LENGTH OF PRG 02247

```
                                    1          IDENT    REQUEST
                                    2          INCLUDE  ↑SYSMAC
                                    3
00001                               4  DEBUG   EQU      1
                                    5
00000                               6          ENTRY    ACCWORD
00000 P                             7          ENTRY    DECODE
00032                               8          ENTRY    DLENGTH
01077 P                             9          ENTRY    ERROR01
00002                              10          ENTRY    FDACC
00011                              11          ENTRY    FDBUSY
00004                              12          ENTRY    FDATE
00010                              13          ENTRY    FDCDATE
00012                              14          ENTRY    FDELNTH
00006                              15          ENTRY    FDEPP
02151 P                            16          ENTRY    FDHASH
00005                              17          ENTRY    FDLP
02021 P                            18          ENTRY    FDSELECT
00000                              19          ENTRY    FDSYM
00007                              20          ENTRY    FDTFL
00003                              21          ENTRY    FDURN
01333 P                            22          ENTRY    FDZAP
02204 P                            23          ENTRY    HARDWARE
00020                              24          ENTRY    HDLENGTH
00001                              25          ENTRY    HTFILE
00017                              26          ENTRY    HTMASK
00012                              27          ENTRY    HTRAF
02146 P                            28          ENTRY    IMPURE03
00000 P                            29          ENTRY    PURE03
02224 P                            30          ENTRY    TTYUNIT
02226 P                            31          ENTRY    TVUNIT
                                   32
                                   33          EXT      A
                                   34          EXT      ABORT
                                   35          EXT      ACCNUM
                                   36          EXT      ACCSTUFF
                                   37          EXT      BIT15
                                   38          EXT      BIT17
                                   38+001      EXT      BIT18
                                   39          EXT      BIT19
                                   39+001      EXT      BIT20
                                   40          EXT      BIT22
                                   41          EXT      BIT23
                                   42          EXT      BLANKS
                                   43          EXT      CALMSFMT
                                   44          EXT      BUSY
                                   45          EXT      CONWAIT
                                   46          EXT      CR
                                   47          EXT      D10
                                   48          EXT      D1000
                                   49          EXT      EXECINST
                                   50          EXT      F7
                                   51          EXT      FDLENGTH
                                   52          EXT      FILEDIR
                                   53          EXT      FINK
                                   54          EXT      FLAGS
                                   55          EXT      FRONTP3
                                   56          EXT      FREEFILE
                                   57          EXT      FREEMEM
                                   58          EXT      GETBUFF
                                   59          EXT      GETMEM
                                   60          EXT      GIVBUFFP
                                   61          EXT      I1
                                   62          EXT      I2
                                   63          EXT      IOBOUND
                                   64          EXT      IOBUSY
                                   65          EXT      IOUGLY
                                   66          EXT      LIBCALL
                                   67          EXT      LINEPAGE
                                   67+001      EXT      LJA
                                   68          EXT      LOG
                                   69          EXT      LOGOFF
                                   70          EXT      LPTAB
                                   71          EXT      LPTABL          LENGTH OF LPTAB
                                   72          EXT      LUNLIST
                                   73          EXT      LUNLISTX        LUNLIST-1
                                   74          EXT      MACHERR
                                   75          EXT      MEMARRAY
```

```
                        76                  EXT         MFBLKS
                        77                  EXT         MFBLKLIM
                        78                  EXT         MSFBLK
                        79                  EXT         MSFCHRG
                        80                  EXT         MSFNUMB
                        81                  EXT         MSUNITS
                        82                  EXT         MSWAIT
                        83                  EXT         MTWAIT
                        84                  EXT         NAMELIST
                        85                  EXT         NBIT23
                        86                  EXT         NMSWAIT
                        87                  EXT         OPMSG
                        88                  EXT         PC
                        89                  EXT         PCHARS
                        90                  EXT         PF1
                        91                  EXT         PUNBLOC
                        92                  EXT         PLOTBLOC
                        93                  EXT         PSABLK
                        94                  EXT         PTPBLOC
                        95                  EXT         PTPCHRG
                        96                  EXT         Q
                        97                  EXT         QTABLE
                        98                  EXT         READ
                        99                  EXT         RETURN
                       100                  EXT         REWRITE
                       101                  EXT         RMTERM
                       102                  EXT         RPSAPTR
                       103                  EXT         SCREAM
                     103+001                EXT         SENDTAB
                     103+002                EXT         SENDTABL
                     103+003                EXT         SENDTAB1
                       104                  EXT         SELECT
                       105                  EXT         SFBLKLIM
                       106                  EXT         SFBLKS
                       107                  EXT         SWBIT
                       108                  EXT         SYSCM
                       109                  EXT         SYSCODE
                       110                  EXT         SYSERR
                       111                  EXT         T1
                       112                  EXT         T2
                       113                  EXT         T3
                       114                  EXT         T4
                       115                  EXT         T5
                     115+001                EXT         TAPESAVL
                       116                  EXT         TAPELIST
                       117                  EXT         TASKQ
                       118                  EXT         TBATCH
                       119                  EXT         TBATCHN
                       120                  EXT         TBLKLIST
                       121                  EXT         TERMINAL
                       122                  EXT         TFBLKMAX
                       123                  EXT         TFBLKS
                       124                  EXT         TIMELEFT
                       125                  EXT         TIMEMASK
                       126                  EXT         TIMEWAIT
                       127                  EXT         TIMLIM
                     127+001                EXT         TNUMLIST
                       128                  EXT         TOTALTIM
                       129                  EXT         TPMNTCHG
                       130                  EXT         TPUNITS
                       131                  EXT         TRUNTIME
                       132                  EXT         TTFCHR
                       133                  EXT         TXTOTAL
                     133+001                EXT         UDESTLP
                       134                  EXT         USRNUM
                     134+001                EXT         UTAPEMAX
                       135                  EXT         WRITE
                       136                  EXT         XREQEND
                       137                  EXT         XREQERR
                       138                  EXT         ZEROPG
                       139
00037                  140      DATE        EQU         37B          REGISTER FILE LOCATION
07773                  141      DINT        EQU         7773B
07774                  142      EINT        EQU         7774B
00000                  143      IMPURE      EQU         00000
00000                  144      PFR         EQU         000
00000                  145      PFW         EQU         000
00001                  146      X1          EQU         1
00002                  147      X2          EQU         2
```

```
00003          148    X3         EQU     3
00000          149    CNBLK      EQU     0
00000          150    LUNLST     EQU     0
00000          151    PSA        EQU     0
00000          152    NAMELST    EQU     0
               153
00043          154    NPU        EQU     2*16+3                 EACH USER GETS 64K + 3 PAGES
               155
00001          156    PFLOC      EQU     001B                   PAGE FILE ADDRESS
04000          157    CORE       EQU     PFLOC*2↑11
01000          158    WPFB       EQU     1000B
               159
               160
               161
               162
               163               HTDEF
               199    .*************************************************************************
               200    .*                                                                      *
00001          201    HTFILE     EQU     01B                    FILE                          *
00002          202    HTLP       EQU     02B                    LINE PRINTER                  *
00003          203    HTPUN      EQU     03B                    CARD PUNCH                    *
00004          204    HTCR       EQU     04B                    CARD READER                   *
00005          205    HTMT       EQU     05B                    MAGNETIC TAPE                 *
00006          206    HTTTY      EQU     06B                    TELETYPE                      *
00007          207    HTPLOT     EQU     07B                    X/Y PLOTTER                   *
00010          208    HTNULL     EQU     10B                    ONLINE INCINERATOR            *
00011          209    HTTV       EQU     11B                    CRT DISPLAY                   *
00012          210    HTRAF      EQU     12B                    RANDOM ACCESS FILE            *
00013          211    HTTASK     EQU     13B                    FUTURE INPUT FOR REMOTE BATCH *
00014          212    HTMSF      EQU     14B                    USER DISKPACK                 *
00015          213    HTPTP      EQU     15B                    PAPER TAPE PUNCH              *
00016          214    HTMAX      EQU     16B                    (NUMBR OF HARDWARE TYPES) + 1 *
00017          215    HTMASK     EQU     17B                    MASK FOR THE HARDWARE TYPE    *
               216    .*                                                                      *
               217    .*************************************************************************
               164
               165
               166               ACBLKDEF
00001          222    LPREC      EQU     1                      NORMAL LINE PRINTER RECORDS   *
               223    .*************************************************************************
               224    .*                                                                      *
00002          225    PUNREC     EQU     LPREC+1                PUNCH RECORDS                 *
00003          226    PLOTREC    EQU     3                      PLOTTER RECORDS               *
00004          227    PTPREC     EQU     4                      PAPER TAPE PUNCH RECORDS      *
00005          228    UTLPREC    EQU     5                      200 UT LP RECORDS             *
00006          229    MSFTIME    EQU     6                      SECONDS OF USER DISK PACK TIME *
               230    .*                                                                      *
               231    .*************************************************************************
```

```
                      168             FCBDEF
                       65       .*                                                                        *
                       66       .*************************************************************************
                       67       .*                                                                        *
                       68       .*                    FILE CONTROL BLOCK DEFINITIONS                      *
                       69       .*                                                                        *
                       70       .*                                                                        *
 00000                 71       ACCWORD   EQU     0                  ACCOUNTING WORD  (MUST BE 0)        *
 00001                 72       LP        EQU     1                  LOAD POINT BLOCK                    *
 00002                 73       COREP     EQU     2                  CORE POINTER IF NON-ZERO            *
                       74       .*                                   IF BIT23 = 1, CORE BLOCK HAS        *
                       75       .*                                   BEEN WRITTEN INTO                   *
 00003                 76       CBP       EQU     COREP+1            BLOCK NUMBER OF THE CURRENT BLOC*
 00004                 77       CPP       EQU     4                  CURRENT POSITION POINTER            *
                       78       .*                                   (REL. POSIT. WITHIN BLOCK CBP)      *
                       79       .*                                   BIT23 SEZ READ-ONLY                 *
                       80       .*                                   BIT22 SEZ AT LOAD POINT             *
                       81       .*                                   BIT21 SEZ END OF DATA               *
                       82       .*                                   BIT20 SEZ FILE MARK JUST READ       *
                       83       .*                                                                       *
                       84       .*                                   BIT18 SEZ BINARY RECORD PROCESSE*
                       85       .*                                   BIT17 SEZ ABNORMAL/UNAVAILABLE      *
                       86       .*                                   BIT16 SEZ ADDRESS ERROR             *
                       87       .*                                   BIT15 SEZ SAVED FILE                *
 00005                 88       BLKR      EQU     5                  NUMBER OF BLOCKS BEYOND             *
                       89       .*                                   THE CURRENT BLOCK                   *
 00006                 90       EPP       EQU     6                  END POSITION POINTER                *
                       91       .*                                   BIT22 SEZ THE FILE HAS CHANGED      *
                       92       .*                                   BIT21 SEZ POSITIONER READY          *
                       93       .*                                   BIT20 SEZ DESTRUCTIVE READ          *
                       94       .*                                   FILE DIRECTORY                      *
                       95       .*                                   BITS 15-18 CONTAIN THE HT           *
                       96       .*                                   BITS 00-14 CONTAIN END POSITION *
 00007                 97       TFL       EQU     7                  TOTAL LENGTH IN BLOCKS              *
                      169       *                                                                        *
            X         170       AUB       EQU     BIT17                                                  *
            X         171       LPB       EQU     BIT22                                                  *
            X         172       SVB       EQU     BIT15                                                  *
                      173       *                                                                        *
                      174       **************************************************************************
                      175       *
                      176       *         FILE DIRECTORY DEFINITIONS
                      177       *
 00000                178       FDSYM     EQU     0
 00002                179       FDACC     EQU     2
 00003                180       FDURN     EQU     FDACC+1
 00004                181       FDATE     EQU     4
 00005                182       FDLP      EQU     5
 00006                183       FDEPP     EQU     6
 00007                184       FDTFL     EQU     7
 00010                185       FDCDATE   EQU     8
 00011                186       FDBUSY    EQU     9
 00012                187       FDELNTH   EQU     10                 LENGTH OF A FILE DIRECTORY ENTRY
```

```
                       URBDEF
                .*                                                               *
                .*****************************************************************
                .*                                                               *
                .*     URBLOCK BLOCK DEFINITIONS                                 *
                .*                                                               *
                .*                                                               *
00000           FB        EQU     0                POINTER TO NEXT FILE BLOCK    *
00001           BLF       EQU     FB+1             COUNT OF BLOCKS IN THIS FILE  *
00002           BFBGN     EQU     BLF+1            QUARTER PAGE NUMBER OF CURRENT *
                .*                                 512 WORD BLOCK                *
00003           BFCPP     EQU     BFBGN+1          POINTER TO NEXT WORD TO BE    *
                .*                                 LOADED FROM THIS BLOCK.  THIS *
                .*                                 POINTER IS RELATIVE TO THE    *
                .*                                 BEGINNING OF THE CURRENT BLOCK *
00004           CALBAK    EQU     BFCPP+1          GO TO THIS ADDRESS WHEN BUFFER *
                .*                                 IS DONE AFTER AN INTERRUPT    *
                .*                                 BIT23 SEZZ CALBAK             *
00005           IMAD      EQU     CALBAK+1         LOCATION WHERE RECORD IS TO BE *
                .*                                 PLACED OR MOVED FROM.         *
00006           LNIM      EQU     IMAD+1           MAXIMUM ALLOWABLE RECORD SIZE *
00007           KILLFLAG  EQU     LNIM+1           STI   *,0                     *
00010           ENAD      EQU     KILLFLAG+1       ENI   BLOCK,X1                *
00011           NJM       EQU     ENAD+1           UJP   IMPURE                  *
00012           ENIT      EQU     NJM+1            TEMP FOR INDEX 3              *
                .*                                 IF BIT23 DEVICE MUST BE STARTED *
                .*                                 BY OPERATOR                   *
                .*                                 IF BIT22 DO NOT PROCESS FORMS ON*
                .*                                 THIS DEVICE                   *
                .*                                 IF BIT21 THEN STOP MACRO      *
                .*                                 IF BIT20 THEN BUFFER IS UNSAFE *
                .*                                 BIT19 IS A QUEUEING FLAG      *
00013           DEVBLK    EQU     ENIT+1           PNTR TO FOUR WORD BLOCK       *
00014           COUNT     EQU     DEVBLK+1         COUNT OF WORDS IN RECORD      *
00015           POSI      EQU     COUNT+1          RELATIVE LOCATION IN BUFFER   *
00016           PFWORD    EQU     POSI+1           CONTENTS OF PF1               *
00016           FORMSWRD  EQU     PFWORD                                         *
                .*                                 BIT19 SEZ WAITING FOR         *
                .*                                 OPERATOR TO READY DEVICE      *
                .*                                 BIT20 SEZ WANTS FORMS         *
                .*                                 BIT21 SEZ HAS FORMS           *
                .*                                 BIT22 SEZ TAKE FORMS OUT      *
                .*                                 BIT23 SEZ SAME AS BIT22 BUT   *
                .*                                 DRIVER IS WAITING TO OUTPUT NEXT*
                .*                                 FILE                          *
00017           IDENT     EQU     PFWORD+1         BCD IDENT OF THE DEVICE       *
00020           URBEXITA  EQU     IDENT+1          ENI   BLOCK,X1                *
00021           URBEXIT   EQU     URBEXITA+1       UJP   IMPURE                  *
00022           QINGLOC   EQU     URBEXIT+1        ADDRESS TO GO TO WHEN FILES   *
                .*                                 ARE UNEQUIPPED                *
00023           QPNT      EQU     QINGLOC+1        POINTER TO NXPTR AND LXPTR    *
00024           QEMPTY    EQU     QPNT+1           ADDRESS TO TELL DRIVER THAT IT *
                .*                                 HAS TO MORE FILES TO OUTPUT   *
00025           STRTLOC   EQU     QEMPTY+1         ADDRESS TO TELL DRIVER TO START *
                .*                                 FILE                          *
                .*                                                               *
                .*****************************************************************
```

```
              00000 P          191     PURE03    EQU       *                     START OF PURE CODE REGION 03
                               192
                               193
                               194
                                       ****************************************************************
                               196     *                                                              *
                               197     *         EXECUTIVE REQUEST DECODE TABLE                       *
                               197+001 *                                                              *
