKOPER    CLOS,=XUSRDSK,1,(UCAP,(,X1),OB.CLOSE)          DSKOPS    1
                                *                                                                   DSKOPS    1
                                *                                                                   DSKOPS    1
                                *  PSEUDO CLOSE FILE (DISK FILE CAP)                                DSKOPS    1
                                *                                                                   DSKOPS    1
 1311  7160000000 X                     DSKOPER    PCLS,=XUSRDSK,1,(UCAP,(,X1),OB.CLOSE)          DSKOPS    1
                                *                                                                   DSKOPS    1
                                *                                                                   DSKOPS    1
                                * CLOSE ALL OPEN FILES                                              DSKOPS    1
                                *                                                                   DSKOPS    1
 1360  7160000000 X                     DSKOPER   CAOF,=XUSRDSK,0                                  DSKOPS    1
                                *                                                                   DSKOPS    1
                                *                                                                   DSKOPS    1
                                * CLEAN UP FOR PROCESS SUICIDE                                      DSKOPS    1
                                *                                                                   DSKOPS    1
 1415  7160000000 X                     DSKOPER   CLUP,=XUSRDSK,0                                  DSKOPS    1
                                *                                                                   DSKOPS    1
                                *                                                                   DSKOPS    1
                                *                                                                   DSKOPS    1
                                *  ATTACH BLOCKS                                                    DSKOPS    1
                                *                                                                   DSKOPS    1
 1452  7160000000 X                     DSKOPER    ATCH,=XUSRDSK,3,(UCAP,T.FILE,OB.ATCH),UDAT,UDAT DSKOPS    1
                                *                                                                   DSKOPS    1
                                *                                                                   DSKOPS    1
                                *  DETACH BLOCKS                                                    DSKOPS    1
                                *                                                                   DSKOPS    1
 1535  7160000000 X                     DSKOPER    DTCH,=XUSRDSK,3,(UCAP,T.FILE,OB.DTCH),UDAT,UDAT DSKOPS    1
                                *                                                                   DSKOPS    1
                                *                                                                   DSKOPS    1
                                *  FREEZE FILE                                                      DSKOPS    1
                                *                                                                   DSKOPS    1
 1620  7160000000 X                     DSKOPER   FREZ,=XUSRDSK,1,(UCAP,T.FILE,OB.FREZ)            DSKOPS    1
                                *                                                                   DSKOPS    1
                                *                                                                   DSKOPS    1
                                *  MELT FILE                                                        DSKOPS    1
                                *                                                                   DSKOPS    1
 1667  7160000000 X                     DSKOPER   MELT,=XUSRDSK,1,(UCAP,T.FILE,OB.FREZ)            DSKOPS    1
                                *                                                                   DSKOPS    1
                                *                                                                   DSKOPS    1
                                *  ZERO MAP                                                         DSKOPS    1
                                *                                                                   DSKOPS    1
 1736  7160000000 X                     DSKOPER     ZRM,=XUSRDSK,3,(UCAP,T.CLSCD,OB.CHMAP),UDAT,(UCAP,DSKOPS    1
                                ,T.FILE,OB.DMAP                                                     DSKOPS    1
                                *                                                                   DSKOPS    1
                                *                                                                   DSKOPS    1
                                *  MAKE A MAP ENTRY (READ ONLY)                                     DSKOPS    1
                                *                                                                   DSKOPS    1
 2025  7160000000 X                     DSKOPER    MMRO,=XUSRDSK,6,(UCAP,T.CLSCD,OB.CHMAP),UDAT,(UCAP,DSKOPS    1
                                ,T.FILE,OB.RDFIL+OB.DMAP),UDAT,UDAT,UDAT                            DSKOPS    1
                                *                                                                   DSKOPS    1
```

```
                                *                                                                   DSKOPS     1
                                *  MAKE A MAP ENTRY (READ WRITE)                                    DSKOPS     1
                                *                                                                   DSKOPS     1
2136  7160000000 X                      DSKOPER    MMRW,=XUSRDSK,6,(UCAP,T.CLSCD,OB.CHMAP),UDAT,(UCAP,DSKOPS     1
                               ,T.FILE,OB.RDFIL+OB.WFILE+OB.DMAP),UDAT,UDAT,UDAT                    DSKOPS     1
                                *                                                                   DSKOPS     1
                                *                                                                   DSKOPS     1
                                *  CHANGE A MAP ENTRY (READ ONLY)                                   DSKOPS     1
                                *                                                                   DSKOPS     1
