```
MMM         MMM  TTTTTTTTTTTTTTT     AAAAAAAAA        AAAAAAAAA        CCCCCCCCCCCC  PPPPPPPPPPPP
MMM         MMM  TTTTTTTTTTTTTTT     AAAAAAAAA        AAAAAAAAA        CCCCCCCCCCCC  PPPPPPPPPPPP
MMM         MMM  TTTTTTTTTTTTTTT     AAAAAAAAA        AAAAAAAAA        CCCCCCCCCCCC  PPPPPPPPPPPP
MMMMMM   MMMMMM        TTT        AAA         AAA  AAA         AAA  CCC              PPP         PPP
MMMMMM   MMMMMM        TTT        AAA         AAA  AAA         AAA  CCC              PPP         PPP
MMMMMM   MMMMMM        TTT        AAA         AAA  AAA         AAA  CCC              PPP         PPP
MMM   MMM   MMM        TTT        AAA         AAA  AAA         AAA  CCC              PPP         PPP
MMM   MMM   MMM        TTT        AAA         AAA  AAA         AAA  CCC              PPP         PPP
MMM   MMM   MMM        TTT        AAA         AAA  AAA         AAA  CCC              PPP         PPP
MMM         MMM        TTT        AAA         AAA  AAA         AAA  CCC              PPPPPPPPPPPP
MMM         MMM        TTT        AAA         AAA  AAA         AAA  CCC              PPPPPPPPPPPP
MMM         MMM        TTT        AAA         AAA  AAA         AAA  CCC              PPPPPPPPPPPP
MMM         MMM        TTT        AAAAAAAAAAAAAAA  AAAAAAAAAAAAAAA  CCC              PPP
MMM         MMM        TTT        AAAAAAAAAAAAAAA  AAAAAAAAAAAAAAA  CCC              PPP
MMM         MMM        TTT        AAAAAAAAAAAAAAA  AAAAAAAAAAAAAAA  CCC              PPP
MMM         MMM        TTT        AAA         AAA  AAA         AAA  CCC              PPP
MMM         MMM        TTT        AAA         AAA  AAA         AAA  CCC              PPP
MMM         MMM        TTT        AAA         AAA  AAA         AAA  CCC              PPP
MMM         MMM        TTT        AAA         AAA  AAA         AAA     CCCCCCCCCCCC  PPP
MMM         MMM        TTT        AAA         AAA  AAA         AAA     CCCCCCCCCCCC  PPP
MMM         MMM        TTT        AAA         AAA  AAA         AAA     CCCCCCCCCCCC  PPP
```

```
**FILE**ID**FRMHDR








FFFFFFFFFF  RRRRRRRR    MM      MM  HH      HH  DDDDDDDD    RRRRRRRR
FFFFFFFFFF  RRRRRRRR    MM      MM  HH      HH  DDDDDDDD    RRRRRRRR
FF          RR      RR  MMMM  MMMM  HH      HH  DD      DD  RR      RR
FF          RR      RR  MMMM  MMMM  HH      HH  DD      DD  RR      RR
FF          RR      RR  MM  MM  MM  HH      HH  DD      DD  RR      RR
FF          RR      RR  MM  MM  MM  HH      HH  DD      DD  RR      RR
FFFFFFFF    RRRRRRRR    MM      MM  HHHHHHHHHH  DD      DD  RRRRRRRR
FFFFFFFF    RRRRRRRR    MM      MM  HHHHHHHHHH  DD      DD  RRRRRRRR
FF          RR  RR      MM      MM  HH      HH  DD      DD  RR  RR
FF          RR  RR      MM      MM  HH      HH  DD      DD  RR  RR
FF          RR    RR    MM      MM  HH      HH  DD      DD  RR    RR          ....
FF          RR    RR    MM      MM  HH      HH  DD      DD  RR    RR          ....
FF          RR      RR  MM      MM  HH      HH  DDDDDDDD    RR      RR        ....
FF          RR      RR  MM      MM  HH      HH  DDDDDDDD    RR      RR        ....