                               197+002 *         BIT 23 -- NEEDS EFFECTIVE ADDRESS (LUN) LOOKED UP IN LUNLIST   *
                               197+003 *         BIT 22 -- LEGAL ONLY IF IN CONTROL MODE              *
                               198     *                                                              *
                                       ****************************************************************
                               200
              00000 P          201     DECODE    EQU       *
    00000  40001225 P          202               40        DELETE            00
    00001  40001075 P          203               40        SAVE              01
    00002  40000536 P          204               40        UNEQUIP           02
    00003  40000032 P          205               40        EQUIP             03
    00004  40001471 P          206               40        RFP               04
    00005  40001374 P          207               40        FP                05
    00006  20001715 P          207+001           20        FREEPAGE          06
    00007  00001715 P          209               00        ZEROPAGE          07
    00010  00077777 X          210               00        LIBCALL           10
    00011  00001630 P          211               00        TIMESET           11
    00012  00001640 P          212               00        TIMEREQ           12
    00013  00001673 P          213               00        MFBLKSET          13
    00014  00001701 P          214               00        MFBLKREQ          14
    00015  00001705 P          215               00        SFBLKREQ          15
    00016  00001710 P          216               00        PURGE             16
    00017  00001721 P          217               00        RMP               17
    00020  60077777 X          217+001           60        LOG               20
    00021  20077777 X          217+002           20        LOGOFF            21
    00022  20001727 P          217+003           20        JOBNUM            22
    00023  40001550 P          221               40        ASSIGN            23
    00024  00001614 P          222               00        PAGESIZE          24
    00025  40001617 P          223               40        FILESIZE          25
    00026  00001644 P          224               00        DELAYREQ          26
    00027  00001713 P          225               00        CFBLKREQ          27
    00030  00001731 P          225+001           00        TAPEMAX           30
    00031  40001574 P          225+002           40        DESTINAT          31
              00032            226     DLENGTH   EQU       *-DECODE
```

```
                            ******************************************************************************
                      231   *                                                                            *
                      232   *          EQUIP                                                             *
                      233   *                                                                            *
                      234   *                      USER CALLING SEQUENCE                                 *
                      235   *          ENI         EQUIP,X1               EQUIP = 3                      *
                      236   *          LDAQ        FILE OR HARDWARE NAME         OR                      *
                      237   *          ENA         0                                                     *
                      238   *          ENQ         OTHERLUN               TO EQUATE LUN TO OTHERLUN      *
                      239   *          XREQ        LUN                                                   *
                      240   *                                                                            *
                      241   *                      ENTER WITH                                            *
                      242   *          X1          = 0 IF LUN IS UNEQUIPPED                              *
                      243   *          X3          = PSA POINTER                                         *
                      244   *                                                                            *
                      245   *                      ERROR CODES                                           *
                      246   *          1           LUN IS ALL READY EQUIPPED                             *
                      247   *          2           FILENAME DOES NOT EXIST  OR                           *
                      248   *                      FIRST CHARACTER IS A ≠$≠                              *
                      249   *          3           LUN IN Q IS NOT EQUIPPED                              *
                      250   *          4           FILE IS BUSY                                          *
                      251   *          5           NOT ENOUGH HARDWARE                                   *
                      252   *          6           BAD TAPE DENSITY OR BAD TAPE OR PACK NUMBER           *
                      253   *                                                                            *
                      254   *          NOTE:       ≠$≠ FILES CAN BE EQUIPPED ONLY IN CONTROL MODE        *
                      255   *                                                                            *
                            ******************************************************************************
                      257
00032  02501077 P     258   EQUIP     IJD    ERROR01,X1          JUMP IF ALL READY EQUIPPED
00033  20077777 X     259             LDA    MEMARRAY            DO WE HAVE AVAILABLE ADDRESSES
00034  03100045 P     260             AZJ,NE EQUIP00B            JUMP IF WE DO
00035  14200007       261             ENI    7,X2
00036  14600001       262   EQUIP00A  ENA    1
00037  12200000       263             SHA    0,X2                COMPUTE NUMBER OF 8 WORD BLOCKS
00040  50277777 X     264             MUA    FRCNTP3,X2
00041  53540000       265             IAI    X1
00042  02600036 P     266             IJD    EQUIP00A,X2
00043  05100144       267             ISG    100,X1              SKIP IF ENOUGH STORAGE
00044  01001331 P     268             UJP    ERROR05             NOT ENOUGH HARDWARE
          00045 P     269   EQUIP00B  EQU    *
00045  21077777 X     270             LDQ    BLANKS
00046  20377777 X     271             LDA    Q,X3+PSA            CAN THIS BE A SPECIAL NAME
00047  03500137 P     272             AQJ,NE EQUIP03
00050  14577777       273             ENQ,S  77777B
00051  20377777 X     274             LDA    A,X3+PSA
00052  14100020       275             ENI    HDLENGTH,X1
00053  06202205 P     276             MEQ    HARDWARE+1,2
00054  01000171 P     277             UJP    EQUIP08             MUST BE A USER FILE
00055  14600000       278             ENA    0                   ASSUME NOT AN OUTPUT DEVICE
00056  05100012       279             ISG    OUTDEV,X1           SKIP IF REALLY NOT
00057  20077777 X     280             LDA    IOBUSY              LOAD COUNT OF OUTPUT FILES TO
00060  17677777       281             ANA    77777B              PROCESS
00061  50377777 X     282             MUA    IOUGLY,X3+PSA       PREVENT ONE USER FROM CREATING
00062  21102204 P     283             LDQ    HARDWARE,X1         A LARGE BACKLOG OF OUTPUT FILES
00063  05611610       284             ASG    50*100              SKIP IF USER HAS TOO MANY
00064  04700000       285             QSE    0                   SKIP IF DEVICE IS ON LINE
00065  01001331 P     286             UJP    ERROR05
00066  14600001       287             ENA    1                   REMEMBER THIS OUTPUT FILE
00067  34300061 X     288             RAD    IOUGLY,X3+PSA
00070  14300001       289             ENI    1,X3                GET TWO WORDS FOR LUNLIST
00071  00777777 X     290             RTJ    GETMEM
00072  53600000       291             TAI    X2                  LUNLIST POINTER TO X2
00073  20102204 P     292             LDA    HARDWARE,X1         GET THE HARDWARE TYPE
00074  21002234 P     293             LDQ    FORM+CPP            LOAD THE INITIAL STATUS
00075  40002236 P     294             STA    FORM+EPP            SAVE THE HARDWARE CODE IN THE
00076  40200001       295   EQUIP01   STA    1,X2+LUNLST         LUNLIST AND FAKE CONTROL BLOCK
00077  54377777 X     296             LDI    RPSAPTR,X3+PSA      RESTORE THE PSA INDEX
00100  41300051 X     297             STQ    A,X3+PSA            PUT STATUS INTO THE USERS (A)
00101  12077760       298             SHA    -15                 HARDWARE TYPE TO LOW END OF (A)
00102  17600017       299             ANA    HTMASK
00103  44300100 X     300             SWA    A,X3+PSA            SAVE IN THE USER≠S A
          00104 P     301   EQUIP02   EQU    *
00104  20077777 X     302             LDA    EXECINST            LOAD THE USERS INSTRUCTION
00105  17600377       303             ANA    377B                AND OBTAIN THE LUN FROM IT
00106  12000017       304             SHA    15
00107  35377777 X     305             SSA    LUNLIST,X3+PSA      MEGER THE LUN AND LUNLIST POINTER
00110  40200000       306             STA    0,X2                PUT THE ELEMENT INTO THE LIST
00111  53200000       307             TIA    X2
00112  40300107 X     308             STA    LUNLIST,X3+PSA
```

```
00113  20200001      309                  LDA      1,X2                  DOES THIS UNIT NEED A CONTROL
00114  03377777 X    310                  AZJ,LT   XREQEND               BLOCK JUMP IF NOT
00115  14300003      311                  ENI      3,X3                  NEED 8 WORDS FOR THE CONTROL
00116  00700071 X    312                  RTJ      GETMEM                BLOCK
00117  44200001      313                  SWA      1,X2                  SAVE THE CONTROL BLOCK ADDRESS
00120  53500000      314                  TAI      X1+CNBLK              SAVE THE CONTROL BLOCK POINTER
00121  20200001      315                  LDA      1,X2                  LOAD WORD FOR LATER
00122  14277770      316                  ENI      -7,X2                 MOVE 8 WORDS
00123  21202237 P    317                  LDQ      FORM+7,X2             MOVE STANDARD CONTROL BLOCK
00124  41300000      318                  STQ      0,X3                  PICTURE TO THIS BLOCK
00125  15300001      319                  INI      1,X3
00126  02200123 P    320                  IJI      *-3,X2
00127  54300077 X    321                  LDI      RPSAPTR,X3+PSA        POINT TO THE USER AGAIN
00130  12000001      322                  SHA      1                     IS THIS A UNIT RECORD OUTPUT
00131  03200114 X    323                  AZJ,GE   XREQEND               DEVICE   WE ARE DONE IF NOT
00132  20377777 X    323+001              LDA      UDESTLP,X3+PSA        GET DESTINATION ADDRESS
00133  12077763      323+002              SHA      -12
00134  17607777      323+003              ANA      7777B
00135  44100006      326                  SWA      EPP,X1+CNBLK
00136  01000131 X    327                  UJP      XREQEND               EXIT
                     328
00137  25300103 X    329     EQUIP03      LDAQ     A,X3+PSA
00140  03100171 P    330                  AZJ,NE   EQUIP08               JUMP IF A NAME
00141  20300112 X    331                  LDA      LUNLIST,X3+PSA        POINT TO THE USER≠S LUNLIST
00142  01000165 P    332                  UJP      EQUIP07
00143  20100001      333     EQUIP04      LDA      0+1,X1                GET THE LUN FROM THE LUNLIST
00144  12077760      334                  SHA      -15                   ELEMENT
00145  03500164 P    335                  AQJ,NE   EQUIP06               JUMP IF NOT THE PROPER ONE
00146  14300001      336     EQUIP05      ENI      1,X3                  GET A TWO WORD LUNLIST ELEMENT
00147  00700116 X    337                  RTJ      GETMEM
00150  53600000      338                  TAI      X2+LUNLST             NEW LUNLIST POINTER TO X2
00151  20100002      339                  LDA      1+1,X1+LUNLST         LOAD FROM OLD LUNLIST ELEMENT
00152  35077777 X    340                  SSA      BIT23                 REMEMBER THIS IS EQUATED TO
00153  40100002      341                  STA      1+1,X1+LUNLST         ANOTHER UNIT
00154  53700000      342                  TAI      X3                    CONTROL BLOCK POINTER TO X3
00155  20300006      342+001              LDA      EPP,X3+CNBLK
00156  37077777 X    342+002              LPA      BIT20
00157  12077776      342+003              SHA      -1                    SDR BIT TO BIT 19
00160  35300004      342+004              SSA      CPP,X3+CNBLK
00161  13077747      342+005              SHAQ     -24                   FILE STATUS TO Q
00162  20100002      342+006              LDA      1+1,X1+LUNLST
00163  01000076 P    344                  UJP      EQUIP01
                     345
00164  20100001      346     EQUIP06      LDA      0+1,X1                LOAD POINTER TO THE NEXT ELEMENT
00165  53500000      347     EQUIP07      TAI      X1                    POINTER TO X1
00166  02500143 P    348                  IJD      EQUIP04,X1            LOOP THRU THE WHOLE LUNLIST
00167  14600003      349     ERROR03      ENA      3                     LUN IN Q NOT EQUIPPED
00170  01077777 X    350     ERROR        UJP      XREQERR
                     351
00171  21002153 P    352     EQUIP08      LDQ      BCDMT                 DOES THE USER WANT A TAPE
00172  03400336 P    353                  AQJ,EQ   EQUIPMT               JUMP IF SO
00173  21002152 P    354                  LDQ      BCDMSF                DOES THE USER WANT HIS OWN DISK
00174  03400506 P    355                  AQJ,EQ   EQUIPMSF              DISK UNIT
00175  12077755      356                  SHA      -18                   IS THIS A $ FILE
00176  04477753      357                  ASE,S    77753B
00177  01000202 P    358                  UJP      *+3
00200  20377777 X    359                  LDA      SYSCM,X3+PSA          MUST BE IN CONTROL MODE
00201  03201323 P    360                  AZJ,GE   ERROR02
00202  20377777 X    361                  LDA      NAMELIST,X3+PSA       IS THE FILE ALREADY EQUIPPED
00203  01000211 P    362                  UJP      EQUIP08Q
00204  25200003      363     EQUIP08N     LDAQ     2+1,X2+NAMELST        LOAD THE NAME FORM THE NAMELIST
00205  33300137 X    364                  SBAQ     A,X3+PSA              AND COMPARE TO THE ONE WE WANT
00206  13400000      365                  SCAQ     0
00207  03000326 P    366                  AZJ,EQ   EQUIP12               JUMP IF NAME IS ALL READY EQUIPED
00210  20200001      367                  LDA      0+1,X2+NAMELST        GET THE NEXT POINTER
00211  53600000      368     EQUIP08Q     TAI      X2+NAMELST
00212  02600204 P    369                  IJD      EQUIP08N,X2+NAMELST     LOOP THRU THE WHOLE LIST
00213  14600215 P    370                  ENA      *+2                   ENTER THE RETURN ADDRESS
00214  01001751 P    371                  UJP      SRCHFOR
00215  03100221 P    372                  AZJ,NE   EQUIP09               JUMP IF THE NAME EXISTS
00216  14600002      373     ERR02        ENA      2
00217  40277777 X    374     SRCHERR      STA      I1,X2+PSA             ERROR CODE TO THE USER≠S X1
00220  01002136 P    375                  UJP      SRCHRTN
00221  21104011      376     EQUIP09      LDQ      CORE+FDBUSY,X1        LOAD THE BUSY COUNTER
00222  20104006      377                  LDA      CORE+FDEPP,X1         LOAD THE FILE PROTECTION WORD
00223  04500000      378                  QSE,S    0                     SKIP IF NOT BUSY
00224  03201516 P    379                  AZJ,GE   ERR04                 JUMP IF NOT FILE PROTECTED
00225  15700001      380                  INQ      1                     INCREMENT THE BUSY COUNTER
00226  41104011      381                  STQ      CORE+FDBUSY,X1        AND STORE IT BACK
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00227  14300002          382              ENI     2,X3          GET 4 WORDS FOR NAMELIST ELEMENT
00230  00700147 X        383              RTJ     GETMEM
00231  21200202 X        384              LDQ     NAMELIST,X2+PSA   LINK THIS FILE INTO THE NAMELIST
00232  40200231 X        385              STA     NAMELIST,X2+PSA   QUEUE
00233  53600000          386              TAI     X2+NAMELST
00234  41200000          387              STQ     0,X2+NAMELST
00235  25104000          388              LDAQ    CORE+FDSYM,X1     GET THE FILE NAME
00236  45200002          389              STAQ    2,X2+NAMELST      AND PUT INTO THE NAMELIST
00237  14300003          390              ENI     3,X3              ELEMENT
00240  00700230 X        391              RTJ     GETMEM            GET 8 WORDS FOR A CONTROL BLOCK
00241  21104006          392              LDQ     CORE+FDEPP,X1     GET THE STATUS FROM THE FILE
00242  13000005          393              SHAQ    5                 CLEAR THE UPPER BITS ON THE
00243  12400023          394              SHQ     24-5              EPP WORD
00244  41300006          395              STQ     EPP,X3+CNBLK      SAVE IN THE CONTROL BLOCK
00245  41200001          396              STQ     1,X2+NAMELST      SAVE IN THE NAMELIST ELEMENT
00246  12077772          397              SHA     -5                RESTORE THE CNBLK POINTER
00247  44200001          398              SWA     1,X2+NAMELST      AND SAVE IN THE NAMELIST ELEMENT
00250  20104010          399              LDA     CORE+FDCDATE,X1
00251  21104007          400              LDQ     CORE+FDTFL,X1     LOAD THE FILE LENGTH
00252  03200260 P        401              AZJ,GE  EQUIP11           JUMP IF THE DATA IS PRESENT
00253  35077777 X        402              SSA     BIT22             SET THE RECOVERY REQUEST BIT
00254  40104010          403              STA     CORE+FDCDATE,X1   AND STORE IT BACK
00255  14600000          404              ENA     0                 CREATE A ZERO LENGTH FILE
00256  44300006          405              SWA     EPP,X3+CNBLK
00257  14700000          406              ENQ     0                 SET FILE LENGTH TO ZERO
         00260 P         407      EQUIP11 EQU     *
00260  41300007          408              STQ     TFL,X3+CNBLK      SAVE IN THE CONTROL BLOCK
00261  15577776          409              INQ,S   -1                SET UP BLOCKS REMAINING
00262  41300005          410              STQ     BLKR,X3+CNBLK
00263  20000253 X        411              LDA     LPB               LOAD THE LOAD POINT BIT FOR THE
00264  05500000          412              QSG,S   0                 STATUS   SKIP IF NOT EMPTY
00265  20002234 P        413              LDA     FORM+CPP          LOAD POINT AND END OF DATA BITS
00266  35077777 X        414              SSA     SVB               REMEMBER THIS IS A SAVED FILE
00267  21104006          415              LDQ     CORE+FDEPP,X1     GET THE FP BIT
00270  13000001          416              SHAQ    1                 MERGE WITH THE REST OF THE
00271  12000027          417              SHA     23                STATUS
00272  21104010          418              LDQ     CORE+FDCDATE,X1   IS THE FILE ABNORMAL
00273  05500000          419              QSG,S   0
00274  35077777 X        420              SSA     AUB               SET THE BIT IF SO
00275  40300004          421              STA     CPP,X3+CNBLK      PUT STATUS IN THE CONTROL BLOCK
00276  12477747          422              SHQ     -24               ONE WORD OF DATA NOT PRESENT BIT
00277  04777777          423              QSE     77777B            SKIP IF DATA NOT PRESENT
00300  21104005          424              LDQ     CORE+FDLP,X1      GET THE LOAD POINT BLOCK
00301  14600000          425              ENA     0                 SAY BLOCK NOT IN CORE
00302  45300002          426              STAQ    COREP,X3+CNBLK
00303  41300001          427              STQ     LP,X3+CNBLK       SAVE THE LOAD POINT BLOCK
00304  54102241 P        428              LDI     SRCHQB,X1+PSA     GET THE PSA POINTER
00305  14300001          429              ENI     1,X3              TWO WORDS FOR A LUNLIST ELEMENT
00306  00700240 X        430              RTJ     GETMEM
00307  21100141 X        431              LDQ     LUNLIST,X1+PSA    LINK INTO THE LUNLIST
00310  40100307 X        432              STA     LUNLIST,X1+PSA
00311  20177777 X        433              LDA     T2,X1+PSA         GET THE LUN
00312  12400011          434              SHQ     9                 MERGE WITH THE POINTER
00313  13000017          435              SHAQ    15
00314  21200001          436              LDQ     1,X2+NAMELST      GET THE CONTROL BLOCK ADDRESS
00315  45300000          437              STAQ    0,X3+LUNLST       SAVE THE NEW ELEMENT
00316  13000030          438              SHAQ    24                CONTROL BLOCK POINTER TO X2
00317  53600000          439              TAI     X2+CNBLK
00320  21200004          440              LDQ     CPP,X2+CNBLK      GET THE STATUS BITS
00321  41100205 X        441              STQ     A,X1+PSA          PUT THE STATUS IN USER=S (A)
00322  12000011          442              SHA     9
00323  17600017          443              ANA     HTMASK            JUST HARDWARE TYPE
00324  44100321 X        444              SWA     A,X1+PSA          SAVE IN USER=S (A)
00325  01002124 P        445              UJP     SRCHRWT           WRITE THE FILE DIRECTORY BLOCK
                         446
00326  20300310 X        447      EQUIP12 LDA     LUNLIST,X3+PSA    LOOK FOR THE LUN EQUIPPED TO THE
00327  53500000          448      EQUIP14 TAI     X1+LUNLST         NAME
00330  20200002          449              LDA     1+1,X2+NAMELST    LOAD THE CONTROL BLOCK POINTER
00331  36100001          450              SCA     1,X1+LUNLST       AND COMPARE TO THIS LUN
00332  05600001          451              ASG     1                 SKIP IF NO MATCH
00333  02500146 P        452              IJD     EQUIP05,X1+LUNLST
00334  20100000          453              LDA     0,X1+LUNLST       LOAD POINTER TO THE NEXT ELEMENT
00335  01000327 P        454              UJP     EQUIP14
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          00336 P          456      EQUIPMT   EQU     *
00336  20377777 X          457                LDA     I2,X3+PSA              LOAD THE DENSITY CODE
00337  14700003            458                ENQ     3
00340  03601132 P          459                AQJ,GE  ERROR06                JUMP IF A PARAMETER ERROR
00341  77730000            460                VFD     A12/DINT
00342  20377777 X          460+001            LDA     UTAPEMAX,X3+PSA
00343  13077771            460+002            SHAQ    -6
00344  12400006            460+003            SHQ     6
00345  17600077            460+004            ANA     77B
00346  17700077            460+005            ANQ     77B
00347  16477777            460+006            XOA,S   77777B
00350  53040000            460+007            AQA
00351  03201331 P          460+008            AZJ,GE  ERROR05                JUMP IF HE CANNOT GET A TAPE
          00352 P          491      EQUIPMT3  EQU     *
00352  14677777 X          492                ENA     CONWAIT                CONSOLE TYPEWRITER WAIT
00353  21077777 X          493                LDQ     BUSY                   LOAD COUNT OF OUTPUT MESSAGES
00354  05700005            494                QSG     5                      SKIP IF TOO MANY
00355  01000357 P          495                UJP     *+2