2247  7160000000 X                      DSKOPER    CMRO,=XUSRDSK,7,(UCAP,T.CLSCD,OB.CHMAP),UDAT,(UCAP,DSKOPS     1
                               ,T.FILE,OB.RDFIL+OB.DMAP),UDAT,UDAT,UDAT,(UCAP,T.FILE,OB.DMAP)       DSKOPS     1
                                *                                                                   DSKOPS     1
                                *                                                                   DSKOPS     1
                                *  CHANGE A MAP ENTRY (READ WRITE)                                  DSKOPS     1
                                *                                                                   DSKOPS     1
2372  7160000000 X                      DSKOPER    CMRW,=XUSRDSK,7,(UCAP,T.CLSCD,OB.CHMAP),UDAT,(UCAP,DSKOPS     1
                               ,T.FILE,OB.RDFIL+OB.WFILE+OB.DMAP),UDAT,UDAT,UDAT,(UCAP,T.FILE,OB.DMAP) DSKOPS     1
                                *                                                                   DSKOPS     1
                                *                                                                   DSKOPS     1
                                *                                                                   DSKOPS     1
                                * RETURN DISK SYSTEM CLOCKS                                         DSKOPS     1
                                *                                                                   DSKOPS     1
2515  7160000000 X                      DSKOPER   CLKS,=XUSRDSK,0                                   DSKOPS     1
                                *                                                                   DSKOPS     1
                                *                                                                   DSKOPS     1
                                *  EXCLUSIVE CLAIM W/ QUEUE WAIT                                    DSKOPS     1
                                *                                                                   DSKOPS     1
2552  7160000000 X                      DSKOPER    ECLM,=XUSRDSK,1,(UCAP,T.FILE,OB.ECLM)            DSKOPS     1
                                *                                                                   DSKOPS     1
                                *                                                                   DSKOPS     1
                                *  SHARED CLAIM W/ QUEUE WAIT                                       DSKOPS     1
                                *                                                                   DSKOPS     1
2621  7160000000 X                      DSKOPER    SCLM,=XUSRDSK,1,(UCAP,T.FILE,OB.SCLM)            DSKOPS     1
                                *                                                                   DSKOPS     1
                                *                                                                   DSKOPS     1
                                *  RELEASE CLAIM                                                    DSKOPS     1
                                *                                                                   DSKOPS     1
2670  7160000000 X                      DSKOPER    RLSE,=XUSRDSK,1,(UCAP,T.FILE,OB.REL)             DSKOPS     1
                                *                                                                   DSKOPS     1
                                *                                                                   DSKOPS     1
                                * ACCOUNTING BLOCK SERVICES                                         DSKOPS     1
                                *                                                                   DSKOPS     1
2737  7160000000 X                      DSKOPER   ABSV,=XUSRDSK,5,UDAT,UDAT,UDAT,UDAT,UDAT          DSKOPS     1
                                *                                                                   DSKOPS     1
                                *                                                                   DSKOPS     1
                                * ACCOUNTING RECORD SERVICES                                        DSKOPS     1
                                *                                                                   DSKOPS     1
3032  7160000000 X                      DSKOPER   ARSV,=XUSRDSK,3,UDAT,UDAT,UDAT                   DSKOPS     1
                                *                                                                   DSKOPS     1
                                *                                                                   DSKOPS     1
                                * DECLARE ACCOUNTING FILE                                           DSKOPS     1
                                *                                                                   DSKOPS     1
3111  7160000000 X                      DSKOPER   DACF,=XUSRDSK,1,(UCAP,(,X1),0)                     DSKOPS     1
```

(BLKD, 8)

```
                                 *                                                          DSKOPS    1
                                 *                                                          DSKOPS    1
                                 * LOAD DISK BUFFER (USED BY FRETURN HANDLER DURING WRITE)  DSKOPS    1
                                 *                                                          DSKOPS    1
 3160  7160000000 X                       DSKOPER   LBUF,=XUSRDSK,4,UDAT,UDAT,UDAT,UDAT   DSKOPS    1
                                 *                                                          DSKOPS    1
                                 *                                                          DSKOPS    1
                                 * AUDIT FILE                                              DSKOPS    1
                                 *                                                          DSKOPS    1
 3245  7160000000 X                       DSKOPER   AUDT,=XUSRDSK,2,(UCAP,T.CLIST),UDAT   DSKOPS    1
                                 *                                                          DSKOPS    1
                                 *                                                          DSKOPS    1
                                 * PROBE FOR FILEBLOCK                                     DSKOPS    1
                                 *                                                          DSKOPS    1
 3322  7160000000 X                       DSKOPER   PROB,=XUSRDSK,2,(UCAP,T.FILE,OB.RDFIL),UDAT  DSKOPS  1