LL            IIIIII      SSSSSSSS
LL            IIIIII      SSSSSSSS
LL              II      SS
LL              II      SS
LL              II      SS
LL              II      SS
LL              II      SSSSSS
LL              II      SSSSSS
LL              II              SS
LL              II              SS
LL              II              SS
LL              II              SS
LLLLLLLLLL    IIIIII    SSSSSSSS
LLLLLLLLLL    IIIIII    SSSSSSSS
```

```
0 MODULE FRMHDR (LANGUAGE (BLISS32) ,
0               IDENT = 'V04-000'
0               ) =
1 BEGIN
1 !
1 !****************************************************************************
1 !*                                                                          *
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1 !*                                                                          *
1 !*                                                                          *
1 !****************************************************************************
1
1 !++
1 !
1 ! FACILITY:  MTAACP
1 !
1 ! ABSTRACT:
1 !
1 !       This module formats HDR1, HDR2, HDR3, and HDR4.
1 !
1 ! ENVIRONMENT:
1 !
1 !       Starlet operating system, including privileged system services
1 !       and internal exec routines.
1 !
1 !--
1
1 !
1 !
1 ! AUTHOR:  D. H. GILLESPIE,       CREATION DATE:  2-JUN-77 14:35
1 !
1 ! MODIFIED BY:
1 !
1 !       V03-003 MMD0301         Meg Dumont,     20-Jun-1984  11:26
1 !               Fix to default HDR4 file extension to ASCII zeros instead of
1 !               decimal zeros
1 !
1 !       V03-002 MMD0279         Meg Dumont,     23-Mar-1984  10:25
1 !               Fix long file name support such that for ANSI version
1 !               3 volumes it converts the exentsion length to
1 !               ASCII characters before writing it to the label.
```

```
1 !
1 !      V03-001 MMD0160         Meg Dumont,      26-Apr-1983  9:31
1 !              Add long file name support include: 1) Change FORMAT_FILE_NAME
1 !              to understand that VMS long file names are split between
1 !              the HDR1 and HDR4 labels, 2) Change FORMAT_HDRS to format the
1 !              HDR4. Added support for interchange qualifier.
1 !
1 !      V02-012 DMW00069        David Michael Walp       11-Jan-1981
1 !              Added support of ANSI "a" 17 character filename thru
1 !              QIO filename parameter
1 !
1 !      V02-011 DMW00064        David Michael Walp        6-Jan-1981
1 !              Return VMS file spec created by ASCNAME without quotes
1 !
1 !      V02-010 DMW00063        David Michael Walp       18-Dec-1981
1 !              Finished ANSI "a" 17 character file name support
1 !
1 !      V02-009 DMW00053        David Michael Walp       10-Nov-1981
1 !              Return if ANSI resultant name, return it minus trailing
1 !              spaces.
1 !
1 !      V02-008 DMW00043        David Michael Walp       27-Oct-1981
1 !              Added ANSI "a" 17 character file name support
1 !
1 !      V02-007 DMW00016        David Michael Walp       20-May-1981
1 !              Get the File Set Id from the MVL rather then 1st volume
1 !              mounted label in the VCB.
1 !
1 !      V02-006 DMW00008        David Michael Walp       23-Jan-1981
1 !              Added check for "%" wild card, needed beacuse of expanded
1 !              wild card support.  Also code commented out for support of
1 !              HDR2 attributes.
1 !
1 !      V02-005 REFORMAT        Maria del C. Nasr        30-Jun-1980
1 !
1 !      A0004   MCN0008         Maria del C. Nasr        22-Feb-1980  16:29
1 !              Temporary support of RMS attributes in HDR2
1 !
1 !      A0003   MCN0003         Maria del C. Nasr        28-Sep-79    10:23
1 !              Add HDR3 processing
1 !
1 !**
1
1 LIBRARY 'SYS$LIBRARY:LIB.L32';
1
1 REQUIRE 'SRC$:MTADEF.B32';
1
1 FORWARD ROUTINE
1     FORMAT_HDRS         : COMMON_CALL NOVALUE;    ! format headers
```

```
;     M   1 MACRO RAD50_TO_VMS ( STRING, VERSION, OUT_INDEX ) =
;     M   1
;     M   1 !++
;     M   1 !
;     M   1 ! FUNCTIONAL DESCRIPTION:
;     M   1 !       This routine converts a RAD-50 file name block into the
;     M   1 !       equivalent VMS format name. Long file names are not supported
;     M   1 !       in RAD50 mode.
;     M   1 !