00356  01077777 X          496                UJP     RMTERM
00357  20300046 X          497                LDA     Q,X3+PSA               GET THE TAPE NUMBER
00360  14177777 X          498                ENI     TPUNITS,X1             ENTER THE NUMBER OF TAPE UNITS
00361  14577777            499                ENQ,S   77777B
00362  03301132 P          500                AZJ,LT  ERROR06                NEGATIVE NUMBERS ARE ILLEGAL
00363  03001132 P          501                AZJ,EQ  ERROR06
00364  06177777 X          502                MEQ     TAPELIST,1             IS ANYONE ELSE USING THIS TAPE
00365  01000370 P          503                UJP     *+3                    WAIT FOR THE OTHER TAPE TO BE
00366  14677777 X          504      STMTWAIT  ENA     MTWAIT                 MOUNTED
00367  01000356 X          505                UJP     RMTERM
00370  14100360 X          506                ENI     TPUNITS,X1
00371  14600000            507                ENA     0                      DO WE HAVE A FREE TAPE DRIVE
00372  06100364 X          508                MEQ     TAPELIST,1
00373  01001331 P          509                UJP     ERROR05                NOT ENOUGH TAPE UNITS
00374  21300357 X          510                LDQ     Q,X3+PSA               LOAD THE TAPE NUMBER
00375  41100372 X          511                STQ     TAPELIST,X1            SAVE IT IN THE TABLE
00376  14677777 X          512                ENA     TPMNTCHG               ENTER TAPE MOUNTING CHARGE
00377  34377777 X          513                RAD     TXTOTAL,X3+PSA
00400  14600001            513+001            ENA     1
00401  34300342 X          513+002            RAD     UTAPEMAX,X3+PSA        INCREASE THE USERS TAPES
00402  20002147 P          514                LDA     BCDTAPE
00403  14200005            515                ENI     HTMT,X2
          00404 P          516      MSFMTSHR  EQU     *
00404  40002160 P          517                STA     BCDION                 SAVE THE STUFF FOR THE OPERATOR
00405  53200000            518                TIA     X2                     HARDWARE TYPE TO A
00406  40300324 X          519                STA     A,X3+PSA               SAVE THE HARDWARE TYPE
00407  14200006            520                ENI     6,X2                   PRINT A 7 DIGIT TAPE NUMBER
00410  14600000            521                ENA     0
00411  51077777 X          522                DVA     D10
00412  13000030            523                SHAQ    24
00413  42410705 P   02161 1 524               SACH    MTNUM,X2
00414  04500000            525                QSE,S   0
00415  02600410 P          526                IJD     *-5,X2
00416  14600060            527                ENA     60B                    BLANK LEADING ZEROS
00417  02600413 P          528                IJD     *-4,X2
00420  14277775            529                ENI     -MTTERML+1,X2          PRINT OUT THE TERMINAL NUMBER
00421  21377777 X          530                LDQ     TERMINAL,X3+PSA
00422  14600000            531                ENA     0                      OF THE USER
00423  13000003            532                SHAQ    3
00424  42410723 P   02164 3 533               SACH    MTTERM+MTTERML-1,X2
00425  02200422 P          534                IJI     *-3,X2
00426  25377777 X          535                LDAQ    TTFCHR,X3+PSA
00427  53700000            536                TAI     X3                     X3 POINTS TO THE FIRST CHARACTER
00430  13000030            537                SHAQ    24                     IN THE TTY INPUT STRING
00431  53600000            538                TAI     X2                     X2 IS THE NUMBER OF CHARACTERS
00432  13000030            539                SHAQ    24                     USER MESSAGE LENGTH BACK TO (Q)
00433  14600077            540                ENA     77B                    RETURN FOR THE CONSOLE
00434  05200073            541                ISG     MAXMESS-1,X2
00435  01000443 P          542                UJP     MOVECHAR
00436  14200073            543                ENI     MAXMESS-1,X2
00437  01000443 P          544                UJP     MOVECHAR
00440  20300000            545                LDA     0,X3
00441  53700000            546                TAI     X3                     NEXT POINTER TO X3
00442  12000011            547                SHA     9                      CHAR TO LOW (A)
          00443 P          548      MOVECHAR  EQU     *
00443  42410724 P   02165 0 549               SACH    MTNOTE,X2              SAVE THE CHARACTER IN THE MESSAGE
00444  02600440 P          550                IJD     *-4,X2                 LOOP THRU ALL THE CHARACTERS
00445  15700033            551                INQ     MTLNTH                 ADD IN LENGTH OF THE STANDARD
00446  11010672 P   02156 2 552               ECHA    MTMSG                  MESSAGE
00447  14200451 P          553                ENI     *+2,X2                 ENTER THE RETURN ADDRESS
00450  01077777 X          554                UJP     OPMSG                  GO PRINT OUT THE MESSAGE
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00451  14600001            555             ENA      1                    MAKE THE CONSOLE CRY
00452  34077777 X          556             RAD      SCREAM
00453  14300001            557             ENI      1,X3                 GET 2 WORDS FOR LUNLIST
00454  00700306 X          558             RTJ      GETMEM
00455  53600000            559             TAI      X2+LUNLST            LUNLIST POINTER TO X2
00456  14300003            560             ENI      3,X3                 GET 8 WORDS FOR A CONTROL BLOCK
00457  00700454 X          561             RTJ      GETMEM               SAVE THE CONTROL BLOCK ADDRESS
00460  54300127 X          562             LDI      RPSAPTR,X3+PSA       RESTORE THE PSA INDEX
00461  21300406 X          563             LDQ      A,X3+PSA             LOAD THE HARDWARE TYPE
00462  04700014            564             QSE      HTMSF
00463  01000466 P          565             UJP      *+3
00464  40177777 X          566             STA      MSFBLK,X1
00465  01000467 P          567             UJP      *+2
00466  40177777 X          568             STA      TBLKLIST,X1
00467  53500000            569             TAI      X1+CNBLK
00470  12400017            570             SHQ      15
00471  41100006            571             STQ      EPP,X1+CNBLK         SAVE THE HARDWARE TYPE IN THE
00472  53040000            572             AQA                           CONTROL BLOCK AND FORM THE WORD
00473  35000152 X          573             SSA      BIT23                SET THE EQUATED TO PREVENT
                           574       *                                   US FROM GETTING ANOTHER CNBLK
00474  40200001            575             STA      1,X2+LUNLST          FOR THE LUNLIST
00475  14477760            576             ENA,S    77760B               INDICATE THAT THE TAPE IS NOT
00476  40100000            577             STA      ACCWORD,X1+CNBLK     MOUNTED
00477  20300336 X          578             LDA      I2,X3+PSA            LOAD THE DENSITY CODE
00500  40100007            579             STA      TFL,X1+CNBLK         AND SAVE IT IN THE BLOCK
00501  14700000            580             ENQ      0
00502  41100004            581             STQ      CPP,X1+CNBLK         CLEAR THE STATUS
00503  41100002            582             STQ      COREP,X1+CNBLK       PREVENT REWRITE ON UNEQUIP
00504  00777777 X          583             RTJ      PCHARS               SCRAP THE TTY INPUT STRING
00505  01000104 P          584             UJP      EQUIP02              GO FINISH LINKING THE LUNLIST
                           585
                           586
          00506 P          587       EQUIPMSF EQU   *
                                 ***************************************************************************
                                 ***************************************************************************
00506  01001331 P          590             UJP      ERROR05              KLUGE TO KEEP MSF FROM WORKING
                                 ***************************************************************************
                                 ***************************************************************************
00507  14600352 X          593             ENA      CONWAIT              CONSOLE TYPEWRITER WAIT
00510  21000353 X          594             LDQ      BUSY                 LOAD COUNT OF OUTPUT MESSAGES
00511  05700005            595             QSG      5                    SKIP IF TOO MANY
00512  01000514 P          596             UJP      *+2
00513  01000367 X          597             UJP      RMTERM
00514  14177777 X          598             ENI      MSUNITS,X1
00515  20300374 X          599             LDA      Q,X3+PSA             LOAD THE PACK NUMBER
00516  14777777            600             ENQ      77777B
00517  03301132 P          601             AZJ,LT   ERROR06              NUMBERS MUST BE POSITIVE
00520  03001132 P          602             AZJ,EQ   ERROR06
00521  77730000            603             VFD      A12/DINT
00522  06177777 X          604             MEQ      MSFNUMB,1            DOES ANY ONE ELSE WANT THIS PACK
00523  01000525 P          605             UJP      *+2                  WAIT FOR THE OTHER PACK TO BE
00524  01000366 P          606             UJP      STMTWAIT             MOUNTED
00525  14100514 X          607             ENI      MSUNITS,X1           LOOK FOR AN EMPTY ENTRY
00526  14600000            608             ENA      0
00527  06100464 X          609             MEQ      MSFBLK,1
00530  01001331 P          610             UJP      ERROR05              NOT ENOUGH HARDWARE
00531  21300515 X          611             LDQ      Q,X3+PSA             LOAD THE PACK NUMBER AGAIN
00532  41100522 X          612             STQ      MSFNUMB,X1
00533  20002150 P          613             LDA      BCDPACK
00534  14200014            614             ENI      HTMSF,X2
00535  01000404 P          615             UJP      MSFMTSHR             GO SHARE SOME CODE
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                              ***************************************************************
                              *                                                             *
                              *         UNEQUIP                                             *
                              *                                                             *
                              *                         USER CALLING SEQUENCE               *
                              *         ENI             UNEQUIP,X1        UNEQUIP = 2       *
                              *         XREQ            LUN                                 *
                              *                                                             *
                              *                         ENTER WITH                          *
                              *         X1              = POINTER TO FROPER LUNLIST ELEMENT *
                              *         X3              = PSA POINTER                       *
                              *                                                             *
                              *                         ERROR CODES                         *
                              *         1               LUN IS NOT EQUIPPED                 *
                              *         2               LUN IS FILE PROTECTED AND NOT SAVED *
                              *                                                             *
                              *                                                             *
                              ***************************************************************

00536  02100540 P     UNEQUIP  IJI     *+2,X1             JUMP IF THE UNIT EXISTS
00537  01001077 P              UJP     ERROR01
00540  20100001                LDA     1,X1               LOAD THE ADDRESS OF THE BLOCK
00541  40377777 X              STA     T4,X3+PSA
00542  05600001                ASG     1                  SKIP IF CONTROL BLOCK EXISTS
00543  01000556 P              UJP     UNEQ01Q
00544  53600000                TAI     X2+CNBLK           PUT CONTROL BLOCK ADDRESS IN INDE
00545  13000011                SHAQ    9                  EXTRACT THE HARDWARE TYPE
00546  17700017                ANQ     HTMASK
00547  14600001                ENA     HTFILE             IF A FILE OR A RAF CHECK TO
00550  04700012                QSE     HTRAF              SEE IF FILE PROTECTED AND NOT
00551  03500556 P              AQJ,NE  UNEQ01Q            SAVED
00552  20200004                LDA     CPP,X2+CNBLK       LOAD THE FILE STATUS
00553  03200556 P              AZJ,GE  UNEQ01Q            JUMP IF NOT FILE PROTECTED
00554  37000266 X              LPA     SV8
00555  03001323 P              AZJ,EQ  ERROR02            JUMP IF NOT SAVED
00556  15300326 X     UNEQ01Q  INI     LUNLIST,X3+PSA     SEARCH FOR THE ELEMENT THAT
00557  53100000       UNEQ01L  TIA     X1+LUNLST          POINTS TO THIS ELEMENT
00560  36300000                SCA     0,X3+LUNLST
00561  04600000                ASE     0                  SKIP IF FCUND
00562  01000753 P              UJP     UNEQ09             CONTINUE SEARCHING
00563  20100000                LDA     0,X1+LUNLST        LOAD THE POINTER FROM THE BLOCK
00564  44300000                SWA     0,X3+LUNLST        REMOVE THE BLCCK FROM THE LIST
00565  53100000                TIA     X1+LUNLST          LUNLIST ELEMENT ADDRESS TO (A)
00566  14300001                ENI     1,X3
00567  00777777 X              RTJ     FREEMEM            FREE THE LUNLIST ELEMENT
00570  20100001                LDA     1,X1+LUNLST
00571  53500000                TAI     X1+CNBLK           CONTROL BLOCK ADDRESS TO X1
00572  05100001                ISG     1,X1+CNBLK         SKIP IF CONTROL BLOCK EXISTS
00573  01000136 X              UJP     XREQEND            NO CONTROL BLOCK SO FLAKE OUT
00574  03200604 P              AZJ,GE  UNEQ01Z            JUMP IF NOT EQUATED
00575  77740000                VFD     A12/EINT
00576  54300460 X              LDI     RPSAPTR,X3         POINT TO THE FSA
00577  15377777 X              INI     LUNLISTX,X3        NOW TO THE LUNLIST-1
00600  20300001       UNEQ01X  LDA     1,X3               GET THE NEXT LUNLIST POINTER
00601  53700000                TAI     X3                 POINTER TO X3
00602  02700756 P              IJD     UNEQ11,X3          JUMP IF MORE LUNLIST
00603  77730000                VFD     A12/DINT
00604  25100002       UNEQ01Z  LDAQ    COREP,X1+CNBLK     CORE ADDRESS AND BLOCK NUMBER
00605  00777777 X              RTJ     REWRITE            REWRITE THE CURRENT BLOCK
00606  77740000                VFD     A12/EINT
00607  54300576 X              LDI     RPSAPTR,X3+PSA     GET THE HARDWARE TYPE
00610  20100006                LDA     EPP,X1+CNBLK       OBTAIN THE HARDWARE TYPE
00611  12000011                SHA     9
00612  17600017                ANA     HTMASK
00613  53600000                TAI     X2                 HARDWARE TYPE TO THE INDEX
00614  77730000                VFD     A12/DINT
00615  01200615 P     UNEQJMP  UJP     UNEQJMP,X2
          00616 P              ORGR    UNEQJMP+HTFILE
00616  01000706 P              UJP     UNEQ04             FILE
          00617 P              ORGR    UNEQJMP+HTLP
00617  01000645 P              UJP     PRINTF             LINE PRINTER
          00620 P              ORGR    UNEQJMP+HTPUN
00620  01000643 P              UJP     PUNF               CARD PUNCH
          00621 P              ORGR    UNEQJMP+HTCR
00621  01000716 P              UJP     UNEQCR             CARD READER
          00622 P              ORGR    UNEQJMP+HTMT
00622  01000772 P              UJP     UNEQMT             MAGNETIC TAPE
          00623 P              ORGR    UNEQJMP+HTTTY
00623  01000573 X              UJP     XREQEND            TELETYPE
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                 00624 P      697                  ORGR    UNEQJMP+HTPLOT
        00624  01000640 P     698                  UJP     PLOTF                X/Y PLOTTER
                 00625 P      699                  ORGR    UNEQJMP+HTNULL
        00625  01000623 X     700                  UJP     XREQEND              NULL
                 00626 P      701                  ORGR    UNEQJMP+HTTV
        00626  01000625 X     702                  UJP     XREQEND              CRT DISPLAY
                 00627 P      703                  ORGR    UNEQJMP+HTRAF
        00627  01000763 P     704                  UJP     UNEQRAF              RANDOM ACCESS FILE
                 00630 P      705                  ORGR    UNEQJMP+HTTASK
        00630  01001042 P     706                  UJP     UNEQTASK             TASK
                 00631 P      707                  ORGR    UNEQJMP+HTMSF
        00631  01001021 P     708                  UJP     UNEQMSF              USER DISK UNIT
                 00632 P      709                  ORGR    UNEQJMP+HTPTP
        00632  01000634 P     710                  UJP     PTPF                 PAPER TAPE PUNCH
                 00633 P      711                  ORGR    UNEQJMP+HTMAX        ADJUST THE ORIGIN
                              712
        00633  00477777       713                  VFD     A9/PTPREC,A15/PTPBLOC
        00634  20000633 P     714        PTPF      LDA     *-1
        00635  14777777 X     715                  ENQ     PTPCHRG              PAPER TAPE HANDLING CHARGE
        00636  01000655 P     716                  UJP     OUTFILEX
                              717
        00637  00377777       718                  VFD     A9/PLOTREC,A15/PLOTBLOC
        00640  20000637 P     719        PLOTF     LDA     *-1
        00641  01000654 P     720                  UJP     OUTFILE
                              721
        00642  00277777       722                  VFD     A9/PUNREC,A15/PUNBLOC
        00643  20000642 P     723        PUNF      LDA     *-1
        00644  01000654 P     724                  UJP     OUTFILE
                              725
                 00645 P      726        PRINTF    EQU     *
        00645  20100006       727                  LDA     EPP,X1+CNBLK         WHERE DOES THE OUTPUT GO
        00646  17600017       728                  ANA     17B
        00647  05677777 X     729                  ASG     LPTABL               SKIP IF OUT OF RANGE
        00650  01000652 P     730                  UJP     *+2
        00651  14600000       731                  ENA     0                    PUT ON THE STANDARD PRINTER
        00652  53600000       732                  TAI     X2
        00653  20277777 X     733                  LDA     LPTAB,X2
        00654  14700000       734        OUTFILE   ENQ     0                    NO HANDLING CHARGE
        00655  41002244 P     735        OUTFILEX  STQ     XTEMP                SAVE THE HANDLING CHARGE
        00656  13077760       736                  SHAQ    -15                  SAVE DRIVER ADDRESS IN Q
        00657  30377777 X     737                  ADA     ACCSTUFF,X3+PSA      CALCULATE ADDRESS IN ACCOUNTING
        00660  53600000       738                  TAI     X2                   BLOCK
        00661  20100007       739                  LDA     TFL,X1+CNBLK         GET THE FILE LENGTH
        00662  03000711 P     740                  AZJ,EQ  UNEQ05               IGNORE EMPTY FILES
        00663  20100000       741                  LDA     ACCWORD,X1+CNBLK     LOAD THE NUMBER OF RECORDS
        00664  15477775       742                  INA,S   -2
        00665  03300711 P     743                  AZJ,LT  UNEQ05               IGNORE NULL FILES
        00666  15600002       744                  INA     2                    RESTORE RECORD COUNT
        00667  30002244 P     745                  ADA     XTEMP                ADD IN HANDLING CHARGE
        00670  34200000       746                  RAD     0,X2                 MAKE THE CHARGE
        00671  13077766       746+001              SHAQ    -9                   DIVIDE BY 511
        00672  15600001       746+002              INA     1                    ADD 512 IF SO
        00673  40100000       746+003              STA     ACCWORD,X1+CNBLK     STORE FOR MACRO
        00674  14600001       747                  ENA     1                    ONE MORE OUTPUT FILE TO PUNCH,
        00675  34000057 X     748                  RAD     IOBUSY               PLOT, OR PRINT
        00676  24100007       749                  LCA     TFL,X1+CNBLK
        00677  34377777 X     750                  RAD     TFBLKS,X3+PSA        ADJUST THE TOTAL SCRATCH SPACE
        00700  53100000       751                  TIA     X1+CNBLK             PUT CNBLK INDEX INTO X3
        00701  53700000       752                  TAI     X3+CNBLK
        00702  13000030       752+001              SHAQ    24                   MOVE MACRO ADDRESS TO A
        00703  53500000       754                  TAI     X1
        00704  14200626 X     755                  ENI     XREQEND,X2           ENTER THE RETURN ADDRESS
        00705  01500022       756                  UJP,I   QINGLOC,X1           START THE DRIVER IF NEEDED
                              757
        00706  21100004       758        UNEQ04    LDQ     CPP,X1+CNBLK         LOAD THE STATUS WORD
        00707  27000554 X     759                  LDL     SVB
        00710  03100722 P     760                  AZJ,NE  UNEQ07               JUMP IF A SAVED FILE
        00711  21100007       761        UNEQ05    LDQ     TFL,X1+CNBLK         LOAD THE FILE SIZE AND THE
        00712  20100001       762        UNEQ05X   LDA     LP,X1+CNBLK          STARTING BLOCK NUMBER
        00713  00777777 X     763                  RTJ     FREEFILE             FREE THE FILE
        00714  24100007       764                  LCA     TFL,X1+CNBLK         SUBTRACT THE LENGTH OF THE FILE
        00715  34300677 X     765                  RAD     TFBLKS,X3+PSA        FROM THE SCRATCH SPACE TOTAL
                 00716 P      766        UNEQCR    EQU     *
        00716  14300003       767                  ENI     3,X3                 CONTROL BLOCKS ARE 8 WORDS LONG
        00717  53100000       768                  TIA     X1+CNBLK             CONTROL BLOCK ADDRESS TO (A)
        00720  00700567 X     769                  RTJ     FREEMEM              RETURN THE FILE CONTROL BLOCK
        00721  01000704 X     770                  UJP     XREQEND
                              771
        00722  15300232 X     772        UNEQ07    INI     NAMELIST,X3+PSA
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00723  01000726 P            773             UJP     *+3                     JUMP INTO THE SEARCH LOOP
00724  53200000              774   UNEQ08    TIA     X2                      CURRENT POSITION INDEX TO THE
00725  53700000              775             TAI     X3                      PREVIOUS POSITION INDEX
00726  20300000              776             LDA     0,X3                    LOAD THE FORWARD POINTER
00727  53600000              777             TAI     X2
00730  53100000              778             TIA     X1+CNBLK                CONTROL BLOCK ADDRESS TO (A)
00731  36200001              779             SCA     1,X2                    IS THIS THE ONE WE WANT
00732  04600000              780             ASE     0                       SKIP IF IT IS
00733  01000724 P            781             UJP     UNEQ08