                                 *                                                          DSKOPS    1
                                 *                                                          DSKOPS    1
                                 *  INTERCHANGE CONTENTS OF TWO DISK FILES                  DSKOPS    1
                                 *                                                          DSKOPS    1
 3377  7160000000 X                       DSKOPER   SHAZ,=XUSRDSK,2,(UCAP,T.FILE,OB.DCRBL+OB.DDLBL),(UCADSKOPS  1
                                ,P,T.FILE,OB.DCRBL+OB.DDLBL)                                DSKOPS    1
                                 *                                                          DSKOPS    1
                                 *                                                          DSKOPS    1
                                 *  SET / RESET ↑CLOSE ALL OPEN FILES↑ LOCK OUT (CLOSE FLAG) DSKOPS    1
                                 *                                                          DSKOPS    1
 3460  7160000000 X                       DSKOPER   CFLG,=XUSRDSK,2,(UCAP,T.FILE,0),UDAT  DSKOPS    1
                                 *                                                          DSKOPS    1
                                 *                                                          DSKOPS    1
                                 *  DISK RECOVERY OR LOAD COMPLETE                          DSKOPS    1
                                 *                                                          DSKOPS    1
 3535  7160000000 X                       DSKOPER   DONE,=XUSRDSK,0                       DSKOPS    1
                                 *                                                          DSKOPS    1
                                 *                                                          DSKOPS    1
                                 *                                                          DSKOPS    1
                                 * CALL DISK-SYSTEM INTERNAL DEBUGGER                      DSKOPS    1
                                 *                                                          DSKOPS    1
 3572  7160000000 X                       DSKOPER   DBUG,=XUSRDSK,0                       DSKOPS    1
                                 *                                                          DSKOPS    1
                                 *                                                          DSKOPS    1
                                 *                                                          DSKOPS    1
                                 * DESTROY SUBPROCESS (POSSIBLE DISK FILES IN MAP)         DSKOPS    1
                                 *                                                          DSKOPS    1
 3627  7160000000 X                       DSKOPER   DSUB,=XUSRDSK,1,(UCAP,T.CLSCD,OB.DSTRY+OB.CHMAP)  DSKOPS  1
                                 *                                                          DSKOPS    1
                                 *                                                          DSKOPS    1
                                 *  DISPLAY N-TH ATTACHED BLOCK                             DSKOPS    1
                                 *                                                          DSKOPS    1
 3676  7160000000 X                       DSKOPER   DSBN,=XUSRDSK,2,UDAT,UDAT             DSKOPS    1
                                 *                                                          DSKOPS    1
                                 *                                                          DSKOPS    1
                                 *  PROCESS DIRTY BLOCK FOR F-RETURN                        DSKOPS    1
                                 *                                                          DSKOPS    1
 3747  7160000000 X                       DSKOPER   DIRT,=XUSRDSK,6,UDAT,UDAT,UDAT,UDAT,UDAT,UDAT  DSKOPS  1
```

```
                                *                                                                   DSKOPS      1
                                *                                                                   DSKOPS      1
                                * DISPLAY ECS OCCUPIED BY THIS PROCESS (FIXED AND SWAPPED)          DSKOPS      1
                                *                                                                   DSKOPS      1
4050  7160000000 X                      DSKOPER   EOCC,=XUSRDSK,0                                  DSKOPS      1
                                *                                                                   DSKOPS      1
                                *                                                                   DSKOPS      1
                                * FUND PROCESS FIXED ECS FROM ALLOCATION BLOCK                      DSKOPS      1
                                *                                                                   DSKOPS      1
4105  7160000000 X                      DSKOPER   FUND,=XUSRDSK,1,(UCAP,T.ALLOC,777777B)          DSKOPS      1
                                *                                  (CRIPPLED CAPABILITIES NEED NOT  DSKOPS      1
                                *                                                                   DSKOPS      1
                                *                                                                   DSKOPS      1
                                *  EXCLUSIVE CLAIM W/O QUEUE WAIT                                   DSKOPS      1
                                *                                                                   DSKOPS      1
4154  7160000000 X                      DSKOPER   ECLF,=XUSRDSK,1,(UCAP,T.FILE,OB.ECLM)           DSKOPS      1
                                *                                                                   DSKOPS      1
                                *                                                                   DSKOPS      1
                                *  SHARED CLAIM W/O QUEUE WAIT                                      DSKOPS      1
                                *                                                                   DSKOPS      1
4223  7160000000 X                      DSKOPER   SCLF,=XUSRDSK,1,(UCAP,T.FILE,OB.SCLM)           DSKOPS      1
                                *                                                                   DSKOPS      1