;     M   1 ! CALLING SEQUENCE:
;     M   1 !       RAD50_TO_VMS ( ARG1, ARG2, ARG3 )
;     M   1 !
;     M   1 ! INPUT PARAMETERS:
;     M   1 !       none
;     M   1 !
;     M   1 ! IMPLICIT INPUTS:
;     M   1 !       NMBLOCK - the Radix 50 name block
;     M   1 !
;     M   1 ! OUTPUT PARAMETERS:
;     M   1 !       ARG1 - buffer for file name string
;     M   1 !       ARG2 - word to receive version number
;     M   1 !       ARG2 - size of filename string
;     M   1 !
;     M   1 ! IMPLICIT OUTPUTS:
;     M   1 !       none
;     M   1 !
;     M   1 ! SIDE EFFECTS:
;     M   1 !       none
;     M   1 !
;     M   1 !--
;     M   1
;     M   1     BEGIN
;     M   1
;     M   1     EXTERNAL
;     M   1         NMBLOCK : VECTOR [ , WORD ];                ! the rad50 name block
;     M   1
;     M   1     MAP
;     M   1         STRING    : VECTOR [ , BYTE ],              ! string buffer arg
;     M   1         VERSION   : WORD,                           ! version number arg
;     M   1         OUT_INDEX : LONG;                           ! file name size arg
;     M   1
;     M   1     LOCAL
;     M   1         CHARS   : VECTOR [ 3, BYTE ];               ! holding place for characters
;     M   1
;     M   1
;     M   1     ! Set up the index. Then start up the outer loop, which iterates
;     M   1     ! over name and type fields.
;     M   1     !
;     M   1     OUT_INDEX = 0;
;     M   1
;     M   1     INCR K FROM 0 TO 3 BY 3 DO
;     M   1         BEGIN
;     M   1
;     M   1         ! The next loop iterates over the RAD-50 words in the name block.
;     M   1         ! There are 3 words for name, 1 for type. Expand each word into
;     M   1         ! the 3 RAD-50 characters.
;     M   1         !
;  165      M 0547  1          INCR I FROM 0 TO ( IF .K THEN 0 ELSE 2 )
;  166      M 0548  1              DO
;  167      M 0549  1
;  168      M 0550  1              BEGIN
;  169      M 0551  1              CHARS [ 0 ] =   .NMBLOCK [ .I + .K ]  / ( 40 * 40 );
;  170      M 0552  1              CHARS [ 1 ] = ( .NMBLOCK [ .I + .K ]  / 40 )         MOD 40;
;  171      M 0553  1              CHARS [ 2 ] =   .NMBLOCK [ .I + .K ]                 MOD 40;
;  172      M 0554  1
;  173      M 0555  1              ! Now convert each character into the correct ASCII code and store
;  174      M 0556  1              ! it in the string buffer if it is not null.
;  175      M 0557  1              !
;  176      M 0558  1              INCR J FROM 0 TO 2 DO
;  177      M 0559  1                  IF .CHARS [ .J ] NEQ 0 THEN
;  178      M 0560  1                      BEGIN
;  179      M 0561  1                      STRING [ .OUT_INDEX ] = ( IF .CHARS [ .J ] LSS 30
;  180      M 0562  1                                                THEN ( .CHARS [ .J ] - 1 ) + 'A'
;  181      M 0563  1                                                ELSE ( .CHARS [ .J ] - 30 ) + '0' );
;  182      M 0564  1
;  183      M 0565  1                      OUT_INDEX = .OUT_INDEX + 1;
;  184      M 0566  1                      END;
;  185      M 0567  1
;  186      M 0568  1              END;                                ! end of word loop
;  187      M 0569  1
;  188      M 0570  1          ! At the end of name field, insert the dot.
;  189      M 0571  1          !
;  190      M 0572  1          IF .K EQL 0
;  191      M 0573  1          THEN
;  192      M 0574  1              BEGIN
;  193      M 0575  1              STRING [ .OUT_INDEX ] = '.';
;  194      M 0576  1              OUT_INDEX = .OUT_INDEX + 1;
;  195      M 0577  1              END;
;  196      M 0578  1          END;                                    ! end of outer loop
;  197      M 0579  1
;  198      M 0580  1      ! fill in the version number
;  199      M 0581  1      !