00734  20200000              782             LDA     0,X2                    REMOVE THE NAMELIST ELEMENT FROM
00735  44300000              783             SWA     0,X3                    THE LINKED LIST
00736  14100740 P            784             ENI     *+2,X1                  ENTER THE RETURN ADDRESS
00737  02601302 P            785             IJD     SRCHXX,X2               GO THE FOR THE FD ENTRY
00740  14477776              786             ENA,S   -1
00741  34104011              787             RAD     CORE+FDBUSY,X1          DECREMENT THE BUSY COUNTER
00742  20200541 X            788             LDA     T4,X2+PSA               GET THE CONTROL BLOCK ADDRESS
00743  53700000              789             TAI     X3                      PUT INTO X3
00744  14200000              790             ENI     0,X2
00745  20104006              791             LDA     CORE+FDEPP,X1           IS THE FILE PROTECTED
00746  35104010              792             SSA     CORE+FDCDATE,X1         OR ABNORMAL
00747  03201446 P            793             AZJ,GE  PZ                      JUMP IF NOT
00750  53020037              794   PFD       TMA     DATE
00751  40104004              795             STA     CORE+FDATE,X1           SET THE LAST REFERENCE DATE
00752  01001464 P            796             UJP     PQ
00753  20300000              797   UNEQ09    LDA     0,X3+LUNLST             GET THE NEXT POINTER
00754  53700000              798             TAI     X3+LUNLST
00755  01000557 P            799             UJP     UNEQ01L                 AND LOOP BACK
                             800
00756  53100000              801   UNEQ11    TIA     X1                      COMPARE CONTROL BLOCK ADDRESSES
00757  36300002              802             SCA     2,X3
00760  04600000              803             ASE     0                       SKIP IF THE SAME
00761  01000600 P            804             UJP     UNEQ01X                 LOOP BACK IF NOT
00762  01000721 X            805             UJP     XREQEND                 EXIT
                             806
00763  21100004              807   UNEQRAF   LDQ     CPP,X1                  IS THE RAF SAVED
00764  27000707 X            808             LDL     SVB
00765  03100722 P            809             AZJ,NE  UNEQ07                  ACT LIKE A FILE IF IT IS
00766  21100007              810             LDQ     TFL,X1+CNBLK            LOAD THE FILE LENGTH
00767  04500000              811             QSE,S   0                       SKIP IF EMPTY
00770  15700002              812             INQ     2                       ADD IN THE SUPER STRUCTURE
00771  01000712 P            813             UJP     UNEQ05X                 FREE THE FILE
                             814
                             815   *         NOTE:   THE PRECEEDING CODE LOSES ALL MINOR ACCESS BLOCKS
                             816   *                 AFTER THE FIRST ONE
                             817
                             818
                             819
00772  21100000              820   UNEQMT    LDQ     0,X1+CNBLK              LOAD THE TAPE UNIT NUMBER
00773  43010662 P   02154 2  821             SQCH    MTFRMSG+2
00774  14477776              822             ENA,S   -1
00775  34300401 X            822+001         RAD     UTAPEMAX,X3+PSA         REMOVE THE GUYS MT
00776  05500000              822+002         QSG,S   0                       SKIP IF TAPE IS MOUNTED
00777  34000452 X            825             RAD     SCREAM                  TURN OFF THE NOISE
01000  13000030              825+001         SHAQ    24                      UNIT NUMBER TO A
01001  53600000              825+002         TAI     X2                      SAVE FOR LATER INDEXING
01002  53100000              828             TIA     X1+CNBLK                CONTROL BLOCK ADDRESS TO (A)
01003  14300003              829             ENI     3,X3                    ITS 8 WORDS LONG
01004  00700720 X            830             RTJ     FREEMEM
01005  53100000              831             TIA     X1+CNBLK                CONTROL BLOCK ADRESS TO (A) AGAIN
01006  14100370 X            832             ENI     TPUNITS,X1              ENTER THE NUMBER OF TAPE UNITS
01007  14577777              833             ENQ,S   777778
01010  04277760              833+001         ISE     777608,X2               SKIP IF TAPE WAS NOT MOUNTED
01011  41277777 X            833+002         STQ     TNUMLIST,X2             WIPE OUT ENTRY FOR TAPE NUMBER
01012  05100466 X            834             MEQ     TBLKLIST,1              LOOK FOR THIS CONTROL BLOCK
01013  01000762 X            835             UJP     XREQEND
01014  41100375 X            836             STQ     TAPELIST,X1             CLEAR THE ENTRY
01015  11010660 P   02154 0  837             ECHA    MTFRMSG                 MESSAGE ADDRESS
01016  14700011              838             ENQ     9                       NINE CHARACTERS
01017  14201013 X            839             ENI     XREQEND,X2              ENTER THE RETURN
01020  01000450 X            840             UJP     OPMSG                   GO PRINT THE MESSAGE
                             841
                             842
          01021 P            843   UNEQMSF   EQU     *
01021  20300657 X            844             LDA     ACCSTUFF,X3+PSA         LOAD ACCOUNTING BLOCK ADDRESS
01022  53600000              845             TAI     X2
01023  21100000              846             LDQ     0,X1+CNBLK              WAS THE PACK MOUNTED
01024  20100005              847             LDA     BLKR,X1+CNBLK           LOAD THE WALL CLOCK TIME
01025  05500000              848             QSG,S   0                       SKIP IF PACK WAS MOUNTED
01026  14600000              849             ENA     0                       NO WALL CLOCK TIME
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01027  15677777 X    850                   INA       MSFCHRG          MOUNTING CHARGE
01030  34200006      851                   RAD       MSFTIME,X2       MAKE THE CHARGE
01031  53100000      852                   TIA       X1+CNBLK         CONTROL BLOCK ADDRESS TO A
01032  14100525 X    853                   ENI       MSUNITS,X1       SEARCH FOR THIS CONTROL BLOCK
01033  14577777      854                   ENQ,S     77777B
01034  06100527 X    855                   MEQ       MSFBLK,1
01035  00777777 X    856                   RTJ       SYSERR
01036  20000473 X    857                   LDA       BIT23
01037  34101034 X    858                   RAD       MSFBLK,X1        INDICATE UNEQUIP
01040  14301017 X    859                   ENI       XREQEND,X3
01041  01077777 X    860                   UJP       CALMSFMT         CALL THE DISK ROUTINE
                     861
                     862
                     863
          01042 P    864         UNEQTASK  EQU       *
01042  20100004      865                   LDA       CPP,X1+CNBLK     IS THE TASK AT LOADPOINT
01043  37000263 X    866                   LPA       LPB
01044  03100711 P    867                   AZJ,NE    UNEQ05           FREE IT IF SO
01045  25377777 X    868                   LDAQ      ACCNUM,X3+PSA    GET JOB NUMBER FORM PSA
01046  45100003      869                   STAQ      CBP,X1+CNBLK     STUFF IN CNBLK FOR PHANTOM
01047  24100007      870                   LCA       TFL,X1+CNBLK     GIVE THE USER HIS SCRATCH
01050  34300715 X    871                   RAD       TFBLKS,X3+PSA    SPACE BACK
01051  16477777      872                   XOA,S     -0
01052  15477776      873                   INA,S     -1               SET THE NUMBER OF BLOCKS IN
01053  40100005      874                   STA       BLKR,X1+CNBLK    THE TASK
01054  14700044      874+001               ENQ       040B+HTCR        MAKE DESTRUCTIVE CARD READER
01055  12400017      874+002               SHQ       15               SHIFT INTO POSITION
01056  20100006      874+003               LDA       EPP,X1+CNBLK     GET DESTINATION
01057  41100006      874+004               STQ       EPP,X1+CNBLK     TURN TASK TO CARD READER
01060  05600001      874+005               ASG       1                PUT TO STANDARD IF...
01061  14677777 X    874+006               ENA       TASKQ            ...NOTHING SPECIAL SPECIFIED
01062  53600000      874+007               TAI       X2
01063  53100000      874+008               TIA       X1+CNBLK
01064  35001036 X    874+009               SSA       BIT23            MARK AS A TASK
01065  40100000      874+010               STA       0,X1+CNBLK       POINT THE CONTROL BLOCK TO ITSELF
01066  35000274 X    874+011               SSA       BIT17            ADD INDIRECT BIT
01067  21600000      874+012               LDQ,I     0,X2             GET LAST ENTRY WORD
01070  05500000      874+013               QSG,S     0                SKIP IF IT HAS SIGN BIT
01071  36001064 X    874+014               SCA       BIT23
01072  36001071 X    874+015               SCA       BIT23            RETAIN BIT 23 ON END ENTRY
01073  40600000      874+016               STA,I     0,X2             PLACE ENTRY INTO QUEUE
01074  01001040 X    882                   UJP       XREQEND
```

```
                                *************************************************************************
                        886     *                                                                       *
                        887     *          SAVE                                                         *
                        888     *                                                                       *
                        889     *                         USER CALLING SEQUENCE                         *
                        890     *          ENI            SAVE,X1             SAVE = 1                  *
                        891     *          LDAQ           FILENAME                                      *
                        892     *          XREQ           LUN                                           *
                        893     *                                                                       *
                        894     *                         ENTER WITH                                    *
                        895     *          X1             = POINTER TO PROPER LUNLIST ELEMENT           *
                        896     *          X3             = PSA POINTER                                 *
                        897     *                                                                       *
                        898     *                         ERROR CODES                                   *
                        899     *          1              LUN IS NOT EQUIPPED                           *
                        900     *          2              NAME ALL READY EXISTS                         *
                        901     *          3              FILE IS ALL READY SAVED                       *
                        902     *          4              LUN IS NOT A FILE OR RAF  OR  DESTRUCTIVE READ FILE *
                        903     *          5              NOT ENOUGH SAVE FILE SPACE                    *
                        904     *          6              NAME IS HARDWARE NAME  OR                     *
                        905     *                         FIRST CHARACTER IS ≠$≠ OR ≠ ≠                 *
                        906     *                                                                       *
                        907     *                         ≠$≠ FILES CAN BE SAVED ONLY IN CONTROL MODE   *
                        908     *                         ≠ ≠ FILES CAN BE SAVED ONLY IF SJ3 IS SET     *
                        909     *                                                                       *
                                *************************************************************************
                        911
01075  53100000         912     SAVE      TIA    X1+LUNLST            LUNLIST ELEMENT ADDRESS TO (A)
01076  02101101 P       913               IJI    *+3,X1+LUNLST        JUMP IF THE UNIT IS DEFINED
01077  14600001         914     ERROR01   ENA    1
01100  01000170 P       915               UJP    ERROR
01101  40300742 X       916               STA    T4,X3+PSA            SAVE THE LUNLIST POINTER
01102  20100001         917               LDA    1,X1                 GET THE CONTROL BLOCK ADDRESS
01103  53600000         918               TAI    X2+CNBLK             CONTROL BLOCK ADDRESS TO X2+CNBLK
01104  20200004         919               LDA    CPP,X2+CNBLK
01105  37000764 X       920               LPA    SVB
01106  03100167 P       921               AZJ,NE ERROR03              JUMP IF ALREACY SAVED
01107  20200006         922               LDA    EPP,X2+CNBLK
01110  12000003         923               SHA    23-20                CHECK FOR DESTRUCTIVE READ
01111  03301325 P       924               AZJ,LT ERROR04              PREVENT A LOT OF TROUBLE
01112  12077755         925               SHA    -15-23+20
01113  17600017         926               ANA    HTMASK               MASK TO THE HARDWARE TYPE
01114  14700012         927               ENQ    HTRAF
01115  04600001         928               ASE    HTFILE
01116  03501325 P       929               AQJ,NE ERROR04              JUMP IF NOT A FILE OR RAF
01117  20200006         930               LDA    EPP,X2+CNBLK         LOAD THE END POSITION POINTER
01120  35001043 X       931               SSA    BIT22                SET THE CHANGED BIT
01121  40200006         932               STA    EPP,X2+CNBLK         AND STORE IT BACK
01122  20300531 X       933               LDA    Q,X3+PSA             LOAD THE SECOND HALF OF THE NAME
01123  21000045 X       934               LDQ    BLANKS
01124  03501134 P       935               AQJ,NE SAVE01               JUMP IF NON BLANK
01125  20300461 X       936               LDA    A,X3+PSA             LOAD THE FIRST HALF OF THE NAME
01126  14577777         937               ENQ,S  77777B
01127  14100020         938               ENI    HDLENGTH,X1
01130  06202205 P       939               MEQ    HARDWARE+1,2         TEST FOR RESERVED NAMES
01131  03101136 P       940               AZJ,NE SAVE01X              JUMP IF A LEGITIMATE NAME
01132  14600006         941     ERROR06   ENA    6
01133  01000170 P       942               UJP    ERROR
01134  20301125 X       943     SAVE01    LDA    A,X3+PSA             LOAD THE FIRST HALF OF THE NAME
01135  03001132 P       944               AZJ,EQ ERROR06              JUMP IF ILLEGAL
01136  21002153 P       945     SAVE01X   LDQ    BCDMT
01137  03401132 P       946               AQJ,EQ ERROR06              ≠MT≠ IS ILLEGAL ALSO
01140  21002152 P       947               LDQ    BCDMSF               ≠MSF≠ IS ALSO ILLEGAL
01141  03401132 P       948               AQJ,EQ ERROR06
01142  13077725         949               SHAQ   -24-18               IS THIS A $ FILE
01143  04777753         950               QSE    77753B
01144  01001147 P       951               UJP    *+3
01145  20300200 X       952               LDA    SYSCM,X3+PSA         MUST BE IN CONTROL MODE IF SO
01146  03201132 P       953               AZJ,GE ERROR06
01147  14601154 P       954               ENA    *+5                  ENTER RETURN FOR SRCHFDR
01150  00301152 P       955               SJ3    *+2
01151  04777760         956               QSE    77760B               IS THE FIRST CHARACTER A BLANK
01152  01001751 P       957               UJP    SRCHFDR
01153  01001132 P       958               UJP    ERROR06
01154  03100216 P       959               AZJ,NE ERR02                JUMP IF NAME ALL READY PRESENT
01155  20201101 X       960               LDA    T4,X2+PSA            GET THE LUNLIST POINTER
01156  53500000         961               TAI    X1+NAMELST           PUT IT INTO X1
01157  20100002         962               LDA    2,X1+NAMELST         GET THE CONTROL BLOCK ADDRESS
01160  40201155 X       963               STA    T4,X2+PSA            SAVE IT IN THE PSA
```

```
01161 53700000              TAI     X3+CNBLK           CONTROL BLOCK ADDRESS TO X3+CNBLK
01162 20300007              LDA     TFL,X3+CNBLK       LOAD THE LENGTH OF THE FILE
01163 30277777 X            ADA     SFBLKS,X2+PSA      CALCULATE THE NEW TOTAL
01164 15600001              INA     1                  CHARGE FOR DIRECTORY SPACE
01165 21277777 X            LDQ     SFBLKLIM,X2+PSA    LOAD THE UPPER LIMIT
01166 03701171 P            AQJ,LT  *+3                JUMP IF THE USER CAN HAVE THE
01167 14600005      ERR05   ENA     5                  SPACE
01170 01000217 P            UJP     SRCHERR
01171 40201163 X            STA     SFBLKS,X2+PSA      STORE THE NEW TOTAL AWAY
01172 24300007              LCA     TFL,X3+CNBLK
01173 34201050 X            RAD     TFBLKS,X2+PSA      DECREMENT THE SCRATCH LIMIT
01174 20001105 X            LDA     SVB
01175 34300004              RAD     CPP,X3+CNBLK       SET THE SAVED FILE BIT
01176 14300002              ENI     2,X3               GET 4 WORDS FOR THE NAMELIST
01177 00700457 X            RTJ     GETMEM             ELEMENT
01200 21200722 X            LDQ     NAMELIST,X2+PSA    LINK THE ELEMENT INTO THE CHAIN
01201 40201200 X            STA     NAMELIST,X2+PSA
01202 41300000              STQ     0,X3+NAMELST
01203 20100002              LDA     2,X1+NAMELST       GET THE STATUS OF THE FILE
01204 40300001              STA     1,X3+NAMELST       SAVE THE STATUS AND CONTROL BLOCK
01205 53500000              TAI     X1                 CONTROL BLOCK ADDRESS TO X1
01206 25201134 X            LDAQ    A,X2+PSA           GET THE FILE NAME
01207 45300002              STAQ    2,X3               SAVE IN THE NAMELIST
01210 54302241 P            LDI     SRCHQB,X3+PSA      GET THE PSA POINTER
01211 45377777 X            STAQ    T5,X3+PSA          SAVE THE FILE NAME
01212 20001215 P            LDA     *+3                SET THE RETURN AND SAY WE WANT
01213 40377777 X            STA     T1,X3+PSA          A VACANT ENTRY
01214 01002015 P            UJP     SRCH03X            GO SEARCH FOR AN ENTRY
01215 40001216 P            40      *+1
01216 14600001              ENA     1                  SET THE BUSY COUNTER
01217 40104011              STA     CORE+FDBUSY,X1
01220 25201045 X            LDAQ    ACCNUM,X2          SET THE ACCOUNT AND USER NUMBER
01221 45104002              STAQ    CORE+FDACC,X1
01222 25201211 X            LDAQ    T5,X2              GET THE NAME
01223 45104000              STAQ    CORE+FDSYM,X1
01224 01001444 P            UJP     PV
```

```
                    ****************************************************************************
                    *                                                                          *
                    *            DELETE                                                        *
                    *                                                                          *
                    *                       USER CALLING SEQUENCE                              *
                    *            ENI        DELETE,X1            DELETE = 0                    *
                    *            LDAQ       FILENAME                                           *
                    *            XREQ       LUN                                                *
                    *                                                                          *
                    *                       ENTER WITH                                         *
                    *            X1         = POINTER TO PROPER LUNLIST ELEMENT                *
                    *            X3         = PSA POINTER                                      *
                    *                                                                          *
                    *                       ERROR CODES                                        *
                    *            1          LUN NOT EQUIPPED                                   *
                    *            2          FILE IS FILE PROTECTED                             *
                    *            3          FILE IS NOT SAVED                                  *
                    *            4          NAME IN AQ IS NOT THE NAME OF THE FILE             *
                    *            5          NOT ENOUGH SCRATCH SPACE                           *
                    *                                                                          *
                    ****************************************************************************

01225  05100001          DELETE    ISG     1,X1                 SKIP IF LUNLIST EXISTS
01226  01001077 P                  UJP     ERROR01
01227  20100002                    LDA     2,X1                 GET THE CONTROL BLOCK ADDRESS
01230  53600000                    TAI     X2+CNBLK             CONTROL BLOCK ADDRESS TO X2+CNBLK
01231  20200004                    LDA     CPP,X2+CNBLK         IS IT FILE PROTECTED
01232  03301323 P                  AZJ,LT  ERROR02              CAN≠T DELETE PROTECTED FILES
01233  25301206 X                  LDAQ    A,X3+PSA             LOAD THE FILE NAME
01234  45002244 P                  STAQ    XTEMP                SAVE IT
01235  15301201 X                  INI     NAMELIST,X3+PSA      POINT TO THE NAMELIST
01236  02701245 P                  IJD     DELETE03,X3          THIS WILL ALWAYS JUMP

01237  25200003          DELETE02  LDAQ    3,X2                 LOAD THE FILE NAME FROM THE
01240  33002244 P                  SBAQ    XTEMP                NAMELIST AND CHECK FOR THE
01241  13400000                    SCAQ    0                    NAME WE WANT
01242  03001251 P                  AZJ,EQ  DELETE04             JUMP IF THE ONE WE WANT
01243  53200000                    TIA     X2                   NAMELIST POINTER TO X3
01244  53700000                    TAI     X3
01245  20300001          DELETE03  LDA     1,X3                 GET THE NEXT POINTER
01246  53600000                    TAI     X2
01247  02601237 P                  IJD     DELETE02,X2          LOOP IF IT IS REALLY A POINTER
01250  01000167 P                  UJP     ERROR03
01251  20200002          DELETE04  LDA     2,X2                 COMPARE CONTROL BLOCK ADDRESS OF
01252  36100002                    SCA     2,X1+LUNLST          THE LUNLIST ELEMENT WITH THAT OF
01253  04600000                    ASE     0                    THE NAMELIST ELEMENT
01254  01001325 P                  UJP     ERROR04              NAME--LUN INCONSISTANT
01255  20200002                    LDA     2,X2                 LOAD THE ADDRESS OF THE CONTROL
01256  53500000                    TAI     X1+CNBLK             BLOCK
01257  24100007                    LCA     TFL,X1+CNBLK         GET THE FILE LENGTH
01260  03001273 P                  AZJ,EQ  DELETEX4             JUMP IF ZERO LENGTH
01261  54100607 X                  LDI     RPSAPTR,X1+PSA       POINT TO THE PSA
01262  34101171 X                  RAD     SFBLKS,X1+PSA        GIVE THE USER CREDIT FOR THE
01263  16477777                    XOA,S   -0                   BLOCKS
01264  30101173 X                  ADA     TFBLKS,X1+PSA        CALCULATE THE NEW TOTAL SCRATCH
01265  21177777 X                  LDQ     MFBLKS,X1+PSA        AND COMPARE IT WITH THE LIMIT
01266  03601327 P                  AQJ,GE  DELERR05             JUMP IF TOO LARGE
01267  40101264 X                  STA     TFBLKS,X1+PSA        STORE THE NEW SCRATCH TOTAL
01270  21177777 X                  LDQ     TFBLKMAX,X1+PSA      LOAD THE MAXIMUM SCRATCH SPACE