                                *                                                                   DSKOPS      1
                                *  DISPLAY FILE                                                     DSKOPS      1
                                *                                                                   DSKOPS      1
4272  7160000000 X                      DSKOPER   DSF,=XUSRDSK,1,UDAT                              DSKOPS      1
                                *                                                                   DSKOPS      1
                                *                                                                   DSKOPS      1
                                *  DISPLAY N-TH FILE                                                DSKOPS      1
                                *                                                                   DSKOPS      1
4335  7160000000 X                      DSKOPER   DSFN,=XUSRDSK,1,UDAT                             DSKOPS      1
                                *                                                                   DSKOPS      1
                                *                                                                   DSKOPS      1
                                *  EXCLUSIVE OPEN                                                   DSKOPS      1
                                *                                                                   DSKOPS      1
4400  7160000000 X                      DSKOPER   XOPN,=XUSRDSK,1,(UCAP,(,X1),OB.XOPN+OB.OPEN+OB.RDFILDSKOPS      1
                                ,+OB.WFILE)                                                         DSKOPS      1
                                *                                                                   DSKOPS      1
                                *                                                                   DSKOPS      1
                                *                                                                   DSKOPS      1
                                *                                                                   DSKOPS      1
                                *                                                                   DSKOPS      1
                                *                                                                   DSKOPS      1
                                *                                                                   DSKOPS      1
                                          LIST      -X                                              DSKOPS      1
                                *
                                *
4447  0270000000                          JP        B7
                                *
4450                            ROL       BSS       0
                                *
4450                            FLDLEN    BSS       0
                                *
4450                                      END
```

```
41477    STORAGE USED          12265 STATEMENTS     389 SYMBOLS     000138 INVENTED SYMBOLS
         6600 ASSEMBLY        73.926 SECONDS       3059 REFERENCES
```

SYMBOLIC REFERENCE TABLE.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| ACCTNT | 0 | EXTERNAL* | 5/44 | | | | | | | |
| ALLOC | 0 | EXTERNAL* | 5/08 | 5/44 | 6/31 | 7/15 | 7/53 | 8/39 | 9/22 | 10/06 |
| | | | 5/13 | 5/49 | 6/37 | 7/20 | 8/06 | 8/44 | 9/27 | 10/11 |
| | | | 5/19 | 6/01 | 6/42 | 7/26 | 8/12 | 8/49 | 9/32 | 10/17 |
| | | | 5/24 | 6/11 | 6/48 | 7/31 | 8/18 | 9/01 | 9/38 | 10/22 |
| | | | 5/29 | 6/16 | 6/53 | 7/36 | 8/24 | 9/06 | 9/44 | 10/27 |
| | | | 5/34 | 6/21 | 7/05 | 7/41 | 8/29 | 9/11 | 9/49 | 10/32 |
| | | | 5/39 | 6/26 | 7/10 | 7/47 | 8/34 | 9/16 | 10/01 | 10/38 |
| CLOSER | 0 | EXTERNAL* | | | | | | | | |
| CTEMP | 0 | EXTERNAL* | 5/08 | 6/26 | 7/05 | 7/41 | 8/12 | 8/44 | 9/22 | 10/01 |
| | | | 5/08 | 6/26 | 7/10 | 7/47 | 8/12 | 8/44 | 9/22 | 10/01 |
| | | | 5/08 | 6/26 | 7/10 | 7/47 | 8/18 | 8/44 | 9/22 | 10/01 |
| | | | 5/08 | 6/31 | 7/10 | 7/47 | 8/18 | 8/44 | 9/22 | 10/06 |
| | | | 5/13 | 6/31 | 7/10 | 7/47 | 8/18 | 8/49 | 9/22 | 10/06 |
| | | | 5/13 | 6/31 | 7/10 | 7/47 | 8/18 | 8/49 | 9/27 | 10/06 |
| | | | 5/13 | 6/31 | 7/15 | 7/47 | 8/18 | 8/49 | 9/27 | 10/06 |
| | | | 5/13 | 6/31 | 7/15 | 7/47 | 8/18 | 8/49 | 9/27 | 10/11 |
| | | | 5/29 | 6/31 | 7/15 | 7/53 | 8/18 | 8/49 | 9/27 | 10/11 |
| | | | 5/29 | 6/31 | 7/15 | 7/53 | 8/18 | 8/49 | 9/27 | 10/11 |
| | | | 5/29 | 6/37 | 7/20 | 7/53 | 8/18 | 8/49 | 9/27 | 10/11 |
| | | | 5/29 | 6/37 | 7/20 | 7/53 | 8/18 | 9/01 | 9/32 | 10/11 |
| | | | 5/29 | 6/37 | 7/20 | 7/53 | 8/18 | 9/01 | 9/32 | 10/17 |
| | | | 5/29 | 6/37 | 7/20 | 7/53 | 8/24 | 9/01 | 9/32 | 10/17 |
| | | | 5/29 | 6/37 | 7/26 | 7/53 | 8/24 | 9/01 | 9/32 | 10/17 |
| | | | 6/11 | 6/37 | 7/26 | 7/53 | 8/24 | 9/01 | 9/38 | 10/17 |
| | | | 6/11 | 6/37 | 7/26 | 7/53 | 8/24 | 9/06 | 9/38 | 10/17 |
| | | | 6/11 | 6/37 | 7/26 | 7/53 | 8/29 | 9/06 | 9/38 | 10/22 |
| | | | 6/11 | 6/42 | 7/26 | 8/06 | 8/29 | 9/06 | 9/38 | 10/22 |
| | | | 6/11 | 6/42 | 7/26 | 8/06 | 8/29 | 9/06 | 9/44 | 10/22 |
| | | | 6/11 | 6/42 | 7/26 | 8/06 | 8/29 | 9/06 | 9/44 | 10/22 |
| | | | 6/16 | 6/42 | 7/31 | 8/06 | 8/29 | 9/06 | 9/44 | 10/22 |
| | | | 6/16 | 6/42 | 7/31 | 8/06 | 8/34 | 9/06 | 9/44 | 10/27 |
| | | | 6/16 | 6/48 | 7/31 | 8/06 | 8/34 | 9/06 | 9/44 | 10/27 |
| | | | 6/16 | 6/48 | 7/31 | 8/06 | 8/34 | 9/11 | 9/49 | 10/27 |
| | | | 6/16 | 6/48 | 7/31 | 8/06 | 8/34 | 9/11 | 9/49 | 10/27 |
| | | | 6/16 | 6/48 | 7/31 | 8/06 | 8/34 | 9/11 | 9/49 | 10/27 |
| | | | 6/16 | 6/48 | 7/31 | 8/06 | 8/39 | 9/11 | 9/49 | 10/32 |
| | | | 6/21 | 6/53 | 7/36 | 8/12 | 8/39 | 9/11 | 9/49 | 10/32 |
| | | | 6/21 | 6/53 | 7/36 | 8/12 | 8/39 | 9/11 | 9/49 | 10/32 |
| | | | 6/21 | 6/53 | 7/36 | 8/12 | 8/39 | 9/16 | 10/01 | 10/32 |
| | | | 6/21 | 6/53 | 7/36 | 8/12 | 8/39 | 9/16 | 10/01 | 10/32 |
| | | | 6/21 | 6/53 | 7/36 | 8/12 | 8/44 | 9/16 | 10/01 | 10/38 |
| | | | 6/26 | 7/05 | 7/41 | 8/12 | 8/44 | 9/16 | 10/01 | 10/38 |
| | | | 6/26 | 7/05 | 7/41 | 8/12 | 8/44 | 9/16 | 10/01 | 10/38 |
| | | | 6/26 | 7/05 | 7/41 | 8/12 | 8/44 | 9/16 | 10/01 | 10/38 |
| | | | 6/26 | 7/05 | 7/41 | 8/12 | 8/44 | 9/22 | 10/01 | 10/38 |
| DF:ABSV | 0 | EXTERNAL* | 8/44 | | | | | | | |
| DF:ARSV | 0 | EXTERNAL* | 8/49 | | | | | | | |
| DF:ATCH | 0 | EXTERNAL* | 7/26 | | | | | | | |
| DF:AUDT | 0 | EXTERNAL* | 9/11 | | | | | | | |
| DF:CAOF | 0 | EXTERNAL* | 7/15 | | | | | | | |
| DF:CBLK | 0 | EXTERNAL* | 6/26 | | | | | | | |