;  200      M 0582  1      VERSION = .NMBLOCK [ 4 ];
;  201      M 0583  1
;  202      M 0584  1      END;
;  203        0585  1      %;                                  ! end of macro RAD50_TO_ASCII
```

```
1 MACRO FORMAT_FILE_NAME =
1
1 !++
1 !
1 ! FUNCTIONAL DESCRIPTION:
1 !       formats the File's Name, Type and Version to placed into the header
1 !
1 ! CALLING SEQUENCE:
1 !       FORMAT_FILE_NAME
1 !
1 ! INPUT PARAMETERS:
1 !       none
1 !
1 ! IMPLICIT INPUTS:
1 !       none
1 !
1 ! OUTPUT PARAMETERS:
1 !       none
1 !
1 ! IMPLICIT OUTPUTS:
1 !       file name is formatted in the HDR1 and HDR4 labels
1 !
1 ! SIDE EFFECTS:
1 !       none
1 !
1 !--
1
1      BEGIN
1
1      EXTERNAL ROUTINE                                   ! turn VMS version number
1          CALC_TAPE_VER,                                 !  into ANSI generation nums
1          PARSE_NAME_TYPE,                               ! parse file name string
1          PARSE_QUOTED_NAME: COMMON_CALL NOVALUE,        ! parse a spec in quotes
1          RESULTANT_STRING: COMMON_CALL NOVALUE,         ! return resultant string
1          STRIP_VERSION    : COMMON_CALL,                ! strip version from file spec
1          SYS$FAO          : ADDRESSING_MODE ( ABSOLUTE ); ! format generation num
1
1      EXTERNAL
1          ANSI_NAME_SIZE   : SIGNED BYTE,                ! size of the ANSI file name
1          HDR1             : REF BBLOCK,                 ! point to the HDR1
1          HDR4             : REF BBLOCK,                 ! point to the HDR4
1          IO_PACKET        : REF BBLOCK,                 ! pointer to current IRP
1          LOCAL_FIB        : BBLOCK;                     ! copy of users File Info Blk
1
1      LOCAL
1          ABD              : REF BBLOCKVECTOR [ , ABD$C_LENGTH ],
1                                                         ! pointer to ACP buffer desc
1          DESCRIPT         : VECTOR [ 2, LONG ],         ! general purpose descriptor
1          FILE_SPEC_PTR    : LONG,                       ! point to file name buffer
1          FILE_SPEC_LEN    : LONG,                       ! length of file name buffer
1          NAME_STRING      : VECTOR [ FILE_SPEC_MAX, BYTE ],
1                                                         ! buff to hold converted RAD50
1          FILE_ID          : VECTOR [FILE_SPEC_MAX, BYTE], ! hole FILE ID
1          GEN_NUM_VER      : VECTOR [ 2, LONG ],         ! ANSI version numbers
1          QUOTED_NAME      : BITVECTOR [ 1 ],            ! was the spec passed in quotes
1          VERSION          : WORD;                       ! VMS version number
1
```

```

 ! which filename should be used
 ! get the filename from name block if not specifed as attribute
 !
ABD = .BBLOCK [ .IO_PACKET [ IRP$L_SVAPTE ], AIB$L_DESCRIPT ];
IF .ABD [ ABD$C_NAME, ABD$W_COUNT ] EQLU 0
THEN
    BEGIN
    RAD50_TO_VMS ( NAME_STRING, VERSION, FILE_SPEC_LEN );
    FILE_SPEC_PTR = NAME_STRING;
    QUOTED_NAME [ 0 ] = FALSE;
    END
ELSE
    BEGIN
    FILE_SPEC_LEN = .ABD [ ABD$C_NAME, ABD$W_COUNT ];
    FILE_SPEC_PTR = .ABD [ ABD$C_NAME, ABD$W_TEXT ] +
                     ABD [ ABD$C_NAME, ABD$W_TEXT ] + 1;

    ! do not allow wild cards in the version field
    !
    VERSION = STRIP_VERSION ( FILE_SPEC_LEN,
                              FILE_SPEC_PTR,
                              FALSE,
                              QUOTED_NAME [ 0 ] );
    END;

! check that it is not to large
!