01271  03701273 P                  AQJ,LT  *+2                  AND CHECK FOR A NEW RECORD
01272  40101270 X                  STA     TFBLKMAX,X1+PSA      STORE THE NEW RECORD AWAY
          01273 P        DELETEX4  EQU     *
01273  25200001                    LDAQ    1,X2                 REMOVE THE NAMELIST ELEMENT
01274  44300001                    SWA     1,X3
01275  13000030                    SHAQ    24
01276  53500000                    TAI     X1+CNBLK             CONTROL BLOCK ADDRESS TO X1+CNBLK
01277  24001174 X                  LCA     SVB
01300  34100004                    RAD     CPP,X1+CNBLK         CLEAR THE SAVE FILE BIT
01301  14101313 P                  ENI     DELETE05,X1          ENTER RETURN FOR LATER
          01302 P        SRCHXX    EQU     *
01302  53200000                    TIA     X2                   NAMELIST ELEMENT ADDRESS TO (A)
01303  15600001                    INA     1
01304  14300002                    ENI     2,X3                 IT≠S FOUR WORDS LONG
01305  00701004 X                  RTJ     FREEMEM              GIVE THE NAMELIST ELEMENT BACK
01306  54301261 X                  LDI     RPSAPTR,X3+PSA       POINT TO THE PSA
01307  53100000                    TIA     X1                   RETURN ADDRESS TO A
01310  40301213 X        SRCHX     STA     T1,X3+PSA            SAVE RETURN ADDRESS IN THE PSA
01311  25200003                    LDAQ    3,X2                 GET THE FILE NAME
01312  01001754 P                  UJP     SRCHFDRX             SEARCH THE FILE DIRECTORY FOR IT
```

```
01313  14477777          1081   DELETE05 ENA,S   77777B
01314  40104000          1082            STA     CORE+FDSYM,X1     CLOBBER THE NAME
01315  14477776          1083            ENA,S   -1                1 FILE BLOCK FOR THE NAME
01316  21104010          1084            LDQ     CORE+FDCDATE,X1
01317  05500000          1085            QSG,S   0                 SKIP IF DATA IS PRESENT
01320  31104007          1086            SBA     CORE+FDTFL,X1     GIVE THE USER CREDIT FOR THE
01321  34201262  X       1087            RAD     SFBLKS,X2         FILE BLOCKS
01322  01002124  P       1088            UJP     SRCHRWT           REWRITE THE DIRECTORY BLOCK
01323  14600002          1089   ERROR02  ENA     2
01324  01000170  P       1090            UJP     ERROR
01325  14600004          1091   ERROR04  ENA     4
01326  01000170  P       1092            UJP     ERROR
                         1093
01327  31101267  X       1094   DELERR05 SBA     TFBLKS,X1         REMOVE THE SCRATCH BLOCKS
01330  34101321  X       1095            RAD     SFBLKS,X1         RESTORE THE SAVE FILE TOTAL
01331  14600005          1096   ERROR05  ENA     5
01332  01000170  P       1097            UJP     ERROR
```

```
                                   *****************************************************************************
                              1101 *                                                                           *
                              1102 *           FDZAP                                                           *
                              1103 *                                                                           *
                              1104 *           THIS ROUTINE IS ENTERED WHENEVER THE LENGTH OF A FILE OR        *
                              1105 *           RAF IS CHANGED.  ITS PURPOSE IS TO UPDATE THE FILE DIRECTORY    *
                              1106 *           ENTRY CORRESPONDING TO THE FILE                                 *
                              1107 *                                                                           *
                              1108 *                       ENTER WITH                                          *
                              1109 *           X1          = POINTER TO PROPER FILE CONTROL BLOCK              *
                              1110 *           X2          = RETURN ADDRESS                                    *
                              1111 *           X3          = PSA POINTER                                       *
                              1112 *                                                                           *
                                   *****************************************************************************
                              1114
 01333  21100004              1115  FDZAP     LDQ      CPP,X1+CNBLK
 01334  27001277 X            1116            LDL      SVB                  IS THE FILE SAVED
 01335  03002123 P            1117            AZJ,EQ   RX2                  EXIT IF NOT
 01336  53200000              1118            TIA      X2                   RETURN ADDRESS TO (A)
 01337  40377777 X            1119            STA      F7,X3+PSA            SAVE IN THE PSA
 01340  53100000              1120            TIA      X1+CNBLK             CONTROL BLOCK ADDRESS TO THE
 01341  40300217 X            1121            STA      I1,X3+PSA            USER≠S X1
 01342  77650001              1122            PFA      PFLOC+PFR
 01343  44377777 X            1123            SWA      PF1,X3+PSA
 01344  20301310 X            1124            LDA      T1,X3+PSA            LOAD THE RETURN ADDRESS AND SET
 01345  40377777 X            1125            STA      PC,X3+PSA            AS THE USER≠S CURRENT PC
 01346  14701363 P            1126            ENQ      FDZAP02              SET THE RETURN FROM THE FILE
 01347  41301344 X            1127            STQ      T1,X3+PSA            DIRECTORY SEARCH
 01350  20301235 X            1128            LDA      NAMELIST,X3+PSA      POINT TO THE NAMELIST
 01351  53600000              1129  FDZAP01   TAI      X2+NAMELST           NAMELIST POINTER TO X2
 01352  53100000              1130            TIA      X1+CNBLK             CONTROL BLOCK ADDRESS TO (A)
 01353  36200001              1131            SCA      1,X2+NAMELST         IS THIS THE RIGHT NAMELIST
 01354  05600001              1132            ASG      1                    ELEMENT    SKIP IF NOT
 01355  02601360 P            1133            IJD      *+3,X2+NAMELST       THIS WILL ALWAYS JUMP
 01356  20200000              1134            LDA      0,X2+NAMELST         GET THE NEXT POINTER
 01357  01001351 P            1135            UJP      FDZAP01
 01360  25200003              1136            LDAQ     2+1,X2+NAMELST       GET THE FILE NAME
 01361  14277777 X            1137            ENI      RETURN,X2            ENTER THE IMMEDIATE RETURN
 01362  01001755 P            1138            UJP      SRCHFDRZ             GO SEARCH THE FILE DIRECTORY
 01363  20201345 X            1139  FDZAP02   LDA      PC,X2                RESTORE T1
 01364  40201347 X            1140            STA      T1,X2
 01365  53200000              1141            TIA      X2                   PSA ADDRESS TO (A)
 01366  15601337 X            1142            INA      F7                   POINT TO THE F7 WORD
 01367  40201363 X            1143            STA      PC,X2                SAVE AS THE PROGRAM COUNTER
 01370  25201233 X            1144            LDAQ     A,X2                 GET THE FILE NAME
 01371  45201222 X            1145            STAQ     T5,X2                SAVE IN T5
 01372  20201341 X            1146            LDA      I1,X2                LOAD THE CONTROL BLOCK ADDRESS
 01373  01001445 P            1147            UJP      PX
```

```
                                   **************************************************************************
                           1151    *                                                                        *
                           1152    *            FILE PROTECT                                                *
                           1153    *                                                                        *
                           1154    *                         USER CALLING SEQUENCE                          *
                           1155    *            ENI          FP,X1                  FP  =  5                *
                           1156    *            XREQ         LUN                                            *
                           1157    *                                                                        *
                           1158    *                         ENTER WITH                                     *
                           1159    *            X1           = POINTER TO PROPER LUNLIST ELEMENT            *
                           1160    *            X3           = PSA POINTER                                  *
                           1161    *                                                                        *
                           1162    *                         ERROR CODES                                    *
                           1163    *            1            LUN IS NOT EQUIPPED                            *
                           1164    *            2            LUN IS NOT A FILE OR RAF  OR                   *
                           1165    *                         FILE IS DESTRUCTIVE READ                       *
                           1166    *                                                                        *
                                   **************************************************************************
                           1168
01374  05100001            1169    FP       ISG       1,X1              SKIP IF THE LUN IS EQUIPPED
01375  01001077 P          1170             UJP       ERROR01
01376  20100002            1171             LDA       2,X1
01377  53500000            1172             TAI       X1+CNBLK          LOAD ADDRESS OF THE CONTROL BLOCK
01400  40301160 X          1173             STA       T4,X3+PSA
01401  20100006            1174             LDA       EPP,X1+CNBLK
01402  12000003            1175             SHA       23-20             CHECK FOR DESTRUCTIVE READ
01403  03301323 P          1176             AZJ,LT    ERROR02
01404  12077755            1177             SHA       -15-23+20
01405  17600017            1178             ANA       HTMASK            MASK TO THE HARDWARE TYPE
01406  14700012            1179             ENQ       HTRAF
01407  04600001            1180             ASE       HTFILE
01410  03501323 P          1181             AQJ,NE    ERROR02           JUMP IF NOT A FILE OR RAF
01411  20100004            1182             LDA       CPP,X1+CNBLK      LOAD THE STATUS WORD
01412  03301074 X          1183             AZJ,LT    XREQEND           RETURN IF ALREADY FILE PROTECTED
01413  35001072 X          1184             SSA       BIT23             SET THE PROTECTION BIT
01414  40100004            1185             STA       CPP,X1+CNBLK      STORE THE NEW STATUS
01415  77730000            1186             VFD       A12/DINT          PREVENT INTERFERENCE
01416  25100002            1187             LDAQ      COREP,X1+CNBLK    LOAD THE CORE POINTERS
01417  00700605 X          1188             RTJ       REWRITE           REWRITE THE CURRENT FILE BLOCK
01420  77740000            1189             VFD       A12/EINT
01421  20100004            1190             LDA       CPP,X1+CNBLK      LOAD THE STATUS WORD
01422  37001334 X          1191             LPA       SVB
01423  03001412 X          1192             AZJ,EQ    XREQEND           DONE IF NOT A SAVED FILE
01424  20301350 X          1193             LDA       NAMELIST,X3+PSA
01425  01001433 P          1194             UJP       FP02
01426  53100000            1195    FP01     TIA       X1+CNBLK          CONTROL BLOCK ADDRESS TO A
01427  35200002            1196             SCA       2,X2
01430  05600001            1197             ASG       1
01431  01001435 P          1198             UJP       FP03
01432  20200001            1199             LDA       1,X2
01433  53600000            1200    FP02     TAI       X2
01434  02601426 P          1201             IJD       FP01,X2
01435  14601437 P          1202    FP03     ENA       *+2               ENTER THE RETURN ADDRESS
01436  01001310 P          1203             UJP       SRCHX
01437  20001413 X          1204             LDA       BIT23
01440  35104006            1205             SSA       CORE+FDEPP,X1     SET THE FILE PROTECT BIT
01441  40104006            1206             STA       CORE+FDEPP,X1
01442  20104010            1207             LDA       CORE+FDCDATE,X1   IS THE FILE ABNORMAL
01443  03300750 P          1208             AZJ,LT    PFD               JUMP IF IT IS
01444  20201400 X          1209    PV       LDA       T4,X2
01445  53700000            1210    PX       TAI       X3                GET THE CONTROL BLOCK ADDRESS
01446  20300007            1211    PZ       LDA       TFL,X3+CNBLK      CONTROL BLOCK ADDRESS TO X3
01447  40104007            1212             STA       CORE+FDTFL,X1     MOVE THE CURRENT FILE STATUS
01450  20300006            1213             LDA       EPP,X3+CNBLK      INTO THE FILE DIRECTORY
01451  13077750            1214             SHAQ      -23               FILE CHANGE BIT TO Q23
01452  53020037            1215             TMA       DATE
01453  40104004            1216             STA       CORE+FDATE,X1     SAVE THE REFERENCE DATE
01454  05500000            1217             QSG,S     0                 WAS THE FILE CHANGED
01455  40104010            1218             STA       CORE+FDCDATE,X1   SAVE THE CHANGE DATE
01456  20300004            1219             LDA       CPP,X3+CNBLK
01457  12000001            1220             SHA       1                 FILE PROTECTION TO BIT ZERO
01460  13077776            1221             SHAQ      -1                MERGE FP WITH THE END POSITION
01461  41104006            1222             STQ       CORE+FDEPP,X1
01462  20300001            1223             LDA       LP,X3+CNBLK       SAVE THE LOAD POINT BLOCK
01463  40104005            1224             STA       CORE+FDLP,X1      IN THE DIRECTORY
01464  02602124 P          1225    PQ       IJD       SRCHRWT,X2        JUMP IF WE DON≠T WANT TO FREE
01465  53300000            1226             TIA       X3+CNBLK          CONTROL BLOCK ADDRESS TO (A)
01466  14300003            1227             ENI       3,X3              IT≠S 8 WORDS LONG
01467  00701305 X          1228             RTJ       FREEMEM
```

```
01470  01002124 P            1229          UJP        SRCHRWT              GO WRITE OUT THE DIRECTORY BLOCK
```

```
                    ********************************************************************
                    *                                                                  *
                    *          REMOVE FILE PROTECT                                     *
                    *                                                                  *
                    *                       USER CALLING SEQUENCE                      *
                    *          ENI          RFP,X1             RFP = 4                 *
                    *          LDAQ         FILENAME           ONLY IF SAVED FILE OR RAF *
                    *          XREQ         LUN                                        *
                    *                                                                  *
                    *                       ENTER WITH                                 *
                    *          X1           = POINTER TO PROPER LUNLIST ELEMENT        *
                    *          X3           = PSA POINTER                              *
                    *                                                                  *
                    *                       ERROR CODES                                *
                    *          1            LUN IS NOT EQUIPPED                        *
                    *          2            ANOTHER USER HAS THE FILE EQUIPPED         *
                    *          3            NAME IN AQ IS NOT THE NAME OF THE FILE     *
                    *          4            FILE IS PUBLIC AND CURRENT USER IS NOT THE OWNER *
                    *                                                                  *
                    ********************************************************************

01471  05100001         RFP      ISG      1,X1               SKIP IF THE UNIT EXISTS
01472  01001077 P                UJP      ERROR01
01473  20100002                  LDA      2,X1               GET THE CONTROL BLOCK POINTER
01474  53600000                  TAI      X2                 CONTROL BLOCK POINTER TO X2
01475  40301444 X                STA      T4,X3+PSA          AND T4
01476  20200004                  LDA      CPP,X2
01477  03201423 X                AZJ,GE   XREQEND            EXIT IF NOT PROTECTED
01500  37001422 X                LPA      SVB                LEAVE THE SAVED FILE BIT
01501  03101505 P                AZJ,NE   RFP01
01502  20077777 X                LDA      NBIT23
01503  34200004                  RAD      CPP,X2             CLEAR THE PROTECTION BIT
01504  01001477 X                UJP      XREQEND
01505  20301370 X       RFP01    LDA      A,X3+PSA
01506  03000167 P                AZJ,EQ   ERROR03            JUMP IF ILLEGAL NAME
01507  14601511 P                ENA      *+2                ENTER THE RETURN ADDRESS
01510  01001751 P                UJP      SRCHFDR
01511  03001531 P                AZJ,EQ   ERR03              JUMP IF NAME NOT IN DIRECTORY
01512  25201220 X                LDAQ     ACCNUM,X2
01513  33104002                  SBAQ     CORE+FDACC,X1
01514  13400000                  SCAQ     0
01515  03001520 P                AZJ,EQ   RFP03              JUMP IF THE OWNER OF THE FILE
01516  14600004         ERR04    ENA      4
01517  01000217 P                UJP      SRCHERR
01520  20201424 X       RFP03    LDA      NAMELIST,X2        POINT TO THE NAMELIST
01521  01001527 P                UJP      RFP05
01522  25201505 X       RFP04    LDAQ     A,X2               LOAD THE NAME
01523  33300003                  SBAQ     3,X3
01524  13400000                  SCAQ     0
01525  03001533 P                AZJ,EQ   RFP07              JUMP IF FOUND
01526  20300001                  LDA      1,X3
01527  53700000         RFP05    TAI      X3                 POINTER TO X3
01530  02701522 P                IJD      RFP04,X3           LOOP THRU ALL THE NAMELIST
01531  14600003         ERR03    ENA      3
01532  01000217 P                UJP      SRCHERR
01533  20300002         RFP07    LDA      2,X3               LOAD ADDRESS FROM THE NAMELIST
01534  53700000                  TAI      X3
01535  36201475 X                SCA      T4,X2              CHECK FOR THE CORRECT UNIT
01536  04600000                  ASE      0
01537  01001531 P                UJP      ERR03              NAME/UNIT INCONSISTANT
01540  20104011                  LDA      CORE+FDBUSY,X1     LOAD THE BUSY COUNTER
01541  04400001                  ASE,S    1
01542  01000216 P                UJP      ERR02
01543  24001437 X                LCA      BIT23
01544  34300004                  RAD      CPP,X3             CLEAR THE PROTECTION BIT
01545  37104006                  LPA      CORE+FDEPP,X1
01546  40104006                  STA      CORE+FDEPP,X1
01547  01002124 P                UJP      SRCHRWT            REWRITE THE DIRECTORY BLOCK
```

```
                          *********************************************************************
                    1303  *                                                                    *
                    1304  *          ASSIGN                                                    *
                    1305  *                                                                    *
                    1306  *                    USER CALLING SEQUENCE                           *
                    1307  *          ENI       ASSIGN,X1          ASSIGN = 23                  *
                    1307+001 *       LDA       <BCD DESTINATION CODE>                          *
                    1309  *          XREQ      LUN                                             *
                    1310  *                                                                    *
                    1311  *                    ENTER WITH                                      *
                    1312  *          X1        = POINTER TO PROPER LUNLIST ELEMENT             *
                    1313  *          X3        = PSA POINTER                                   *
                    1314  *                                                                    *
                    1315  *                    ERROR CODES                                     *
                    1316  *          1         LUN IS NOT EQUIPPED                             *
                    1317  *          2         DEVICE IS NOT UNIT RECORD OUPUT EQUIPMENT       *
                    1317+001 *       3         UNDEFINED DESTINATION NAME                      *
                    1318  *                                                                    *
                          *********************************************************************
                    1320
                    1321
01550 02101552 P    1322     ASSIGN    IJI       *+2,X1+LUNLST       IS THE UNIT EQUIPED
01551 01001077 P    1323               UJP       ERROR01             ERROR IF NOT
01552 20100001      1323+001           LDA       1,X1+LUNLST
01553 53600000      1323+002           TAI       X2+CNBLK            GET CONTROL BLOCK POINTER
01554 12000001      1323+003           SHA       1
01555 03201323 P    1323+004           AZJ,GE    ERROR02             ERROR IF NOT UNIT RECORD
01556 14177777 X    1323+005           ENI       SENDTABL,X1
01557 14577777      1323+006           ENQ,S     77777B
         01560 P    1323+007 ASSIGN01  EQU       *
01560 20301522 X    1323+008           LDA       A,X3+PSA            GET SYMBOL
01561 06277777 X    1323+009           MEQ       SENDTAB,2           LOOK FOR IT
01562 01000167 P    1323+010           UJP       ERROR03             ERROR 3 IF NOT FOUND
01563 20177777 X    1323+011           LDA       SENDTAB1,X1         GET VALUE ENTRY
01564 03001572 P    1323+012           AZJ,EQ    ASSIGN06            ALLOW FOR ANYBODY (≠SITE≠)
01565 36200006      1323+013           SCA       EPP,X2+CNBLK
01566 12000011      1323+014           SHA       9                   HARDWARE TYPE TO LOWER 9 BITS OF
01567 17600017      1323+015           ANA       HTMASK              CHECK IF RIGTH HARDWARE TYPE
01570 03101560 P    1323+016           AZJ,NE    ASSIGN01            JUMP IF NOT RIGHT TYPE
01571 20101563 X    1323+017           LDA       SENDTAB1,X1         GET DESTINATION CODE
         01572 P    1323+018 ASSIGN06  EQU       *
01572 44200006      1323+019           SWA       EPP,X2+CNBLK        STORE INTO CONTROL BLOCK
01573 01001504 X    1330               UJP       XREQEND
                    1331
                    1332
                    1333
                          *********************************************************************
                    1333+002 *                                                                 *
                    1333+003 *       DESTINAT(ION) --                                          *
                    1333+004 *                                                                 *
                    1333+005 *       RETURNS THE CURRENT DESTINATION OF THE SPECIFIED LUN.     *
                    1333+006 *                                                                 *
                    1333+007 *       CALLING SEQUENCE --                                       *