| DF:CFIL | 0 | EXTERNAL* | 6/11 | | | | | | | |

SYMBOLIC REFERENCE TABLE.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| DF:CFLG | 0 | EXTERNAL* | 9/27 | | | | | | |
| DF:CLKS | 0 | EXTERNAL* | 8/24 | | | | | | |
| DF:CLO | 0 | EXTERNAL* | 6/53 | | | | | | |
| DF:CLOS | 0 | EXTERNAL* | 7/05 | | | | | | |
| DF:CLUP | 0 | EXTERNAL* | 7/20 | | | | | | |
| DF:CMRO | 0 | EXTERNAL* | 8/12 | | | | | | |
| DF:CMRW | 0 | EXTERNAL* | 8/18 | | | | | | |
| DF:DACF | 0 | EXTERNAL* | 9/01 | | | | | | |
| DF:DBLK | 0 | EXTERNAL* | 6/31 | | | | | | |
| DF:DBUG | 0 | EXTERNAL* | 9/38 | | | | | | |
| DF:DFIL | 0 | EXTERNAL* | 6/21 | | | | | | |
| DF:DIRT | 0 | EXTERNAL* | 10/01 | | | | | | |
| DF:DONE | 0 | EXTERNAL* | 9/32 | | | | | | |
| DF:DSBN | 0 | EXTERNAL* | 9/49 | | | | | | |
| DF:DSF | 0 | EXTERNAL* | 10/27 | | | | | | |
| DF:DSFN | 0 | EXTERNAL* | 10/32 | | | | | | |
| DF:DSUB | 0 | EXTERNAL* | 9/44 | | | | | | |
| DF:DTCH | 0 | EXTERNAL* | 7/31 | | | | | | |
| DF:ECLF | 0 | EXTERNAL* | 10/17 | | | | | | |
| DF:ECLM | 0 | EXTERNAL* | 8/29 | | | | | | |
| DF:EOCC | 0 | EXTERNAL* | 10/06 | | | | | | |
| DF:FINI | 0 | EXTERNAL* | 5/29 | | | | | | |
| DF:FREZ | 0 | EXTERNAL* | 7/36 | | | | | | |
| DF:FUND | 0 | EXTERNAL* | 10/11 | | | | | | |
| DF:LBUF | 0 | EXTERNAL* | 9/06 | | | | | | |
| DF:MBLK | 0 | EXTERNAL* | 6/37 | | | | | | |
| DF:MELT | 0 | EXTERNAL* | 7/41 | | | | | | |
| DF:MMRO | 0 | EXTERNAL* | 7/53 | | | | | | |
| DF:MMRW | 0 | EXTERNAL* | 8/06 | | | | | | |
| DF:OPRO | 0 | EXTERNAL* | 6/42 | | | | | | |
| DF:OPRW | 0 | EXTERNAL* | 6/48 | | | | | | |
| DF:PCFL | 0 | EXTERNAL* | 6/16 | | | | | | |
| DF:PCLS | 0 | EXTERNAL* | 7/10 | | | | | | |
| DF:PROB | 0 | EXTERNAL* | 9/16 | | | | | | |
| DF:READ | 0 | EXTERNAL* | 5/08 | | | | | | |
| DF:RLSE | 0 | EXTERNAL* | 8/39 | | | | | | |
| DF:SCLF | 0 | EXTERNAL* | 10/22 | | | | | | |
| DF:SCLM | 0 | EXTERNAL* | 8/34 | | | | | | |
| DF:SHAZ | 0 | EXTERNAL* | 9/22 | | | | | | |
| DF:WRIT | 0 | EXTERNAL* | 5/13 | | | | | | |
| DF:XOPN | 0 | EXTERNAL* | 10/38 | | | | | | |
| DF:ZRM | 0 | EXTERNAL* | 7/47 | | | | | | |
| DISK4B | 0 | PROGRAM* | 4/46 E | 4/49 L | | | | | |
| EC:ADOR | 0 | EXTERNAL* | 5/08 | 5/13 | | | | | |
| EC:BDAT | 0 | EXTERNAL* | 6/11 | 6/16 | | | | | |
| EC:COPR | 0 | EXTERNAL* | 5/19 | 6/01 | 6/42 | 7/26 | 8/12 | 8/49 | 9/32 | 10/17 |
| | | | 5/24 | 6/11 | 6/48 | 7/31 | 8/18 | 9/01 | 9/38 | 10/22 |
| | | | 5/29 | 6/16 | 6/53 | 7/36 | 8/24 | 9/06 | 9/44 | 10/27 |
| | | | 5/34 | 6/21 | 7/05 | 7/41 | 8/29 | 9/11 | 9/49 | 10/32 |
| | | | 5/39 | 6/26 | 7/10 | 7/47 | 8/34 | 9/16 | 10/01 | 10/38 |
| | | | 5/44 | 6/31 | 7/15 | 7/53 | 8/39 | 9/22 | 10/06 | |
| | | | 5/49 | 6/37 | 7/20 | 8/06 | 8/44 | 9/27 | 10/11 | |

SYMBOLIC REFERENCE TABLE.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| EC:COUT | 0 | EXTERNAL* | 5/08 | 6/31 | 7/15 | 7/53 | 8/39 | 9/22 | 10/06 | |
| | | | 5/13 | 6/37 | 7/20 | 8/06 | 8/44 | 9/27 | 10/11 | |
| | | | 5/29 | 6/42 | 7/26 | 8/12 | 8/49 | 9/32 | 10/17 | |
| | | | 6/11 | 6/48 | 7/31 | 8/18 | 9/01 | 9/38 | 10/22 | |
| | | | 6/16 | 6/53 | 7/36 | 8/24 | 9/06 | 9/44 | 10/27 | |
| | | | 6/21 | 7/05 | 7/41 | 8/29 | 9/11 | 9/49 | 10/32 | |
| | | | 6/26 | 7/10 | 7/47 | 8/34 | 9/16 | 10/01 | 10/38 | |
| EC:FDAT | 0 | EXTERNAL* | 5/08 | 5/44 | 6/31 | 7/15 | 7/53 | 8/39 | 9/22 | 10/06 |
| | | | 5/13 | 5/49 | 6/37 | 7/20 | 8/06 | 8/44 | 9/27 | 10/11 |
| | | | 5/19 | 6/01 | 6/42 | 7/26 | 8/12 | 8/49 | 9/32 | 10/17 |
| | | | 5/24 | 6/11 | 6/48 | 7/31 | 8/18 | 9/01 | 9/38 | 10/22 |
| | | | 5/29 | 6/16 | 6/53 | 7/36 | 8/24 | 9/06 | 9/44 | 10/27 |
| | | | 5/34 | 6/21 | 7/05 | 7/41 | 8/29 | 9/11 | 9/49 | 10/32 |
| | | | 5/39 | 6/26 | 7/10 | 7/47 | 8/34 | 9/16 | 10/01 | 10/38 |
| EC:READ | 0 | EXTERNAL* | 5/08 | | | | | | | |
| EC:UCAP | 0 | EXTERNAL* | 5/29 | 6/42 | 7/31 | 7/53 | 8/18 | 9/01 | 9/44 | |
| | | | 6/21 | 6/48 | 7/36 | 8/06 | 8/18 | 9/11 | 10/11 | |
| | | | 6/26 | 6/53 | 7/41 | 8/06 | 8/18 | 9/16 | 10/17 | |
| | | | 6/31 | 7/05 | 7/47 | 8/12 | 8/29 | 9/22 | 10/22 | |
| | | | 6/37 | 7/10 | 7/47 | 8/12 | 8/34 | 9/22 | 10/38 | |
| | | | 6/37 | 7/26 | 7/53 | 8/12 | 8/39 | 9/27 | | |
| EC:UDAT | 0 | EXTERNAL* | 5/08 | 6/16 | 7/05 | 7/53 | 8/18 | 8/49 | 9/27 | 10/11 |
| | | | 5/13 | 6/16 | 7/10 | 7/53 | 8/18 | 8/49 | 9/32 | 10/17 |
| | | | 5/19 | 6/21 | 7/15 | 7/53 | 8/18 | 8/49 | 9/38 | 10/22 |
| | | | 5/24 | 6/26 | 7/20 | 7/53 | 8/18 | 9/01 | 9/44 | 10/27 |
| | | | 5/29 | 6/26 | 7/26 | 8/06 | 8/24 | 9/06 | 9/49 | 10/27 |
| | | | 5/29 | 6/26 | 7/26 | 8/06 | 8/29 | 9/06 | 9/49 | 10/32 |
| | | | 5/29 | 6/31 | 7/26 | 8/06 | 8/34 | 9/06 | 9/49 | 10/32 |
| | | | 5/34 | 6/31 | 7/31 | 8/06 | 8/39 | 9/06 | 10/01 | 10/38 |
| | | | 5/39 | 6/31 | 7/31 | 8/06 | 8/44 | 9/06 | 10/01 | |
| | | | 5/44 | 6/37 | 7/31 | 8/12 | 8/44 | 9/11 | 10/01 | |
| | | | 5/49 | 6/37 | 7/36 | 8/12 | 8/44 | 9/11 | 10/01 | |
| | | | 6/01 | 6/37 | 7/41 | 8/12 | 8/44 | 9/16 | 10/01 | |
| | | | 6/11 | 6/42 | 7/47 | 8/12 | 8/44 | 9/16 | 10/01 | |
| | | | 6/11 | 6/48 | 7/47 | 8/12 | 8/44 | 9/22 | 10/01 | |
| | | | 6/16 | 6/53 | 7/53 | 8/18 | 8/49 | 9/27 | 10/06 | |
| EC:WRIT | 0 | EXTERNAL* | 5/13 | | | | | | | |
| FLDLEN | 4450 | PROGRAM* | 4/46 E | 10/51 L | | | | | | |
| FRETRW | 0 | EXTERNAL* | 5/08 | 5/13 | 5/24 | 5/29 | | | | |
| HELPER | 0 | EXTERNAL* | 5/39 | | | | | | | |
| INIA | 0 | EXTERNAL* | 5/44 | 5/44 | 5/44 | | | | | |
| INIB | 0 | EXTERNAL* | 6/01 | 6/01 | 6/01 | | | | | |
| INID | 0 | EXTERNAL* | 5/19 | 5/19 | 5/19 | | | | | |
| INIF | 0 | EXTERNAL* | 5/24 | 5/24 | 5/24 | | | | | |
| INIH | 0 | EXTERNAL* | 5/39 | 5/39 | 5/39 | | | | | |
| INIR | 0 | EXTERNAL* | 5/49 | 5/49 | 5/49 | | | | | |
| INIT | 0 | EXTERNAL* | 5/34 | 5/34 | 5/34 | | | | | |
| IPLIST | 0 | EXTERNAL* | 2/11 | | | | | | | |

SYMBOLIC REFERENCE TABLE.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| IP::LIST | 0 | EXTERNAL* | 2/11 D | 6/11 S | 6/42 S | 7/31 S | 8/06 S | 8/39 S | 9/16 | 10/01 S |
| | | | 5/08 S | 6/11 | 6/42 S | 7/31 S | 8/06 S | 8/39 S | 9/16 S | 10/01 |
| | | | 5/08 S | 6/11 S | 6/42 S | 7/31 | 8/06 | 8/39 S | 9/16 S | 10/01 S |
| | | | 5/08 S | 6/11 S | 6/42 S | 7/31 S | 8/06 S | 8/39 | 9/16 S | 10/01 S |
| | | | 5/08 S | 6/11 S | 6/42 S | 7/31 S | 8/06 S | 8/39 S | 9/16 S | 10/01 S |
| | | | 5/08 S | 6/11 | 6/42 | 7/31 S | 8/06 S | 8/39 S | 9/16 S | 10/01 |
| | | | 5/08 S | 6/11 S | 6/42 S | 7/31 S | 8/06 | 8/39 S | 9/16 | 10/01 S |
| | | | 5/08 | 6/11 S | 6/42 S | 7/31 | 8/06 S | 8/39 S | 9/16 S | 10/01 S |
| | | | 5/08 S | 6/11 S | 6/42 S | 7/31 S | 8/06 S | 8/39 | 9/16 S | 10/01 S |
| | | | 5/08 S | 6/11 S | 6/42 S | 7/31 S | 8/06 S | 8/39 S | 9/16 S | 10/01 |
| | | | 5/08 S | 6/11 | 6/42 | 7/31 S | 8/06 S | 8/39 S | 9/16 | 10/01 S |
| | | | 5/08 | 6/11 S | 6/48 S | 7/31 S | 8/06 | 8/39 S | 9/16 S | 10/01 S |
| | | | 5/08 S | 6/11 S | 6/48 S | 7/31 S | 8/12 S | 8/39 S | 9/16 S | 10/01 S |
| | | | 5/08 S | 6/11 S | 6/48 S | 7/31 | 8/12 S | 8/39 S | 9/16 S | 10/01 |
| | | | 5/08 S | 6/11 S | 6/48 S | 7/31 S | 8/12 S | 8/39 | 9/16 S | 10/01 S |
| | | | 5/08 S | 6/11 | 6/48 S | 7/31 S | 8/12 S | 8/39 S | 9/16 | 10/01 S |
| | | | 5/08 | 6/16 S | 6/48 S | 7/31 S | 8/12 S | 8/39 S | 9/22 S | 10/01 S |
| | | | 5/08 S | 6/16 S | 6/48 | 7/31 | 8/12 S | 8/39 S | 9/22 S | 10/01 S |
| | | | 5/08 S | 6/16 S | 6/48 S | 7/31 S | 8/12 | 8/39 S | 9/22 S | 10/01 |
| | | | 5/08 S | 6/16 S | 6/48 S | 7/31 S | 8/12 S | 8/39 | 9/22 S | 10/06 S |
| | | | 5/08 S | 6/16 S | 6/48 S | 7/31 S | 8/12 S | 8/44 S | 9/22 S | 10/06 S |
| | | | 5/08 | 6/16 S | 6/48 | 7/31 | 8/12 S | 8/44 S | 9/22 S | 10/06 S |
| | | | 5/13 S | 6/16 | 6/48 S | 7/31 S | 8/12 | 8/44 S | 9/22 | 10/06 S |
| | | | 5/13 S | 6/16 S | 6/48 S | 7/31 S | 8/12 S | 8/44 S | 9/22 S | 10/06 S |
| | | | 5/13 S | 6/16 S | 6/48 S | 7/31 S | 8/12 S | 8/44 S | 9/22 S | 10/06 S |
| | | | 5/13 S | 6/16 S | 6/48 S | 7/31 S | 8/12 S | 8/44 S | 9/22 S | 10/06 |
| | | | 5/13 S | 6/16 | 6/48 | 7/31 | 8/12 S | 8/44 | 9/22 | 10/06 S |
| | | | 5/13 S | 6/16 S | 6/48 S | 7/36 S | 8/12 | 8/44 S | 9/22 S | 10/06 S |
| | | | 5/13 | 6/16 S | 6/48 S | 7/36 S | 8/12 S | 8/44 S | 9/22 S | 10/06 S |
| | | | 5/13 S | 6/16 S | 6/48 S | 7/36 S | 8/12 S | 8/44 S | 9/22 S | 10/06 |
| | | | 5/13 S | 6/16 S | 6/48 S | 7/36 S | 8/12 S | 8/44 | 9/22 S | 10/06 S |
| | | | 5/13 S | 6/16 | 6/48 S | 7/36 S | 8/12 S | 8/44 S | 9/22 | 10/06 S |
| | | | 5/13 | 6/16 S | 6/48 | 7/36 S | 8/12 S | 8/44 S | 9/22 S | 10/06 S |
| | | | 5/13 S | 6/16 S | 6/48 S | 7/36 | 8/12 | 8/44 S | 9/22 S | 10/06 S |
| | | | 5/13 S | 6/16 S | 6/48 S | 7/36 S | 8/12 S | 8/44 S | 9/22 S | 10/06 |
| | | | 5/13 S | 6/16 | 6/48 S | 7/36 S | 8/12 S | 8/44 | 9/22 S | 10/06 S |
| | | | 5/13 S | 6/16 S | 6/48 S | 7/36 S | 8/12 S | 8/44 S | 9/22 S | 10/06 S |
| | | | 5/13 | 6/16 S | 6/48 | 7/36 | 8/12 | 8/44 S | 9/22 | 10/06 S |
| | | | 5/13 S | 6/16 S | 6/53 S | 7/36 S | 8/12 S | 8/44 S | 9/22 S | 10/06 S |
| | | | 5/13 S | 6/16 S | 6/53 S | 7/36 S | 8/12 S | 8/44 | 9/22 S | 10/06 |
| | | | 5/13 S | 6/16 | 6/53 S | 7/36 S | 8/12 S | 8/44 S | 9/22 S | 10/11 S |
| | | | 5/13 S | 6/16 S | 6/53 S | 7/36 S | 8/12 S | 8/44 S | 9/22 S | 10/11 S |
| | | | 5/13 | 6/16 S | 6/53 S | 7/36 | 8/12 S | 8/44 S | 9/22 S | 10/11 S |
| | | | 5/19 S | 6/16 S | 6/53 S | 7/36 S | 8/12 | 8/44 | 9/22 | 10/11 S |
| | | | 5/19 S | 6/16 | 6/53 | 7/36 S | 8/12 S | 8/44 S | 9/22 S | 10/11 S |
| | | | 5/19 S | 6/16 S | 6/53 S | 7/36 S | 8/12 S | 8/44 S | 9/22 S | 10/11 S |
| | | | 5/19 S | 6/16 S | 6/53 S | 7/36 S | 8/12 S | 8/44 S | 9/22 S | 10/11 |
| | | | 5/19 S | 6/16 S | 6/53 S | 7/36 S | 8/12 | 8/44 | 9/22 S | 10/11 S |
| | | | 5/19 S | 6/16 S | 6/53 | 7/36 | 8/12 S | 8/44 S | 9/22 | 10/11 S |
| | | | 5/19 | 6/16 | 6/53 S | 7/36 S | 8/12 S | 8/44 S | 9/27 S | 10/11 S |
| | | | 5/19 S | 6/21 S | 6/53 S | 7/36 S | 8/12 S | 8/44 S | 9/27 S | 10/11 |
| | | | 5/19 S | 6/21 S | 6/53 S | 7/36 S | 8/12 | 8/44 | 9/27 S | 10/11 S |
| | | | 5/19 S | 6/21 S | 6/53 S | 7/36 S | 8/12 S | 8/44 S | 9/27 S | 10/11 S |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 5/19 | 6/21 S | 6/53 | 7/36 | 8/12 S | 8/44 S | 9/27 S | 10/11 S |
| 5/19 S | 6/21 S | 6/53 S | 7/41 S | 8/12 S | 8/44 S | 9/27 S | 10/11 S |
| 5/19 S | 6/21 S | 6/53 S | 7/41 S | 8/12 | 8/44 | 9/27 | 10/11 |
| 5/19 S | 6/21 | 6/53 S | 7/41 S | 8/12 S | 8/44 S | 9/27 S | 10/11 S |
| 5/19 S | 6/21 S | 6/53 S | 7/41 S | 8/12 S | 8/44 S | 9/27 S | 10/11 S |
| 5/19 | 6/21 S | 6/53 S | 7/41 S | 8/12 S | 8/44 S | 9/27 S | 10/11 S |
| 5/24 S | 6/21 S | 6/53 | 7/41 S | 8/12 S | 8/44 S | 9/27 | 10/11 S |
| 5/24 S | 6/21 | 6/53 S | 7/41 | 8/12 S | 8/44 | 9/27 S | 10/11 S |
| 5/24 S | 6/21 S | 6/53 S | 7/41 S | 8/12 | 8/49 S | 9/27 S | 10/11 |
| 5/24 S | 6/21 S | 6/53 S | 7/41 S | 8/12 S | 8/49 S | 9/27 S | 10/11 S |
| 5/24 S | 6/21 S | 6/53 S | 7/41 S | 8/12 S | 8/49 S | 9/27 S | 10/11 S |
| 5/24 S | 6/21 S | 6/53 | 7/41 | 8/12 S | 8/49 S | 9/27 | 10/11 S |
| 5/24 | 6/21 | 7/05 S | 7/41 S | 8/12 S | 8/49 S | 9/27 S | 10/11 S |
| 5/24 S | 6/21 S | 7/05 S | 7/41 S | 8/12 | 8/49 S | 9/27 S | 10/11 |
| 5/24 S | 6/21 S | 7/05 S | 7/41 S | 8/18 S | 8/49 | 9/27 S | 10/17 S |
| 5/24 S | 6/21 S | 7/05 S | 7/41 S | 8/18 S | 8/49 S | 9/27 S | 10/17 S |
| 5/24 | 6/21 S | 7/05 S | 7/41 | 8/18 S | 8/49 S | 9/27 S | 10/17 S |
| 5/24 S | 6/21 S | 7/05 S | 7/41 S | 8/18 S | 8/49 S | 9/27 | 10/17 S |
| 5/24 S | 6/21 | 7/05 | 7/41 S | 8/18 S | 8/49 | 9/27 S | 10/17 S |
| 5/24 S | 6/21 S | 7/05 S | 7/41 S | 8/18 S | 8/49 S | 9/27 S | 10/17 S |
| 5/24 S | 6/21 S | 7/05 S | 7/41 S | 8/18 | 8/49 S | 9/27 S | 10/17 |
| 5/24 | 6/21 S | 7/05 S | 7/41 S | 8/18 S | 8/49 S | 9/27 | 10/17 S |
| 5/29 S | 6/21 S | 7/05 | 7/41 | 8/18 S | 8/49 S | 9/27 S | 10/17 S |
| 5/29 S | 6/21 | 7/05 S | 7/41 S | 8/18 S | 8/49 | 9/27 S | 10/17 S |
| 5/29 S | 6/26 S | 7/05 S | 7/41 S | 8/18 | 8/49 S | 9/27 S | 10/17 |
| 5/29 S | 6/21 | 7/05 S | 7/41 S | 8/18 S | 8/49 | 9/27 S | 10/17 S |
| 5/29 S | 6/26 S | 7/05 S | 7/41 S | 8/18 | 8/49 S | 9/27 S | 10/17 |
| 5/29 S | 6/26 S | 7/05 S | 7/41 S | 8/18 S | 8/49 S | 9/27 S | 10/17 S |
| 5/29 S | 6/26 S | 7/05 S | 7/41 S | 8/18 S | 8/49 S | 9/27 | 10/17 S |
| 5/29 S | 6/26 S | 7/05 | 7/41 | 8/18 S | 8/49 | 9/32 S | 10/17 S |
| 5/29 | 6/26 S | 7/05 S | 7/47 S | 8/18 S | 8/49 S | 9/32 S | 10/17 S |
| 5/29 S | 6/26 S | 7/05 S | 7/47 S | 8/18 | 8/49 S | 9/32 S | 10/17 |
| 5/29 S | 6/26 | 7/05 S | 7/47 S | 8/18 S | 8/49 S | 9/32 S | 10/17 S |
| 5/29 S | 6/26 S | 7/05 S | 7/47 S | 8/18 S | 8/49 | 9/32 S | 10/17 S |
| 5/29 | 6/26 S | 7/05 S | 7/47 S | 8/18 S | 8/49 S | 9/32 S | 10/17 S |
| 5/29 S | 6/26 S | 7/05 | 7/47 S | 8/18 S | 8/49 S | 9/32 | 10/17 S |
| 5/29 S | 6/26 | 7/05 S | 7/47 | 8/18 S | 8/49 S | 9/32 S | 10/17 S |
| 5/29 S | 6/26 S | 7/05 S | 7/47 S | 8/18 | 8/49 | 9/32 S | 10/17 |
| 5/29 S | 6/26 S | 7/05 S | 7/47 S | 8/18 S | 8/49 S | 9/32 S | 10/17 S |
| 5/29 | 6/26 S | 7/05 S | 7/47 S | 8/18 S | 8/49 S | 9/32 | 10/17 S |
| 5/29 S | 6/26 S | 7/05 | 7/47 | 8/18 S | 8/49 S | 9/32 S | 10/17 S |
| 5/29 S | 6/26 | 7/10 S | 7/47 S | 8/18 | 8/49 S | 9/32 S | 10/17 S |
| 5/29 S | 6/26 S | 7/10 S | 7/47 S | 8/18 S | 8/49 | 9/32 S | 10/17 |