                    1333+008 *                                                                 *
                    1333+009 *       ENI       31B,X1              XREQ CODE FOR DESTINATION   *
                    1333+010 *       XREQ      <LUN>                                           *
                    1333+011 *                                                                 *
                    1333+012 *       RETURNS WITH A = BCD IDENT OF DESTINATION OR              *
                    1333+013 *       X1 = 1 -- LUN NOT EQUIPPED                                *
                    1333+014 *       X1 = 2 -- LUN NOT A UNIT RECORD DEVICE                    *
                    1333+015 *                                                                 *
                          *********************************************************************
                    1333+017
         01574 P    1333+018 DESTINAT  EQU       *
01574 02101576 P    1333+019           IJI       *+2,X1+LUNLST       SKIP IF LUN EXISTS
01575 01001077 P    1333+020           UJP       ERROR01             IMPART BAD NEWS
01576 20100001      1333+021           LDA       1,X1+LUNLST         CONTROL BLOCK POINTER TO A
01577 53600000      1333+022           TAI       X2+CNBLK            SO AS TO INDEX CONTROL BLOCK
01600 12000001      1333+023           SHA       1                   CHECK UNIT RECORD STATUS
01601 03201323 P    1333+024           AZJ,GE    ERROR02             JUMP IF NOT UNIT RECORD
01602 14700017      1333+025           ENQ       HTMASK              BIT MASK FOR HARDWARE TYPE CODES
01603 12400017      1333+026           SHQ       15                  UP TO TOP NINE BITS
01604 16777777      1333+027           XOQ       77777B              MAKE A FULL WIDTH MASK
01605 27200006      1333+028           LDL       EPP,X2+CNBLK        GET HARDWARE TYPE AND DESTINATION
01606 14101556 X    1333+029           ENI       SENDTABL,X1         LENGTH OF TABLE TO LOOK INTO
01607 04600000      1333+030           ASE       00000B              SKIP IF EPP IS ZERO (SITE)
01610 06201571 X    1333+031           MEQ       SENDTAB1,2          LOOK FOR CORRESPONDING ENTRY
01611 14100000      1333+032           ENI       0,X1                THEN DEFAULT TO ≠SITE≠
01612 20101561 X    1333+033           LDA       SENDTAB,X1          BCD IDENT OF LUN≠S DESTINATION
```

```
01613  01001615 P          1333+034        UJP      STA                  AND IMPART THE WISDOM TO USER
```

```
                                    ****************************************************************************
                            1336    *                                                                          *
                            1337    *            PAGESIZE                                                      *
                            1338    *                                                                          *
                            1339    *                                                                          *
                            1340    *                        USER CALLING SEQUENCE                             *
                            1341    *            ENI         PAGESIZE,X1           PAGESIZE = 24               *
                            1342    *            XREQ                                                          *
                            1343    *                                                                          *
                            1344    *                        ENTER WITH                                        *
                            1345    *            X3          = PSA POINTER                                     *
                            1346    *                                                                          *
                            1347    *                        EXIT WITH                                         *
                            1348    *                        USERS A REGISTER WILL BE SET EQUAL TO THE PAGE SIZE *
                            1349    *                                                                          *
                                    ****************************************************************************
                            1351
                            1352
  01614  14677777 X         1353    PAGESIZE ENA         LINEPAGE              ENTER LINES/PAGE
  01615  40301560 X         1354    STA      STA         A,X3+PSA
  01616  01001573 X         1355             UJP         XREQEND
```

```
                                      ***********************************************************************
                          1358        *                                                                     *
                          1359        *         FILESIZE                                                    *
                          1360        *                                                                     *
                          1361        *                    USER CALLING SEQUENCE                            *
                          1362        *         ENI        FILESIZE,X1         FILESIZE = 25                *
                          1363        *         XREQ       LUN                                              *
                          1364        *                                                                     *
                          1365        *                    ENTER WITH                                       *
                          1366        *         X1         = POINTER TO PROPER LUNLIST ELEMENT              *
                          1367        *         X3         = PSA POINTER                                    *
                          1368        *                                                                     *
                          1369        *                    EXIT WITH                                        *
                          1370        *         USER A     LENGTH OF THE FILE                               *
                          1371        *         USER Q     NUMBER OF RECORDS IF UNIT RECORD DEVICE          *
                          1372        *                                                                     *
                          1373        *                    ERROR CODES                                      *
                          1374        *         1          LUN IS NOT EQUIPPED                              *
                          1375        *         2          LUN DOES NOT HAVE A CONTROL BLOCK                *
                          1376        *                                                                     *
                                      ***********************************************************************
                          1378
                          1379
 01617   02101621 P       1380        FILESIZE IJI       *+2,X1+LUNLST          IS THE UNIT EQUIPPED
 01620   01001077 P       1381                 UJP       ERROR01                ERROR ONE IF NOT
 01621   20100001         1382                 LDA       1,X1+LUNLST            LOAD THE CONTROL BLOCK POINTER
 01622   53500000         1383                 TAI       X1+CNBLK
 01623   05100001         1384                 ISG       1,X1+CNBLK             SKIP IF A CONTROL BLOCK EXISTS
 01624   01001323 P       1385                 UJP       ERROR02
 01625   20100007         1386                 LDA       TFL,X1+CNBLK           LOAD THE FILE LENGTH
 01626   21100000         1387                 LDQ       ACCWORD,X1+CNBLK       GET NUMBER OF RECORDS
 01627   01001703 P       1388                 UJP       STAQ                   SET THE USER≠S REGISTERS
```

```
                                     ***************************************************************************
                              1392   *                                                                         *
                              1393   *          TIMESET  --  PROCESS A TIME LIMIT SETTING REQUEST             *
                              1394   *          A CONTAINS THE REQUESTED TIME IN SECONDS                       *
                              1395   *                                                                         *
                                     ***************************************************************************
                              1397
01630  20301615 X             1398   TIMESET  LDA      A,X3+PSA            GET THE REQUESTED TIME
01631  21377777 X             1399            LDQ      TIMLIM,X3+PSA       GET THE MAX ALLOWED FOR USER
01632  03701634 P             1400            AQJ,LT   TIMES2              IF REQUEST MORE USE LESSER
01633  13000030               1401            SHAQ     24                  PUT LESSER IN A
          01634 P             1402   TIMES2   EQU      *
01634  03301636 P             1403            AZJ,LT   *+2                 SKIP MULTIPLY IF NO TIME AT ALL
01635  50077777 X             1404            MUA      D1000               CONVERT TO MILLISECONDS
01636  40377777 X             1405            STA      TRUNTIME,X3+PSA     SET THE MAX RUNNING TIME
01637  01001616 X             1406            UJP      XREQEND             SKIP AND INDICATE NO ERRORS
                              1407
                              1408
                                     ***************************************************************************
                              1410   *                                                                         *
                              1411   *          TIMEREQ  --  PROCESS A REQUEST FOR THE TIME LEFT               *
                              1412   *          RETURNS WITH A = TIME USED FOR RUN                             *
                              1413   *                                                                         *
                                     ***************************************************************************
                              1415
01640  20377777 X             1416   TIMEREQ  LDA      TOTALTIM,X3+PSA
01641  31377777 X             1417            SBA      TIMELEFT,X3+PSA     PUT THE TIME USED INTO A
01642  21301631 X             1418            LDQ      TIMLIM,X3+PSA       LOAD THE UPPER TIME LIMIT
01643  01001703 P             1419            UJP      STAQ                RETURN

                                     ***************************************************************************
                              1422   *                                                                         *
                              1423   *          DELAYREQ  --  SET USER IOBOUND FOR C(A) SECONDS                *
                              1424   *                                                                         *
                                     ***************************************************************************
                              1426
          01644 P             1427   DELAYREQ EQU      *
01644  24377777 X             1427+001        LCA      SYSCODE,X3+PSA      GET NOT BATCH BIT
01645  12000004               1427+002        SHA      23-19               MOVE TO POST
01646  35301145 X             1427+003        SSA      SYSCM,X3+PSA        OR IN CNTL MODE BIT
01647  03201132 P             1427+004        AZJ,GE   ERROR06             ILLEGAL IF BATCH AND NOT CNTLMODE
01650  14677777 X             1431            ENA      TIMEMASK            MASK FOR TIME DELAY
01651  37301630 X             1432            LPA      A,X3+PSA            MASK REQUEST SIZE
01652  03001637 X             1433            AZJ,EQ   XREQEND             IGNORE IF ZERO
01653  40301651 X             1434            STA      A,X3+PSA            USE THE USERS A REGISTER
01654  14677777 X             1435            ENA      TIMEWAIT            DELAY BIT FOR IOBOUND
01655  34377777 X             1436            RAD      IOBOUND,X3+PSA      SET INTO IOBOUND WORD
01656  14677777 X             1437            ENA      SWBIT               SWITCH USERS BIT
01657  77730000               1438            VFD      A12/DINT            DISABLE FURTHER FLAG CHANGES
01660  35077777 X             1439            SSA      FLAGS               OR IN PREVIOUS FLAGS
01661  40001660 X             1440            STA      FLAGS               AND RESTORE
01662  20377777 X             1440+001        LDA      LJA,X3+PSA          GET SYSTEM CODE
01663  12000005               1440+002        SHA      23-18               SHIFT TV BIT INTO POSITION
01664  03201652 X             1440+003        AZJ,GE   XREQEND             JUMP IF NOT TV
01665  04200001               1440+004        ISE      000016,X2           SKIP IF HE WANTS TO RE-WRITE TV
01666  01001664 X             1440+005        UJP      XREQEND             THEN FLAKE OUT IF NOT
01667  20077777 X             1440+006        LDA      BIT18
01670  35377777 X             1440+007        SSA      CR,X3+PSA           SET WITE ENABLE ON TV
01671  40301670 X             1440+008        STA      CR,X3+PSA
01672  01001666 X             1441            UJP      XREQEND             END OF PROCESS
```

```
                          ****************************************************************
                          *                                                              *
                          *        MFBLKSET  --  SET THE MAXIMUM ALLOWED FILE BLOCKS FOR A RUN  *
                          *        A CONTAINS THE REQUESTED NUMBER OF FILE BLOCKS        *
                          *                                                              *
                          ****************************************************************

01673  20301653 X         MFBLKSET LDA       A,X3+PSA
01674  21377777 X                  LDQ       MFBLKLIM,X3+PSA      GET THE MAX ALLOWED LIMIT
01675  03701677 P                  AQJ,LT    MFBLKST2             USE WHICH EVER IS THE SMALLER
01676  13000030                    SHAQ      24
01677  40301265 X         MFBLKST2 STA       MFBLKS,X3+PSA        SET THE MAXIMUM SCRATCH LIMIT
01700  01001672 X                  UJP       XREQEND              SKIP AND INDICATE NO ERRORS


                          ****************************************************************
                          *                                                              *
                          *        MFBLKREQ  --  PROCESS A REQUEST FOR THE MAXIMUM NUMBER OF  *
                          *        FILE BLOCKS USED                                      *
                          *        EXIT WITH A = MAXIMUM USED FILE BLOCKS                *
                          *        EXIT WITH Q = NUMBER OF FILE BLOCKS NOW USED          *
                          *                                                              *
                          ****************************************************************

01701  20301272 X         MFBLKREQ LDA       TFBLKMAX,X3+PSA      SEE WHAT THE USER CHEWED UP
01702  21301327 X         MFBLKR01 LDQ       TFBLKS,X3+PSA        TOTAL NUMBER OF USED BLOCKS
01703  45301673 X         STAQ     STAQ      A,X3+PSA             STORE INTO THE USERS AQ
01704  01001700 X                  UJP       XREQEND              SKIP AND INDICATE NO ERRORS

                          ****************************************************************
                          *                                                              *
                          *        SFBLKREQ  --  PROCESS A REQUEST FOR THE TOTAL NUMBER OF  *
                          *        SAVED FILE BLOCKS USED                                *
                          *        RETURN WITH A = NUMBER OF USED SAVED FILE BLOCKS      *
                          *                                                              *
                          ****************************************************************

01705  20301330 X         SFBLKREQ LDA       SFBLKS,X3+PSA        TOTAL NUMBER OF SAVED FILE BLOCKS
01706  21301165 X                  LDQ       SFBLKLIM,X3+PSA      LOAD THE SAVE SPACE LIMIT
01707  01001703 P                  UJP       STAQ                 LOAD THE USERS A AND Q

                          ****************************************************************
                          *                                                              *
                          *        PURGE -- REMOVE ALL CHARACTERS FROM THE PARAMETER STRING  *
                          *                                                              *
                          ****************************************************************

01710  77730000           PURGE    VFD       A12/DINT
01711  00700504 X                  RTJ       PCHARS
01712  01001704 X                  UJP       XREQEND

                          ****************************************************************
                          *                                                              *
                          *        CFBLKREQ  --  RETURN MAXIMUM USABLE SCRATCH IN A      *
                          *        AND TOTAL CURRENTLY IN USE IN Q                       *
                          *                                                              *
                          ****************************************************************

          01713 P         CFBLKREQ EQU       *
01713  20301674 X                  LDA       MFBLKLIM,X3+PSA      GET MAXIMUM USABLE SCRATCH
01714  01001702 P                  UJP       MFBLKR01             AND GET WHAT IS CURRENTLY IN USE
```

```
                             *************************************************************************
                   1508      *                                                                       *
                   1509      *          FREEPAGE -- ROUTINE TO SAY USER DOES NOT CARE WHAT IS        *
                   1509+001  *          IN A PAGE OF MEMORY.                                         *
                   1511      *                                                                       *
                             *************************************************************************
                   1513
          01715 P  1513+001  FREEPAGE EQU      *                   ZERO NOW ANYWAY
                   1517
                             *************************************************************************
                   1519      *                                                                       *
                   1520      *          ZEROPAGE -- ROUTINE TO SET A PAGE OF MEMORY TO ZEROES        *
                   1521      *                                                                       *
                             *************************************************************************
                   1523
          01715 P  1524      ZEROPAGE EQU      *
01715  14601712 X  1525               ENA      XREQEND             RETURN ADDRESS
01716  05200043    1525+001           ISG      NPU,X2              SKIP IF AN UNREASONABLE PAGE
01717  01077777 X  1527               UJP      ZEROPG
01720  01077777 X  1528               UJP      ABORT               WHEEEEEEEEE
                   1529
                   1530
                             *************************************************************************
                   1532      *                                                                       *
                   1533      *          RMP  --  REMOVE MEMORY PROTECTION                            *
                   1534      *          SET THE MEMORY PROTECTION BIT EQUAL TO THE LOW ORDER BIT IN  *
                   1535      *          THE ADDRESS OF THE XREQ                                      *
                   1536      *                                                                       *
                             *************************************************************************
                   1538
01721  53200000    1539      RMP      TIA      X2                  ADDRESS FROM THE XREQ INSTRUCTION
01722  21301671 X  1540               LDQ      CR,X3+PSA           LOAD THE CONDITION REGISTER
01723  12400001    1541               SHQ      1
01724  13077776    1542               SHAQ     -1                  SET PROTECTION BIT AS REQUESTED
01725  41301722 X  1543               STQ      CR,X3+PSA           STORE THE CONDITION REGISTER BACK
01726  01001715 X  1544               UJP      XREQEND             RETURN
                   1545
                             *************************************************************************
                   1547      *                                                                       *
                   1548      *          JOBNUM  --  REQUEST THE JOB/USER CODE OF THE USER            *
                   1549      *          THIS REQUEST IS LEGAL ONLY IF THE USER IS IN CONTROL MODE    *
                   1550      *                                                                       *
                             *************************************************************************
                   1552
          01727 P  1553      JOBNUM   EQU      *
01727  25301512 X  1556               LDAQ     ACCNUM,X3+PSA
01730  01001703 P  1557               UJP      STAQ
                   1557+001
                             *************************************************************************
                   1557+003  *                                                                       *
                   1557+004  *          TAPEMAX -- SET THE MAXIMUM TAPES THAT CAN BE EQUIPPED        *
                   1557+005  *                                                                       *
                   1557+006  *          ENI      30B,X1                                              *
                   1557+007  *          ENA      <NEW MAXIMUM>                                       *
                   1557+008  *          XREQ     0                                                   *
                   1557+009  *                                                                       *
                   1557+010  *                   ERROR CODES                                         *
                   1557+011  *          1        SET LIMIT LESS THEN CURRENT USE                     *
                   1557+012  *          2        SET GREATER THAN MAX SCHEDULED                      *
                   1557+013  *                                                                       *
                             *************************************************************************
                   1557+015
          01731 P  1557+016  TAPEMAX  EQU      *
01731  20300775 X  1557+017           LDA      UTAPEMAX,X3+PSA
01732  13077771    1557+018           SHAQ     -6
01733  12400006    1557+019           SHQ      6
01734  17600077    1557+020           ANA      77B                 MAXIMUM SHED IN A
01735  17700077    1557+021           ANQ      77B                 PRESENT IN USE IN Q
01736  52301703 X  1557+022           CPR      A,X3+PSA            SEE IF IN RANGE
01737  01001323 P  1557+023           UJP      ERROR02             GREATER THEN MAX. SCHED.
01740  01001077 P  1557+024           UJP      ERROR01             LESS THEN CURRENT USE
01741  21301736 X  1557+025           LDQ      A,X3+PSA
01742  16577777    1557+026           XOQ,S    -0                  NEGATE NEW LIMIT
01743  53040000    1557+027           AQA                          FOR RELETIVE CHANGE
01744  34077777 X  1557+028           RAD      TAPESAVL            MAKE ANY TAPES FREE
01745  12000006    1557+029           SHA      6
01746  16477777    1557+030           XOA,S    -0                  MAKE CHANGE TO MAX
01747  34301731 X  1557+031           RAD      UTAPEMAX,X3+PSA     CHANGE USER≠S MAX
01750  01001726 X  1557+032           UJP      XREQEND
```

```
                                 ****************************************************************
                                 *                                                              *
                                 *         ON ENTRY   A23 SEZ THAT THE USER WANTS AN EMPTY ENTRY *
                                 *                    A14-0 HAS RETURN ADDRESS                   *
                                 *                                                              *
                                 *         ON EXIT    CORE + (X1) POINTS AT THE REQUIRED ENTRY   *
                                 *                    X2 HAS PSA POINTER                         *
                                 *                                                              *
                                 *         FILE DIRECTORY REFERENCES ARE QUEUED THRU T3 IN EACH PSA THAT *
                                 *         WANTS THE FILE DIRECTORY FOR SOME REASON             *
                                 *                                                              *
                                 *         AFTER PROCESSING THE NEEDED INFORMATION CONTROL MUST BE PASSED *
                                 *         TO EITHER SRCHRWT (TO REWRITE THE DIRECTORY BLOCK) OR *
                                 *                   SRCHRTN (TO ENABLE FURTHER QUEUE PROCESSING) *
                                 *                                                              *
                                 ****************************************************************

01751  21000104 X                SRCHFDR  LDQ      EXECINST            GET THE USER≠S INSTRUCTION
01752  45301364 X                         STAQ     T1,X3+PSA           SAVE IT AND THE RETURN ADDRESS
01753  25301741 X                         LDAQ     A,X3+PSA            GET THE FILE NAME
01754  14201750 X                SRCHFDRX ENI      XREQEND,X2
01755  45301371 X                SRCHFDRZ STAQ     T5,X3+PSA
01756  14600000                           ENA      0
01757  40377777 X                         STA      T3,X3+PSA
01760  14677777 X                         ENA      MSWAIT              TELL OURSELVES THAT THIS GUY IS
01761  34301655 X                         RAD      IOBOUND,X3+PSA      WAITING ON MASS STORAGE
01762  77730000                           VFD      A12/DINT            PREVENT INTERFERENCE
01763  14601656 X                         ENA      SWBIT               SET THE FLAGS TO INDICATE THAT
01764  35001661 X                         SSA      FLAGS               SWITCHING MUST BE PERFORMED
01765  40001764 X                         STA      FLAGS
01766  54102242 P                         LDI      SRCHQE,X1           GET THE QUEUE POINTER
01767  47302242 P                         STI      SRCHQE,X3+PSA       PUT THIS USER INTO THE QUEUE
01770  02502121 P                         IJD      SRCH10,X1           JUMP IF THE QUEUE WAS NOT EMPTY
01771  47202240 P                         STI      SRCHEXIT,X2         SAVE THE RETURN ADDRESS
01772  47302241 P                         STI      SRCHQB,X3+PSA       SAVE THE PSA POINTER IN SRCHQB
01773  14702006 P                         ENQ      SRCHCWT             ENTER THE INTERRUPT ADDRESS
01774  14601776 P                         ENA      *+2                 ENTER THE IMMEDIATE RETURN
01775  01077777 X                         UJP      GETBUFF             GET A FILE CORE BLOCK
01776  03302240 P                         AZJ,LT   SRCHEXIT            RETURN IF NO CORE
01777  77640001                  SRCHPFLD APF      PFLOC+PFW           LOAD THE PAGE FILE WORD
02000  20002241 P                         LDA      SRCHQB              GET THE POINTER TO THE PSA
02001  03102014 P                SRCH02   AZJ,NE   SRCH03              JUMP IF REALLY A POINTER
02002  40002242 P                         STA      SRCHQE              CLEAR SRCHQE
02003  14302041 P                         ENI      SRCHRSTR,X3         ENTER THE RETURN ADDRESS
02004  77730000                           VFD      A12/DINT            PREVENT INTERFERENCE
02005  01077777 X                         UJP      GIVBUFFP            GIVE THE FILE CORE BLOCK BACK
                                 *
02006  47202240 P                SRCHCWT  STI      SRCHEXIT,X2         SAVE THE RETURN ADDRESS
02007  13000030                           SHAQ     24
02010  77650001                           PFA      PFLOC+PFR           SAVE THE CONTENTS OF PFLOC
02011  40002246 P                         STA      PFSAVE
02012  13000030                           SHAQ     24
02013  01001777 P                         UJP      SRCHPFLD

02014  53700000                  SRCH03   TAI      X3+PSA              LOAD THE PSA INDEX
02015  25301755 X                SRCH03X  LDAQ     T5,X3+PSA           LOAD THE FILE NAME
                                 *
                                 *        THE FOLLOWING IS THE SCATTER FUNCTION FOR THE FILE DIRECTORY
                                 *
02016  53040000                           AQA
02017  50002151 P                         MUA      FDHASH
02020  53040000                           AQA
02021  00002021                  FDSELECT VFD      A9/IMPURE,A15/*+IMPURE,A24/IMPURE

02023  14277777 X                SRCH04   ENI      READ,X2
02024  14302045 P                         ENI      SRCH05,X3           ENTER THE COMPLETION ADDRESS
02025  21077777 X                         LDQ      FDLENGTH
02026  03702030 P                         AQJ,LT   *+2                 JUMP IF WITHIN THE FILE DIRECTORY
02027  14600000                           ENA      0                   RESET TO THE FIRST BLOCK
02030  40002243 P                         STA      ADDRESS
02031  14101000                  FDIO     ENI      WPFB,X1             READ 1 FILE BLOCK
02032  30077777 X                         ADA      FILEDIR             RELOCATE TO THE FILE DIRECTORY
02033  13000030                           SHAQ     24                  BLOCK ADDRESS TO (Q)
02034  77650001                           PFA      PFLOC+PFR           QUARTER PAGE NUMBER TO (A)
02035  12000011                           SHA      9                   FORM CORE ADDRESS
02036  13000030                           SHAQ     24
02037  77730000                           VFD      A12/DINT            PREVENT INTERFERENCE
02040  00777777 X                         RTJ      FINK
02041  20002246 P                SRCHRSTR LDA      PFSAVE              GET THE ORIGINAL CONTENTS OF
```

```
02042  77640001                      APF      PFLOC+PFW            PFLOC AND RESTORE IT
02043  01002240 P                    UJP      SRCHEXIT

02044  00777777 X                    RTJ      MACHERR              IRRECOVERABLE ERROR
02045  77740000          SRCH05      VFD      A12/EINT
02046  47302240 P                    STI      SRCHEXIT,X3          SAVE THE RETURN ADDRESS
02047  77650001                      PFA      PFLOC+PFR            SAVE THE CONTENTS OF PFLOC
02050  40002246 P                    STA      PFSAVE               QUARTER PAGE NUMBER OF THE FILE
02051  13000017                      SHAQ     15                   CORE BLOCK TO PFLOC
02052  77640001                      APF      PFLOC+PFW
02053  54202241 P                    LDI      SRCHQB,X2            LOAD THE PSA POINTER
02054  14100000                      ENI      0,X1                 START AT THE BEGINNING OF THE
02055  20201752 X                    LDA      T1,X2                BLOCK
02056  03202065 P                    AZJ,GE   SRCH07               JUMP IF WE WANT AN EXISTING NAME
02057  20104000          SRCH06      LDA      CORE+FDSYM,X1        GET THE NEXT NAME
02060  03002106 P                    AZJ,EQ   SRCH08               JUMP IF VACANT
02061  15100012                      INI      FDELNTH,X1           POINT TO THE NEXT ENTRY
02062  05100767                      ISG      WPFB-FDELNTH+1,X1    SKIP IF IN THE NEXT BLOCK
02063  01002057 P                    UJP      SRCH06
02064  01002116 P                    UJP      SRCH09X              READ ANOTHER BLOCK

02065  25104000          SRCH07      LDAQ     CORE+FDSYM,X1        LOAD A NAME
02066  33202015 X                    SBAQ     T5,X2
02067  13400000                      SCAQ     0
02070  03102110 P                    AZJ,NE   SRCH09               JUMP IF NOT THE ONE WE WANT
02071  21202066 X                    LDQ      T5,X2                LOAD THE FILE NAME
02072  12477755                      SHQ      -18                  LEAVE THE LEFTMOST CHARACTER
02073  20201727 X                    LDA      ACCNUM,X2            COMPARE ACCOUNT NUMBERS
02074  37001502 X                    LPA      NBIT23               IGNORE LOGON/LOGOFF CONDITION
02075  31104002                      SBA      CORE+FDACC,X1
02076  05777755                      QSG      77755B
02077  05777753                      QSG      77753B               SKIP IF * OR $
02100  03102110 P                    AZJ,NE   SRCH09               JUMP IF ACCOUNT NUMBERS DIFFER
02101  20104003                      LDA      CORE+FDURN,X1
02102  31277777 X                    SBA      USRNUM,X2            COMPARE THE USER CODES
02103  05777756                      QSG      77756B
02104  05777753                      QSG      77753B               SKIP IF $ * OR ↑
02105  03102110 P                    AZJ,NE   SRCH09               JUMP IF NOT FOUND
02106  14600777          SRCH08      ENA      777B                 SAY WE FOUND THE NAME
02107  01602055 X        SRCH08X     UJP,I    T1,X2                EXIT TO THE CALLER
02110  15100012          SRCH09      INI      FDELNTH,X1           POINT TO THE NEXT ENTRY
02111  05100767                      ISG      WPFB-FDELNTH+1,X1    ARE WE AT THE END OF THE BLOCK
02112  01002065 P                    UJP      SRCH07               LOOP BACK IF NOT
02113  20103766                      LDA      CORE-FDELNTH+FDSYM,X1   GET THE LAST ENTRY
02114  03102116 P                    AZJ,NE   *+2                  JUMP IF A NAME
02115  03202107 P                    AZJ,GE   SRCH08X              JUMP IF NOT FOUND
02116  20002243 P        SRCH09X     LDA      ADDRESS              GET THE FILE DIRECTORY BLOCK
02117  15600001                      INA      1                    POINT TO THE NEXT BLOCK
02120  01002023 P                    UJP      SRCH04
02121  53300000          SRCH10      TIA      X3+PSA
02122  40101535 X                    STA      T4,X1                STORE INTO T3
02123  01200000          RX2         UJP      0,X2                 EXIT FOR AWHILE



02124  20002243 P        SRCHRWT     LDA      ADDRESS              LOAD RELATIVE FILE BLOCK NUMBER
02125  14302131 P                    ENI      *+4,X3               SET THE COMPLETION ADDRESS
02126  14277777 X                    ENI      WRITE,X2
02127  01002031 P                    UJP      FDIO

02130  00702044 X                    RTJ      MACHERR              IRRECOVERABLE ERROR
02131  47302240 P                    STI      SRCHEXIT,X3          SAVE THE RETURN ADDRESS
02132  77650001                      PFA      PFLOC+PFR            SAVE THE CONTENTS OF PFLOC
02133  40002246 P                    STA      PFSAVE               QUARTER PAGE NUMBER OF THE CORE
02134  13000017                      SHAQ     15                   BLOCK WE ARE USING TO PFLOC
02135  77640001                      APF      PFLOC+PFW
02136  54302241 P        SRCHRTN     LDI      SRCHQB,X3+PSA        GET THE POINTER TO THE PSA
02137  14600050                      ENA      40                   CHARGE FOR THE FILE DIRECTORY
02140  34301640 X                    RAD      TOTALTIM,X3+PSA      REFERRENCE
02141  14477777 X                    ENA,S    NMSWAIT              THE USER IS NO LONGER WAITING
02142  34301761 X                    RAD      IOBOUND,X3+PSA       ON MASS STORAGE
02143  20301757 X                    LDA      T3,X3+PSA            GET THE POINTER TO THE NEXT
02144  44002241 P                    SWA      SRCHQB               USER WAITING FOR THE FILE
02145  01002001 P                    UJP      SRCH02               DIRECTORY
```

```
 02146  00000000           1715      IMPURE03 VFD      A24/IMPURE          END OF PURE CODE REGION 03
                           1716
                           1717
 02147  63214725           1718      BCDTAPE  BCD      1,TAPE
 02150  47212342           1719      BCDPACK  BCD      1,PACK
 02151  00000000           1720      FDHASH   VFD      A24/IMPURE
 02152  44622660           1721      BCDMSF   BCD      1,MSF
 02153  44636060           1722      BCDMT    BCD      1,MT
 02154  44636760           1723      MTFRMSG  BCD,C    9,MTX FREE^
 02156  77600000           1724               BCD,C    1,
 02156  77604446           1725      MTMSG    BCD,C    6,MOUNT
 02160  67676767           1726      BCDIDN   BCD,C    5,XXXX
 02161  60676767           1727      MTNUM    BCD,C    8,XXXXXXX
 02163  60264651           1728               BCD,C    4,FOR
 02164  60676767           1729      MTTERM   BCD,C    3,XXX
           00003           1730      MTTERML  EQU,C    *-MTTERM
 02165  60606060           1731      MTNOTE   BCD,C    60,
           00074           1732      MAXMESS  EQU,C    *-MTNOTE
           00033           1733      MTLNTH   EQU,C    MTNOTE-MTMSG+1
 02204                     1734               BSS      0                   SET THE PC TO A WORD BOUNDARY
                           1735
                           1736
                           1736+001           MACRO    P1,,P3
                           1736+002
                           1736+003           $P1 IS THE HARDWARE TYPE
                           1736+004           $P3 MAY HAVE UP TO 3 PARAMETERS:
                           1736+005
                           1736+006              UNITREC  -- DEVICE IS A UNIT RECORD DEVICE
                           1736+007              DOWN     -- DEVICE IS DOWN (BROUGHT UP BY INITIAL)
                           1736+008              EQUATED  -- DEVICE IS ALREADY EQUATED (NULL ONLY)
                           1736+009
                           1736+010           NAME     DEVICE
                           1736+011           LOCAL SET U,D,E,STRING
                           1736+012           RESET    U=0
                           1736+013           RESET    D=0
                           1736+014           RESET    E=0
                           1736+015  PARAM    REEQU    1
                           1736+016  .IFTEST  IF       PARAM GT L≠P3, GOTO ASSEM
                           1736+017           RESET    STRING=$P3(PARAM)
                           1736+018           IF       H≠$STRING≠ EQ H≠UNITREC≠, RESET U=1
                           1736+019           IF       H≠$STRING≠ EQ H≠DOWN≠, RESET D=1
                           1736+020           IF       H≠$STRING≠ EQ H≠EQUATED≠, RESET E=1
                           1736+021  PARAM    REEQU    PARAM+1
                           1736+022           GOTO     IFTEST
                           1736+023  .ASSEM   VFD      A1/$E,A1/$U,A3/0,A4/HT:$P1,A15/$D,H24/$P1
                           1736+024           END
                           1746
                           1747
           02204 P         1748      HARDWARE EQU      *
 02204  21500001           1748+001  PTP      DEVICE   UNITREC,DCWN
 02206  20700001           1748+002  PLOT     DEVICE   UNITREC,DCWN
 02210  20300001           174&+003  PUN      DEVICE   UNITREC,DOWN
 02212  20200001           1748+004  LP       DEVICE   UNITREC,DOWN
 02214  21300000           1748+005  TASK     DEVICE   UNITREC
           00012           1754      OUTDEV   EQU      *-HARDWARE
 02216  00100000           1754+001  FILE     DEVICE
 02220  01200000           1754+002  RAF      DEVICE
 02222  41000000           1754+003  NULL     DEVICE   EQUATED
           00020           1758      HDLENGTH EQU      *-HARDWARE
                           1759
 02224  14400000           1760      TTYUNIT  VFD      A9/100,015/00000,01/0,A8/HTTTY,015/00000
 02226  14400000           1761      TVUNIT   VFD      A9/100,015/00000,01/0,A8/HTTV,015/00000
 02230                     1762      FORM     BSS      8
           02231 P         1763               ORGR     FORM+LP
 02231  77777777           1764               OCT      77777777            NON-EXISTANT LCAD POINT BLOCK
           02232 P         1765               ORGR     FORM+COREP
 02232  00000000           1766               OCT      00000000            BLOCK IS NOT IN CORE
           02233 P         1767               ORGR     FORM+CBP
 02233  77777777           1768               OCT      77777777            NON-EXISTANT CURRENT BLOCK
           02234 P         1769               ORGR     FORM+CPP
 02234  30000000           1770               OCT      30000000            LOAD PCINT ANC END OF DATA
           02235 P         1771               ORGR     FORM+BLKR
 02235  77777776           1772               DEC      -1                  EMPTY FILE
           02236 P         1773               ORGR     FORM+EPP
 02236  00000000           1774               OCT      0
           02237 P         1775               ORGR     FORM+TFL
 02237  00000000           1776               DEC      0                   LENGTH OF ZERC
           02240 P         1777               ORGR     FORM+8
 02240  01000000           1778      SRCHEXIT UJP      IMPURE
```

```
02241  00000000                1779      SRCHQB   DD        IMPURE
02242  00000000                1780      SRCHQE   DD        IMPURE
02243                          1781      ADDRESS  BSS       1
02244                          1782      XTEMP    BSS       2
02246                          1783      PFSAVE   BSS       1
                               1784                END
```

NO LINES WITH ERRORS

```
   A          X                33      274 00051P     297 00100P     300 00103P     329 00137P     364 00205P     441 00321P
                                       444 00324P     519 00406P     563 00461P     936 01125P     943 01134P     985 01206P
                                      1030 01233P    1144 01370P    1265 01505P    1278 01522P  1323+8 01560P    1354 01615P
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                                   1557+25 01741P    1579 01753P
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   ASSIGN          01550P    1322      221 00023P
   ASSIGN01        01560P  1323+7  1323+16 01570P
   ASSIGN06        01572P 1323+18  1323+12 01564P
   AUB        X               170      420 00274P
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   BCDMSF          02152P    1721      354 00173P     947 01140P
   BCDMT           02153P    1722      352 00171P     945 01136P
   BCDPACK         02150P    1719      613 00533P
   BCDTAPE         02147P    1718      514 00402P
   BFBGN           00002       13       15 00000P
   BFCPP           00003       15       19 00000P
   BIT15      X                37      172 00000P
   BIT17      X                38      170 00000P  874+11 01066P
   BIT18      X              38+1   1440+6 01667P
 * BIT19      X                39
   BIT20      X              39+1    342+2 00156P
   BIT22      X                40      171 00000P     402 00253P     931 01120P
   BIT23      X                41      340 00152P     573 00473P     857 01036P   874+9 01064P  874+14 01071P  874+15 01072P
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   BLF             00001       12       13 00000P
   BLKR            00005       88     1771 02235P     410 00262P     847 01024P     874 01053P
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   CALMSFMT   X                43      860 01041P
   CBP             00003       76     1767 02233P     869 01046P
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                                      1174 01401P    1182 01411P    1185 01414P    1187 01416P    1190 01421P    1195 01426P
                                      1211 01446P    1213 01450P    1219 01456P    1223 01462P    1226 01465P  1323+2 01553P
                                   1323+13 01565P 1323+19 01572P 1333+22 01577P 1333+28 01605P    1383 01622P    1384 01623P
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   D1000      X                48     1404 01635P
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   DELERR05        01327P    1094     1058 01266P
   DELETE          01225P    1024      202 00000P
   DELETE02        01237P    1035     1043 01247P
   DELETE03        01245P    1041     1033 01236P
   DELETE04        01251P    1045     1038 01242P
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DELETEX4          01273P     1063      1052 01260P
DESTINAT          01574P  1333+18       225+2 00031P
DEVBLK            00013        36         37 00000P
DINT              07773       141        460 00341P      603 00521P      674 00603P      683 00614P     1186 01415P     1438 01657P
                                        1491 01710P     1586 01762P     1604 02004P     1636 02037P
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ENAD              00010        26         27 00000P
ENIT              00012        28         36 00000P
EPP               00006        90       1773 02236P      294 00075P      326 00135P     342+1 00155P      395 00244P      405 00256P
                                         571 00471P      679 00610P      727 00645P     874+3 01056P     874+4 01057P      922 01107P
                                         930 01117P      932 01121P     1174 01401P     1213 01450P  1323+13 01565P  1323+19 01572P
                                     1333+28 01605P
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EQUIP02           00104P      301        584 00505P
EQUIP03           00137P      329        272 00047P
EQUIP04           00143P      333        348 00166P
EQUIP05           00146P      336        452 00333P
EQUIP06           00164P      346        335 00145P
EQUIP07           00165P      347        332 00142P
EQUIP08           00171P      352        277 00054P      330 00140P
EQUIP08N          00204P      363        369 00212P
EQUIP08Q          00211P      368        362 00203P
EQUIP09           00221P      376        372 00215P
EQUIP11           00260P      407        401 00252P