| 5/29 S | 6/26 S | 7/10 S | 7/47 S | 8/18 S | 9/01 S | 9/32 S | 10/22 S |
| 5/29 S | 6/26 S | 7/10 S | 7/47 S | 8/18 S | 9/01 S | 9/32 | 10/22 S |
| 5/29 | 6/26 S | 7/10 S | 7/47 | 8/18 S | 9/01 S | 9/32 S | 10/22 S |
| 5/29 S | 6/26 S | 7/10 S | 7/47 S | 8/18 S | 9/01 S | 9/32 S | 10/22 S |
| 5/29 S | 6/26 | 7/10 | 7/47 S | 8/18 | 9/01 S | 9/32 S | 10/22 |
| 5/29 S | 6/26 S | 7/10 S | 7/47 S | 8/18 S | 9/01 S | 9/32 S | 10/22 S |
| 5/29 | 6/26 S | 7/10 S | 7/47 S | 8/18 S | 9/01 | 9/32 | 10/22 |
| 5/29 S | 6/26 S | 7/10 S | 7/47 S | 8/18 S | 9/01 S | 9/38 S | 10/22 S |
| 5/29 S | 6/26 | 7/10 | 7/47 | 8/18 | 9/01 S | 9/38 S | 10/22 S |
| 5/29 S | 6/26 S | 7/10 S | 7/47 S | 8/18 S | 9/01 S | 9/38 S | 10/22 S |
| 5/29 | 6/26 S | 7/10 S | 7/47 S | 8/18 S | 9/01 | 9/38 S | 10/22 |
| 5/29 S | 6/26 S | 7/10 S | 7/47 S | 8/18 S | 9/01 S | 9/38 S | 10/22 S |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 5/29 S | 6/26 | 7/10 S | 7/47 | 8/18 | 9/01 S | 9/38 S | 10/22 S |
| 5/29 S | 6/26 S | 7/10 | 7/47 S | 8/18 S | 9/01 S | 9/38 | 10/22 S |
| 5/29 S | 6/26 S | 7/10 S | 7/47 S | 8/18 S | 9/01 S | 9/38 S | 10/22 S |
| 5/29 | 6/26 S | 7/10 S | 7/47 S | 8/18 S | 9/01 | 9/38 S | 10/22 |
| 5/34 S | 6/26 S | 7/10 S | 7/47 S | 8/18 | 9/01 S | 9/38 S | 10/22 S |
| 5/34 S | 6/26 | 7/10 S | 7/47 S | 8/18 S | 9/01 S | 9/38 | 10/22 S |
| 5/34 S | 6/31 S | 7/10 S | 7/47 | 8/18 S | 9/01 S | 9/38 S | 10/22 S |
| 5/34 S | 6/31 S | 7/10 | 7/47 S | 8/18 S | 9/01 S | 9/38 S | 10/22 S |
| 5/34 S | 6/31 S | 7/10 S | 7/47 S | 8/18 S | 9/01 S | 9/38 S | 10/22 S |
| 5/34 S | 6/31 S | 7/10 S | 7/47 S | 8/18 S | 9/01 | 9/38 S | 10/22 |
| 5/34 | 6/31 S | 7/10 S | 7/47 S | 8/18 | 9/01 S | 9/38 | 10/22 S |
| 5/34 S | 6/31 S | 7/10 S | 7/47 | 8/18 S | 9/01 S | 9/38 S | 10/22 S |
| 5/34 S | 6/31 | 7/10 | 7/53 S | 8/18 S | 9/01 S | 9/38 S | 10/22 S |
| 5/34 S | 6/31 S | 7/15 S | 7/53 S | 8/18 S | 9/01 S | 9/38 S | 10/22 S |
| 5/34 | 6/31 S | 7/15 S | 7/53 S | 8/18 S | 9/01 | 9/38 S | 10/22 |
| 5/34 S | 6/31 S | 7/15 S | 7/53 S | 8/18 | 9/06 S | 9/38 | 10/27 S |
| 5/34 S | 6/31 | 7/15 S | 7/53 S | 8/24 S | 9/06 S | 9/44 S | 10/27 S |
| 5/34 S | 6/31 S | 7/15 S | 7/53 S | 8/24 S | 9/06 S | 9/44 S | 10/27 S |
| 5/34 S | 6/31 S | 7/15 S | 7/53 | 8/24 S | 9/06 S | 9/44 S | 10/27 S |
| 5/34 | 6/31 S | 7/15 | 7/53 S | 8/24 S | 9/06 S | 9/44 S | 10/27 S |
| 5/39 S | 6/31 S | 7/15 S | 7/53 S | 8/24 S | 9/06 S | 9/44 S | 10/27 S |
| 5/39 S | 6/31 | 7/15 S | 7/53 S | 8/24 S | 9/06 | 9/44 S | 10/27 |
| 5/39 S | 6/31 S | 7/15 S | 7/53 | 8/24 | 9/06 S | 9/44 | 10/27 S |
| 5/39 S | 6/31 S | 7/15 | 7/53 S | 8/24 S | 9/06 S | 9/44 S | 10/27 S |
| 5/39 S | 6/31 S | 7/15 S | 7/53 S | 8/24 S | 9/06 S | 9/44 S | 10/27 S |
| 5/39 S | 6/31 S | 7/15 S | 7/53 S | 8/24 S | 9/06 | 9/44 S | 10/27 |
| 5/39 | 6/31 S | 7/15 S | 7/53 S | 8/24 | 9/06 S | 9/44 | 10/27 S |
| 5/39 S | 6/31 | 7/15 S | 7/53 | 8/24 S | 9/06 S | 9/44 S | 10/27 S |
| 5/39 S | 6/31 S | 7/15 | 7/53 S | 8/24 S | 9/06 S | 9/44 S | 10/27 S |
| 5/39 S | 6/31 S | 7/15 S | 7/53 S | 8/24 S | 9/06 S | 9/44 S | 10/27 S |
| 5/39 | 6/31 S | 7/15 S | 7/53 S | 8/24 S | 9/06 | 9/44 S | 10/27 |
| 5/39 S | 6/31 | 7/15 S | 7/53 S | 8/24 | 9/06 S | 9/44 | 10/27 S |
| 5/39 S | 6/31 S | 7/15 S | 7/53 S | 8/24 S | 9/06 S | 9/44 S | 10/27 S |
| 5/39 S | 6/31 S | 7/15 | 7/53 | 8/24 S | 9/06 S | 9/44 S | 10/27 S |
| 5/39 S | 6/31 S | 7/20 S | 7/53 S | 8/24 S | 9/06 | 9/44 S | 10/27 |
| 5/39 | 6/31 | 7/20 S | 7/53 S | 8/24 S | 9/06 S | 9/44 S | 10/27 S |
| 5/44 S | 6/31 S | 7/20 S | 7/53 S | 8/24 | 9/06 S | 9/44 S | 10/27 S |
| 5/44 S | 6/31 S | 7/20 S | 7/53 | 8/29 S | 9/06 S | 9/44 | 10/27 S |
| 5/44 S | 6/31 S | 7/20 S | 7/53 S | 8/29 S | 9/06 | 9/44 S | 10/27 S |
| 5/44 S | 6/31 S | 7/20 S | 7/53 S | 8/29 S | 9/06 S | 9/44 S | 10/27 |
| 5/44 S | 6/31 | 7/20 | 7/53 S | 8/29 S | 9/06 S | 9/44 S | 10/32 S |
| 5/44 S | 6/37 S | 7/20 S | 7/53 S | 8/29 S | 9/06 S | 9/44 S | 10/32 S |
| 5/44 | 6/37 S | 7/20 S | 7/53 S | 8/29 S | 9/06 | 9/44 | 10/32 S |
| 5/44 S | 6/37 S | 7/20 S | 7/53 | 8/29 | 9/06 S | 9/49 S | 10/32 S |
| 5/44 S | 6/37 S | 7/20 | 7/53 S | 8/29 S | 9/06 S | 9/49 S | 10/32 S |
| 5/44 S | 6/37 S | 7/20 S | 7/53 S | 8/29 S | 9/06 S | 9/49 S | 10/32 S |
| 5/44 | 6/37 S | 7/20 S | 7/53 S | 8/29 S | 9/06 | 9/49 S | 10/32 |
| 5/44 S | 6/37 | 7/20 S | 7/53 | 8/29 | 9/06 S | 9/49 S | 10/32 S |
| 5/44 S | 6/37 S | 7/20 S | 7/53 S | 8/29 S | 9/06 S | 9/49 S | 10/32 S |
| 5/44 S | 6/37 S | 7/20 | 7/53 S | 8/29 S | 9/06 S | 9/49 | 10/32 S |
| 5/44 S | 6/37 S | 7/20 S | 7/53 S | 8/29 S | 9/06 S | 9/49 S | 10/32 |
| 5/44 | 6/37 | 7/20 S | 7/53 | 8/29 S | 9/06 | 9/49 S | 10/32 S |
| 5/49 S | 6/37 S | 7/20 S | 7/53 S | 8/29 | 9/11 S | 9/49 S | 10/32 S |

| | | |

SYMBOLIC REFERENCE TABLE.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| OB.DSTRY | 1 | | 6/21 | 9/44 | | | | | | |
| OB.DTCH | 20000 | | 7/31 | | | | | | | |
| OB.ECLM | 100000 | | 8/29 | 10/17 | | | | | | |
| OB.FREZ | 1000000 | | 7/36 | 7/41 | | | | | | |
| OB.OPEN | 400 | | 6/42 | 6/48 | 10/38 | | | | | |
| OB.RDFIL | 20 | | 5/29 | 6/42 | 7/53 | 8/12 | 9/16 | | | |
| | | | 6/37 | 6/48 | 8/06 | 8/18 | 10/38 | | | |
| OB.REL | 400000 | | 8/39 | | | | | | | |
| OB.SCLM | 200000 | | 8/34 | 10/22 | | | | | | |
| OB.WFILE | 40 | | 6/37 | 6/48 | 8/06 | 8/18 | 10/38 | | | |
| OB.XOPN | 4000000 | | 10/38 | | | | | | | |
| OPERCL | 0 | EXTERNAL* | 2/11 | 6/16 | 6/53 | 7/36 | 8/24 | 9/06 | 9/44 | 10/27 |
| | | | 5/08 | 6/21 | 7/05 | 7/41 | 8/29 | 9/11 | 9/49 | 10/32 |
| | | | 5/08 | 6/26 | 7/10 | 7/47 | 8/34 | 9/16 | 10/01 | 10/38 |
| | | | 5/13 | 6/31 | 7/15 | 7/53 | 8/39 | 9/22 | 10/06 | |
| | | | 5/13 | 6/37 | 7/20 | 8/06 | 8/44 | 9/27 | 10/11 | |
| | | | 5/29 | 6/42 | 7/26 | 8/12 | 8/49 | 9/32 | 10/17 | |
| | | | 6/11 | 6/48 | 7/31 | 8/18 | 9/01 | 9/38 | 10/22 | |
| OPNUM | 70 | | 2/40 D | 5/44 | 6/31 D | 7/15 | 8/06 | 8/44 D | 9/27 | 10/17 |
| | | | 5/08 | 5/44 D | 6/31 | 7/20 | 8/06 D | 8/44 | 9/32 | 10/17 D |
| | | | 5/08 D | 5/44 | 6/37 | 7/20 D | 8/06 | 8/49 | 9/32 D | 10/17 |
| | | | 5/08 | 5/49 | 6/37 D | 7/20 | 8/12 | 8/49 D | 9/32 | 10/22 |
| | | | 5/13 | 5/49 D | 6/37 | 7/26 | 8/12 D | 8/49 | 9/38 | 10/22 D |
| | | | 5/13 D | 5/49 | 6/42 | 7/26 D | 8/12 | 9/01 | 9/38 D | 10/22 |
| | | | 5/13 | 6/01 | 6/42 D | 7/26 | 8/18 | 9/01 D | 9/38 | 10/27 |
| | | | 5/19 | 6/01 D | 6/42 | 7/31 | 8/18 D | 9/01 | 9/44 | 10/27 D |
| | | | 5/19 D | 6/01 | 6/48 | 7/31 D | 8/18 | 9/06 | 9/44 D | 10/27 |
| | | | 5/19 | 6/11 | 6/48 D | 7/31 | 8/24 | 9/06 D | 9/44 | 10/32 |
| | | | 5/24 | 6/11 D | 6/48 | 7/36 | 8/24 D | 9/06 | 9/49 | 10/32 D |
| | | | 5/24 D | 6/11 | 6/53 | 7/36 D | 8/24 | 9/11 | 9/49 D | 10/32 |
| | | | 5/24 | 6/16 | 6/53 D | 7/36 | 8/29 | 9/11 D | 9/49 | 10/38 |
| | | | 5/29 | 6/16 D | 6/53 | 7/41 | 8/29 D | 9/11 | 10/01 | 10/38 D |
| | | | 5/29 D | 6/16 | 7/05 | 7/41 D | 8/29 | 9/16 | 10/01 D | 10/38 |
| | | | 5/29 | 6/21 | 7/05 D | 7/41 | 8/34 | 9/16 D | 10/01 | |
| | | | 5/34 | 6/21 D | 7/05 | 7/47 | 8/34 D | 9/16 | 10/06 | |
| | | | 5/34 D | 6/21 | 7/10 | 7/47 D | 8/34 | 9/22 | 10/06 D | |
| | | | 5/34 | 6/26 | 7/10 D | 7/47 | 8/39 | 9/22 D | 10/06 | |
| | | | 5/39 | 6/26 D | 7/10 | 7/53 | 8/39 D | 9/22 | 10/11 | |
| | | | 5/39 D | 6/26 | 7/15 | 7/53 D | 8/39 | 9/27 | 10/11 D | |
| | | | 5/39 | 6/31 | 7/15 D | 7/53 | 8/44 | 9/27 D | 10/11 | |

SYMBOLIC REFERENCE TABLE.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| OP::::CL | 0 | EXTERNAL* | 2/11 D | 6/11 | 6/42 | 7/31 | 8/06 | 8/39 | 9/16 | 10/01 |
| | | | 5/07 | 6/11 | 6/42 | 7/31 | 8/10 | 8/39 | 9/16 | 10/01 |
| | | | 5/08 | 6/11 | 6/46 | 7/31 | 8/12 | 8/43 | 9/16 | 10/01 |
| | | | 5/08 | 6/15 | 6/48 | 7/31 | 8/12 | 8/44 | 9/20 | 10/01 |
| | | | 5/08 | 6/16 | 6/48 | 7/35 | 8/12 | 8/44 | 9/22 | 10/05 |
| | | | 5/12 | 6/16 | 6/48 | 7/36 | 8/12 | 8/44 | 9/22 | 10/06 |
| | | | 5/13 | 6/16 | 6/48 | 7/36 | 8/12 | 8/44 | 9/22 | 10/06 |
| | | | 5/13 | 6/16 | 6/52 | 7/36 | 8/12 | 8/44 | 9/22 | 10/06 |
| | | | 5/13 | 6/16 | 6/53 | 7/36 | 8/12 | 8/44 | 9/22 | 10/10 |
| | | | 5/18 | 6/16 | 6/53 | 7/40 | 8/12 | 8/44 | 9/26 | 10/11 |
| | | | 5/19 | 6/20 | 6/53 | 7/41 | 8/12 | 8/44 | 9/27 | 10/11 |
| | | | 5/19 | 6/21 | 6/53 | 7/41 | 8/12 | 8/48 | 9/27 | 10/11 |
| | | | 5/23 | 6/21 | 7/04 | 7/41 | 8/16 | 8/49 | 9/27 | 10/11 |
| | | | 5/24 | 6/21 | 7/05 | 7/41 | 8/18 | 8/49 | 9/27 | 10/16 |
| | | | 5/24 | 6/21 | 7/05 | 7/45 | 8/18 | 8/49 | 9/27 | 10/17 |
| | | | 5/28 | 6/25 | 7/05 | 7/47 | 8/18 | 8/49 | 9/31 | 10/17 |
| | | | 5/29 | 6/26 | 7/05 | 7/47 | 8/18 | 8/49 | 9/32 | 10/17 |
| | | | 5/29 | 6/26 | 7/09 | 7/47 | 8/18 | 8/49 | 9/32 | 10/17 |
| | | | 5/29 | 6/26 | 7/10 | 7/47 | 8/18 | 8/53 | 9/32 | 10/21 |
| | | | 5/29 | 6/26 | 7/10 | 7/47 | 8/18 | 9/01 | 9/37 | 10/22 |
| | | | 5/29 | 6/26 | 7/10 | 7/47 | 8/18 | 9/01 | 9/38 | 10/22 |
| | | | 5/29 | 6/26 | 7/10 | 7/51 | 8/18 | 9/01 | 9/38 | 10/22 |
| | | | 5/33 | 6/30 | 7/14 | 7/53 | 8/18 | 9/01 | 9/38 | 10/22 |
| | | | 5/34 | 6/31 | 7/15 | 7/53 | 8/23 | 9/05 | 9/43 | 10/26 |
| | | | 5/34 | 6/31 | 7/15 | 7/53 | 8/24 | 9/06 | 9/44 | 10/27 |
| | | | 5/38 | 6/31 | 7/15 | 7/53 | 8/24 | 9/06 | 9/44 | 10/27 |
| | | | 5/39 | 6/31 | 7/19 | 7/53 | 8/24 | 9/06 | 9/44 | 10/27 |
| | | | 5/39 | 6/31 | 7/20 | 7/53 | 8/28 | 9/06 | 9/44 | 10/27 |
| | | | 5/43 | 6/31 | 7/20 | 7/53 | 8/29 | 9/06 | 9/48 | 10/31 |
| | | | 5/44 | 6/35 | 7/20 | 7/53 | 8/29 | 9/06 | 9/49 | 10/32 |
| | | | 5/44 | 6/37 | 7/25 | 7/53 | 8/29 | 9/06 | 9/49 | 10/32 |
| | | | 5/48 | 6/37 | 7/26 | 8/04 | 8/29 | 9/10 | 9/49 | 10/32 |
| | | | 5/49 | 6/37 | 7/26 | 8/06 | 8/33 | 9/11 | 9/49 | 10/32 |
| | | | 5/49 | 6/37 | 7/26 | 8/06 | 8/34 | 9/11 | 9/49 | 10/36 |
| | | | 5/53 | 6/37 | 7/26 | 8/06 | 8/34 | 9/11 | 9/53 | 10/38 |
| | | | 6/01 | 6/37 | 7/26 | 8/06 | 8/34 | 9/11 | 10/01 | 10/38 |
| | | | 6/01 | 6/37 | 7/26 | 8/06 | 8/34 | 9/11 | 10/01 | 10/38 |
| | | | 6/10 | 6/41 | 7/30 | 8/06 | 8/38 | 9/15 | 10/01 | 10/38 |
| | | | 6/11 | 6/42 | 7/31 | 8/06 | 8/39 | 9/16 | 10/01 | |
| | | | 6/11 | 6/42 | 7/31 | 8/06 | 8/39 | 9/16 | 10/01 | |
| RETRY | 0 | EXTERNAL* | 5/49 | | | | | | | |
| ROL | 4450 | PROGRAM* | 4/46 E | 10/49 L | | | | | | |
| TERMIN | 0 | EXTERNAL* | 5/34 | | | | | | | |
| T.ALLOC | 1767 | | 10/11 | | | | | | | |
| T.CLIST | 1377 | | 9/11 | | | | | | | |
| T.CLSCD | 1737 | | 7/47 | 7/53 | 8/06 | 8/12 | 8/18 | 9/44 | | |
| T.FILE | 1577 | | 5/29 | 6/37 | 7/36 | 8/06 | 8/18 | 9/16 | 10/17 | |
| | | | 6/26 | 6/53 | 7/41 | 8/12 | 8/29 | 9/22 | 10/22 | |
| | | | 6/31 | 7/26 | 7/47 | 8/12 | 8/34 | 9/22 | | |
| | | | 6/37 | 7/31 | 7/53 | 8/18 | 8/39 | 9/27 | | |
| USERBUG | 0 | EXTERNAL* | 6/01 | | | | | | | |

SYMBOLIC REFERENCE TABLE.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| USRDSK | 0 | EXTERNAL* | 5/19 | 6/37 | 7/15 | 7/47 | 8/29 | 9/06 | 9/38 | 10/17 |
| | | | 6/11 | 6/42 | 7/20 | 7/53 | 8/34 | 9/11 | 9/44 | 10/22 |
| | | | 6/16 | 6/48 | 7/26 | 8/06 | 8/39 | 9/16 | 9/49 | 10/27 |
| | | | 6/21 | 6/53 | 7/31 | 8/12 | 8/44 | 9/22 | 10/01 | 10/32 |
| | | | 6/26 | 7/05 | 7/36 | 8/18 | 8/49 | 9/27 | 10/06 | 10/38 |
| | | | 6/31 | 7/10 | 7/41 | 8/24 | 9/01 | 9/32 | 10/11 | |

```
00.58.27. 03/02/71 TSS SCOPE 3.0
00.58.29.CPU = 000 SEC : CM =  014000
00.58.36.GET,XTEXT,DISKSYS
00.58.38.FILE,XTEXT
00.58.39.RFL,50000
00.58.39.CPU = 000 SEC : CM =  050000
00.58.39.TEXT,OUTPUT
00.58.39.GET,SYSSUBP,MACROS,,RO
00.58.39.GET,MACROS,DISKSYS,,RO
00.58.39.GET,SYMBOLS,DISKSYS,,RO
00.58.39.GET,PARAMS,DISKSYS,,RO
00.58.39.GET,DSKOPS,OPERS,,RO
00.58.40.GET,STACKS,DISKSYS,,RO
00.58.40.GET,OBBITS,DISKSYS,,RO
00.58.40.GET,TYPES,DISKSYS,,RO
00.58.40.GET,ERRORS,DISKSYS,,RO
00.58.40.GET,DSKOPR,DISKSYS,,RO
00.58.40.GET,ACTNUMS,DISKSYS,,RO
00.58.41.GET,SYSCALL,MACROS,,RO
00.58.43.GET,DISK4,DISKSYS
00.59.33.NOMPASS,S=0,I=DISK4
00.59.34.ASSEMBLING DISK4A
00.59.43.ASSEMBLING DISK4A
00.59.45.ASSEMBLING DISK4B
01.00.37.ASSEMBLING DISK4B
01.01.23. ASSEMBLY COMPLETE.
01.01.26.END
01.01.26.FIN
01.01.26.CPU TIME:     085.837 SECONDS
01.01.26.SYS TIME:     009.022 SECONDS
01.01.26.SYSTEXT :        1329 LINES
```

```
01.01.42. 03/02/71 TSS SCOPE 3.0
01.01.44.CPU = 000 SEC : CM =  014000
01.01.45.GET,UPDATE,DISKSYS
01.01.49.FILE,UPDATE
01.01.50.RFL,20000
01.01.50.CPU = 000 SEC : CM =  020000
01.01.50.TEXT,OUTPUT
01.01.50.GET,BINARY,DISKSYS
01.01.50.REWIND,LGO
01.01.50.END
01.01.50.REWIND,BINARY
01.01.51.END
01.01.51.REWIND,TBIN
01.01.51.END
01.01.51.COPYL,BINARY,LGO,TBIN
01.01.52. DISK4A   UPDATED
01.01.52. DISK4B   UPDATED
01.01.56.COPYL DONE
01.01.56.END
01.01.57.REWIND,TBIN
01.01.57.END
01.01.57.REWIND,BINARY
01.01.57.END
01.01.57.COPYF,TBIN,BINARY
01.02.01.END
01.02.01.REWIND,LGO
01.02.02.END
01.02.19.FIN
01.02.19.CPU TIME:     000.997 SECONDS
01.02.19.SYS TIME:     010.558 SECONDS
01.02.19.SYSTEXT :         030 LINES
```

END OF FILE

```
DISK4: DISKSYS
DISK4: DISKSYS
DISK4: DISKSYS
DISK4: DISKSYS
DISK4: DISKSYS
DISK4: DISKSYS
DISK4: DISKSYS
DISK4: DISKSYS
DISK4: DISKSYS
DISK4: DISKSYS
DISK4: DISKSYS
DISK4: DISKSYS
DISK4: DISKSYS
DISK4: DISKSYS
DISK4: DISKSYS
DISK4: DISKSYS
DISK4: DISKSYS
DISK4: DISKSYS
```