EQUIP12           00326P      447        366 00207P
EQUIP14           00327P      448        454 00335P
EQUIPMSF          00506P      587        355 00174P
EQUIPMT           00336P      456        353 00172P
* EQUIPMT3        00352P      491
ERR02             00216P      373        959 01154P     1294 01542P
ERR03             01531P     1285       1269 01511P     1291 01537P
ERR04             01516P     1274        379 00224P
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ERROR05           01331P     1096        268 00044P      286 00065P     460+8 00351P      509 00373P      590 00506P      610 00530P
ERROR06           01132P      941        459 00340P      500 00362P      501 00363P      601 00517P      602 00520P      944 01135P
                                         946 01137P      948 01141P      953 01146P      958 01153P  1427+4 01647P
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F7        X                     50       1119 01337P     1142 01366P
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FDACC     E       00002       179        180 00000P       10 00000P      996 01221P     1271 01513P     1668 02075P
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FDIO              02031P     1630       1697 02127P
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FDURN     E       00003       180         21 00000P     1672 02101P
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FILESIZE          01617P     1380        223 00025P
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                                        1775 02237P     1777 02240P      293 00074P      294 00075P      317 00123P      413 00265P
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FP02          01433P  1200  1194 01425P
FP03          01435P  1202  1198 01431P
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                         558 00454P   561 00457P   978 01177P
GIVBUFFP    X           60  1605 02005P
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HTCR          00004   204   691 00621P 874+1 01054P
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HTLP          00002   202   687 00617P 1736+23 02212P
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HTNULL        00010   208   699 00625P 1736+23 02222P
HTPLOT        00007   207   697 00624P 1736+23 02206P
HTPTP         00015   213   709 00632P 1736+23 02204P
HTPUN         00003   203   689 00620P 1736+23 02210P
HTRAF     E   00012   210   703 00627P    27 00000P   647 00550P   927 01114P  1179 01406P 1736+23 02221P
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HTTV          00011   209   701 00626P  1761 02227P
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IOUGLY      X           65   282 00061P   288 00067P
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LNIM          00006    24    25 00000P
LOG         X           68  217+1 00020P
LOGOFF      X           69  217+2 00021P
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LPB         X          171   411 00263P   866 01043P
LPREC         00001   222   225 00000P
LPTAB       X           70   733 00653P
LPTABL      X           71   729 00647P
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                         654 00557P   655 00560P   658 00563P   659 00564P   660 00565P   663 00570P
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                        1323+1 01552P 1333+19 01574P 1333+21 01576P 1380 01617P 1382 01621P
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MFBLKSET      01673P 1451   213 00013P
MFBLKST2      01677P 1455  1453 01675P
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MSFNUMB     X           80   604 00522P   612 00532P
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NAMELST       00000       152      363 00204P      367 00210P      368 00211P      369 00212P      386 00233P      387 00234P
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                               1736+21 02214P  1736+16 02214P  1736+16 02216P  1736+16 02220P  1736+16 02222P  1736+17 02222P
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PC         X                88     1125 01345P     1139 01363P     1143 01367P
PCHARS     X                89      583 00504P     1492 01711P
PF1        X                90     1123 01343P
PFD           00750P      794     1208 01443P
PFLOC         00001       156      157 00000P     1122 01342P     1599 01777P     1609 02010P     1633 02034P     1639 02042P
                                  1645 02047P     1648 02052P     1701 02132P     1704 02135P
PFR           00000       144     1122 01342P     1609 02010P     1633 02034P     1645 02047P     1701 02132P
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PFW           00000       145     1599 01777P     1639 02042P     1648 02052P     1704 02135P
PFWORD        00016        39       40 00000P       49 00000P
PLOTBLOC   X                92      718 00637P
PLOTF         00640P      719      698 00624P
PLOTREC       00003       226      718 00637P
POSI          00015        38       39 00000P
PQ            01464P     1225      796 00752P
PRINTF        00645P      726      688 00617P
PSA           00000       151      271 00046P      274 00051P      282 00061P      288 00067P      296 00077P      297 [illegible]
                                   300 00103P      305 00107P      308 00112P      321 00127P    323+1 00132P      329 00137P
                                   331 00141P      359 00200P      361 00202P      364 00205P      374 00217P      384 00231P
                                   385 00232P      428 00304P      431 00307P      432 00310P      433 00311P      [illegible] 00321P
                                   444 00324P      447 00326P      457 00336P    460+1 00342P      497 00357P      [illegible] 00374P
                                   513 00377P    513+2 00401P      519 00406P      530 00421P      535 00426P      552 00460P
                                   563 00461P      578 00477P      599 00515P      611 00531P      640 00541P      [illegible]
                                   678 00607P      737 00657P      750 00677P      765 00715P      772 00722P      [illegible] 00742P
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                                     936 01125P     943 01134P     952 01145P     960 01155P     963 01160P     9[illegible] 01163P
                                     968 01165P     972 01171P     974 01173P     979 01200F     980 01201P     9[illegible] [illegible]1206P
                                     987 01210P     988 01211P     990 01213P    1030 01233P    1032 01235P    1053 01261P
                                    1054 01262P    1056 01264P    1057 01265P    1059 01267P    1060 01270P    106[illegible] 01272P
                                    1076 01306P    1078 01310P    1119 01337P    1121 01341P    1123 01343P    112[illegible] 013[illegible]4P
                                    1125 01345P    1127 01347P    1128 01350P    1173 01400P    1193 01424P    12[illegible] 01475P
                                    1265 01505P  1323+8 01560P    1354 01615P    1398 01630P    1399 01631P    14[illegible]5 01636P
                                    1416 01640P    1417 01641P    1418 01642P  1427+1 01644P  1427+3 01646P    14[illegible]2 01651P
                                    1434 01653P    1436 01655P  1440+1 01662P  1440+7 01670P  1440+8 01671P    145[illegible] 01673P
                                    1452 01674P    1455 01677P    1468 01701P    1469 01702P    1470 01703P    14[illegible] [illegible]1705P
                                    1482 01706P    1503 01713P    1540 01722P    1543 01725P    1556 01727P  1557+[illegible]7 01731P
                                 1557+22 01736P 1557+25 01741P 1557+31 01747P    1578 01752P    1579 01753P    15[illegible] 017[illegible]5P
                                    1583 01757P    1585 01761P    1591 01767P    1594 01772P    1614 02014P    16[illegible] [illegible]2015P
                                    1688 02121P    1705 02136P    1707 02140P    1709 02142P    1710 02143P
 * PSABLK      X               93
   PTPBLOC     X               94    713 00633P
   PTPCHRG     X               95    715 00635P
   PTPF            00634P     714    710 00632P
   PTPREC          00004      227    713 00633P
   PUNBLOC     X               91    722 00642P
   PUNF            00643P     723    690 00620P
   PUNREC          00002      225    722 00642P
   PURE03    E     00000P     191     29 00000P
   PURGE           01710P    1491    216 00016P
   PV              01444P    1209    999 01224P
   PX              01445P    1210   1147 01373P
   PZ              01446P    1211    793 00747P
   Q           X               96    271 00046P     497 00357P     510 00374P     599 00515P     611 00531P     9[illegible]3 01112P
   QEMPTY          00024       55     57 00000P
   QINGLOC         00022       52     54 00000P     756 00705P
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   READ        X               98   1624 02023P
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   RFP01           01505P    1265   1261 01501P
   RFP03           01520P    1276   1273 01515P
   RFP04           01522P    1278   1284 01530P
   RFP05           01527P    1283   1277 01521P
   RFP07           01533P    1287   1281 01525P
   RMP             01721P    1539    217 00017P
   RMTERM      X              101    496 00356P     505 00367P     597 00513P
   RPSAPTR     X              102    296 00077P     321 00127P     562 00460P     669 00576P     678 00607P    1053 01261P
                                    1076 01306P
   RX2             02123P    1690   1117 01335P
   SAVE            01075P     912    203 00001P
   SAVE01          01134P     943    935 01124P
   SAVE01X         01136P     945    940 01131P
   SCREAM      X              103    556 00452P     825 00777P
 * SELECT      X              104
   SENDTAB     X            103+1 1323+9 01561P 1333+33 01612P
   SENDTAB1    X            103+3 1323+11 01563P 1323+17 01571P 1333+31 01610P
   SENDTABL    X            103+2 1323+5 01556P 1333+29 01606P
   SFBLKLIM    X              105    968 01165P    1482 01706P
   SFBLKREQ        01705P    1481    215 00015P
   SFBLKS      X              106    966 01163P     972 01171P    1054 01262P    1087 01321P    1095 01330P    148[illegible] [illegible]1705P
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   SRCH03          02014P    1614   1601 02001P
   SRCH03X         02015P    1615    991 01214P
   SRCH04          02023P    1624   1687 02120P
   SRCH05          02045P    1643   1625 02024P
   SRCH06          02057P    1653   1657 02063P
   SRCH07          02065P    1660   1652 02056P    1681 02112P
   SRCH08          02106P    1677   1654 02060P
   SRCH08X         02107P    1678   1684 02115P
   SRCH09          02110P    1679   1663 02070P    1671 02100P    1676 02105P
   SRCH09X         02116P    1685   1658 02064P
   SRCH10          02121P    1688   1592 01770P
   SRCHCWT         02006P    1607   1595 01773P
   SRCHERR         00217P     374    971 01170P    1275 01517P    1286 01532P
   SRCHEXIT        02240P    1778   1593 01771P    1598 01776P    1607 02006P    1640 02043P    1644 02046P    170[illegible] 02131P
   SRCHFDR         01751P    1577    371 00214P     957 01152P    1268 01510P
   SRCHFDRX        01754P    1580   1080 01312P
   SRCHFDRZ        01755P    1581   1138 01362P
   SRCHPFLD        01777P    1599   1612 02013P
   SRCHQB          02241P    1779    428 00304P     987 01210P    1594 01772P    1600 02000P    1649 02053P    1705 02136P
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SRCHX		01310P	1078	1203 01436P					
SRCHXX		01302P	1071	785 00737P					
STA		01615P	1354	1333+34 01613P					
STAQ		01703P	1470	1388 01627P	1419 01643P	1483 01707P	1557 01730P		
STMTWAIT		00366P	504	606 00524P					
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SVB	X		172	414 00266P	651 00554P	759 00707P	808 00764P	920 01105P	975 [illegible]
				1068 01277P	1116 01334P	1191 01422P	1260 01500P		
SWBIT	X		107	1437 01656P	1587 01763P				
SYSCM	X		108	359 00200P	952 01145P	1427+3 01646P			
SYSCODE	X		109	1427+1 01644P					
SYSERR	X		110	856 01035P					
T1	X		111	990 01213P	1078 01310P	1124 01344P	1127 01347P	1140 01364P	1578 01752P
				1651 02055P	1678 02107P				
T2	X		112	433 00311P					
T3	X		113	1583 01757P	1710 02143P				
T4	X		114	640 00541P	788 00742P	916 01101P	960 01155P	963 01160P	1173 [illegible]
				1209 01444P	1257 01475P	1289 01535P	1689 02122P		
T5	X		115	988 01211P	997 01222P	1145 01371P	1581 01755P	1615 02015P	1661 [illegible]
				1664 02071P					
TAPELIST	X		116	502 00364P	508 00372P	511 00375P	836 01014P		
TAPEMAX		01731P	1557+16	225+1 00030P					
TAPESAVL	X		115+1	1557+28 01744P					
TASKQ	X		117	874+6 01061P					
* TBATCH	X		118						
* TBATCHN	X		119						
TBLKLIST	X		120	568 00466P	834 01012P				
TERMINAL	X		121	530 00421P					
TFBLKMAX	X		122	1060 01270P	1062 01272P	1468 01701P			
TFBLKS	X		123	750 00677P	765 00715P	871 01050P	974 01173P	1056 01264P	1059 01267P
				1094 01327P	1469 01702P				
TFL		00007	97	1775 02237P	408 00260P	579 00500P	739 00661P	749 00676P	761 [illegible]
				764 00714P	810 00766P	870 01047P	965 01162P	973 01172P	1051 01257P
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TIMELEFT	X		124	1417 01641P					
TIMEMASK	X		125	1431 01650P					
TIMEREQ		01640P	1416	212 00012P					
TIMES2		01634P	1402	1400 01632P					
TIMESET		01630P	1398	211 00011P					
TIMEWAIT	X		126	1435 01654P					
TIMLIM	X		127	1399 01631P	1418 01642P				
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TOTALTIM	X		128	1416 01640P	1707 02140P				
TPMNTCHG	X		129	512 00376P					
TPUNITS	X		130	498 00360P	506 00370P	832 01006P			
TRUNTIME	X		131	1405 01636P					
TTECHR	X		132	535 00426P					
TTYUNIT	E	02224P	1760	30 00000P					
TVUNIT	E	02226P	1761	31 00000P					
TXTOTAL	X		133	513 00377P					
UDESTLP	X		133+1	323+1 00132P					
UNEQ01L		00557P	654	799 00755P					
UNEQ01Q		00556P	653	642 00543P	648 00551P	650 00553P			
UNEQ01X		00600P	671	804 00761P					
UNEQ01Z		00604P	675	667 00574P					
UNEQ04		00706P	758	686 00616P					
UNEQ05		00711P	761	740 00662P	743 00665P	867 01044P			
UNEQ05X		00712P	762	813 00771P					
UNEQ07		00722P	772	760 00710P	809 00765P				
UNEQ08		00724P	774	781 00733P					
UNEQ09		00753P	797	657 00562P					
UNEQ11		00756P	801	673 00602P					
UNEQCR		00716P	766	692 00621P					
UNEQJMP		00615P	684	685 00616P	687 00617P	689 00620P	691 00621P	693 00622P	695 [illegible]
				697 00624P	699 00625P	701 00626P	703 00627P	705 00630P	707 [illegible]
				709 00632P	711 00633P	684 00615P			
UNEQMSF		01021P	843	708 00631P					
UNEQMT		00772P	820	694 00622P					
UNEQRAF		00763P	807	704 00627P					
UNEQTASK		01042P	864	706 00630P					
UNEQUIP		00536P	637	204 00002P					
URBEXIT		00021	51	52 00000P					
URBEXITA		00020	50	51 00000P					
USRNUM	X		134	1673 02102P					
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                                          598 00514P       607 00525P       612 00532P       637 00536P       639 00540P       654 00557P
                                          658 00563P       660 00565P       663 00570P       664 00571P       665 00572P       675 00604P
                                          679 00610P       727 00645P       739 00661P       741 00663P     746+3 00673P       749 00676P
                                          751 00700P       754 00703P       756 00705P       758 00706P       761 00711P       762 00712P
                                          764 00714P       768 00717P       778 00730P       784 00736P       787 00741P       791 00745P
                                          792 00746P       795 00751P       801 00756P       807 00763P       810 00766P       820 00772P
                                          828 01002P       831 01005P       832 01006P       836 01014P       846 01023P       847 01024P
                                          852 01031P       853 01032P       858 01037P       865 01042P       869 01046P       870 01047P
                                          874 01053P     874+3 01056P     874+4 01057P     874+8 01063P    874+10 01065P       912 01075P
                                          913 01076P       917 01102P       938 01127P       961 01156P       962 01157P       982 01203P
                                          984 01205P       994 01217P       996 01221P       998 01223P      1024 01225P      1026 01227P
                                         1046 01252P      1050 01256P      1051 01257P      1053 01261P      1054 01262P      1056 01264P
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                                         1172 01377P      1174 01401P      1182 01411P      1185 01414P      1187 01416P      1190 01421P
                                         1195 01426P      1205 01440P      1206 01441P      1207 01442P      1212 01447P      1216 01453P
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                                      1323+11 01563P   1323+17 01571P   1333+19 01574P   1333+21 01576P   1333+29 01606P   1333+32 01611P
                                      1333+33 01612P      1380 01617P      1382 01621P      1383 01622P      1384 01623P      1386 01625P
                                         1387 01626P      1590 01766P      1592 01770P      1630 02031P      1650 02054P      1653 02057P
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                                         1680 02111P      1682 02113P      1689 02122P
   X2                00002      147       261 00035P       263 00037P       264 00040P       266 00042P       291 00072P       295 00076P
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                                          369 00212P       374 00217P       384 00231P       385 00232P       386 00233P       387 00234P
                                          389 00236P       396 00245P       398 00247P       436 00314P       439 00317P       440 00320P
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                                         1276 01520P      1278 01522P      1289 01535P    1323+2 01553P   1323+13 01565P   1323+19 01572P
                                      1333+22 01577P   1333+28 01605P    1440+4 01665P    1525+1 01716P      1539 01721P      1580 01754P
                                         1593 01771P      1607 02006P      1624 02023P      1649 02053P      1651 02055P      1661 02066P
                                         1664 02071P      1666 02073P      1673 02102P      1678 02107P      1690 02123P      1696 02126P
   X3                00003      148       271 00046P       274 00051P       282 00061P       288 00067P       289 00070P       296 00077P
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                                          319 00125P       321 00127P     323+1 00132P       329 00137P       331 00141P       336 00146P
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                                          775 00725P       776 00726P       783 00735P       789 00743P       797 00753P       798 00754P
                                          802 00757P     822+1 00775P       829 01003P       844 01021P       859 01040P       868 01045P
                                          871 01050P       916 01101P       933 01122P       936 01125P       943 01134P       952 01145P
                                          964 01161P       965 01162P       973 01172P       976 01175P       977 01176P       981 01202P
                                          983 01204P       986 01207P       987 01210P       988 01211P       990 01213P      1030 01233P
                                         1032 01235P      1033 01236P      1040 01244P      1041 01245P      1065 01274P      1074 01304P
                                         1076 01306P      1078 01310P      1119 01337P      1121 01341P      1123 01343P      1124 01344P
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                                                1125 01345P      1127 01347P      1128 01350P      1173 01400P      1193 01424P      1210 01445P
                                                1211 01446P      1213 01450P      1219 01456P      1223 01462P      1226 01465P      1227 01466P
                                                1257 01475P      1265 01505P      1279 01523P      1282 01526P      1283 01527P      1284 01530P
                                                1287 01533P      1288 01534P      1296 01544P    1323+8 01560P      1354 01615P      1398 01630P
                                                1399 01631P      1405 01636P      1416 01640P      1417 01641P      1418 01642P    1427+1 01644P
                                              1427+3 01646P      1432 01651P      1434 01653P      1436 01655P    1440+1 01662P    1440+7 01670P
                                              1440+8 01671P      1451 01673P      1452 01674P      1455 01677P      1468 01701P      1469 01702P
                                                1470 01703P      1481 01705P      1482 01706P      1503 01713P      1540 01722P      1543 01725P
                                                1556 01727P  1557+17 01731P  1557+22 01736P  1557+25 01741P  1557+31 01747P      1578 01752P
                                                1579 01753P      1581 01755P      1583 01757P      1585 01761P      1591 01767P      1594 01772P
                                                1603 02003P      1614 02014P      1615 02015P      1625 02024P      1644 02046P      1688 02121P
                                                1695 02125P      1700 02131P      1705 02136P      1707 02140P      1709 02142P      1710 02143P
XREQEND      X                    136         310 00114P       323 00131P       327 00136P       666 00573P       696 00623P       700 00625P
                                                702 00626P       755 00704P       770 00721P       805 00762P       835 01013P       839 01017P
                                                859 01040P       882 01074P      1183 01412P      1192 01423P      1259 01477P      1264 01504P
                                               1330 01573P      1355 01616P      1406 01637P      1433 01652P    1440+3 01664P    1440+5 01676P
                                               1441 01672P      1456 01700P      1471 01704P      1493 01712P      1525 01715P      1544 01726P
                                           1557+32 01750P      1580 01754P
XREQERR      X                    137         350 00170P
XTEMP          02244P     1782               735 00655P       745 00667P      1031 01234P      1036 01240P
ZEROPAGE       01715P     1524               209 00007P
ZEROPG       X                    138        1527 01717P
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