IF .VERSION GTRU 32767 THEN ERR_EXIT ( SS$_BADFILEVER );

! Space fill the temporary FILE_ID field

CH$FILL(' ',FILE_SPEC_MAX,FILE_ID);

! parse the file name if is a VMS file spec and place into HDR1
!
IF .ANSI_NAME_SIZE LSS 0
THEN
    BEGIN
    DESCRIPT [ 0 ] = FILE_SPEC_MAX;
    DESCRIPT [ 1 ] = FILE_ID[0];

    ! call the correct parse routine
    !
    IF .QUOTED_NAME [ 0 ]
    THEN
        BEGIN
        PARSE_QUOTED_NAME ( .FILE_SPEC_LEN,
                            .FILE_SPEC_PTR,
                            DESCRIPT );

        ! set a dummy value so it is tested to see if it is VMS spec
        !
        ANSI_NAME_SIZE = 1;
        END
    ELSE
        BEGIN
```

```
;  319      M 0700  1          IF NOT PARSE_NAME_TYPE ( FALSE, ! no wild cards allowed
;  320      M 0701  1                                  .FILE_SPEC_LEN,
;  321      M 0702  1                                  .FILE_SPEC_PTR,
;  322      M 0703  1                                  DESCRIPT )
;  323      M 0704  1          THEN ERR_EXIT ( SS$_BADFILENAME );
;  324      M 0705  1          END;
;  325      M 0706  1      END;
;  326      M 0707  1
;  327      M 0708  1  ! test if the file spec give to us by ATR$_ASCNAME or in quotes is a VMS
;  328      M 0709  1  ! spec so we do not return it in quotes.  A size of zero will not work
;  329      M 0710  1  ! cause you need at least a "."
;  330      M 0711  1  !
;  331      M 0712  1  IF .ANSI_NAME_SIZE GTR 0
;  332      M 0713  1  THEN
;  333      M 0714  1      BEGIN
;  334      M 0715  1      EXTERNAL WORK_AREA;       ! address of general work area
;  335      M 0716  1      DESCRIPT [ 0 ] = FILE_SPEC_MAX;
;  336      M 0717  1      DESCRIPT [ 1 ] = WORK_AREA;
;  337      M 0718  1      IF PARSE_NAME_TYPE ( FALSE, ! no wild cards allowed
;  338      M 0719  1                           FILE_SPEC_MAX,
;  339      M 0720  1                           FILE_ID[0],
;  340      M 0721  1                           DESCRIPT )
;  341      M 0722  1      THEN ANSI_NAME_SIZE = -1;
;  342      M 0723  1      END;
;  343      M 0724  1
;  344      M 0725  1  ! Fill in the HDR1 FILE ID field and the HDR4 label.
;  345      M 0726  1
;  346      M 0727  1  CH$MOVE (HD1$S_FILEID, FILE_ID, HDR1[HD1$T_FILEID]);
;  347      M 0728  1  CH$MOVE (HD4$S_FILEID_EXT, FILE_ID[HD1$S_FILEID], HDR4[HD4$T_FILEID_EXT]);
;  348      M 0729  1
;  349      M 0730  1  ! Check the length of the file name. If the file name will fit in
;  350      M 0731  1  ! the HDR1 FILE ID then set the HDR4 length to zero. Else set up
;  351      M 0732  1  ! the lengths such that the HDR1 FILE ID is filed with the name
;  352      M 0733  1  ! then the remainder of the name is put in the HDR4 label with the
;  353      M 0734  1  ! size that is in the HDR4 label only.
;  354      M 0735  1  ! PLEASE NOTE that the actual implementation of this is different for
;  355      M 0736  1  ! volumes with a 4 in the VOL1 standard field as opposed to a 3 or less.
;  356      M 0737  1  ! This is because the new standard allows us to write any kind
;  357      M 0738  1  ! of data in implementation dependant fields. The old standard did not allow
;  358      M 0739  1  ! us to do this.
;  359      M 0740  1
;  360      M 0741  1  BEGIN
;  361      M 0742  1      BIND
;  362      M 0743  1          CVT2 = DESCRIPTOR ('!2ZW');
;  363      M 0744  1      LOCAL
;  364      M 0745  1          DESCR : VECTOR [2,LONG],
;  365      M 0746  1          MVL   : REF BBLOCK;
;  366      M 0747  1      MVL = .CURRENT_VCB[VCB$L_MVL];
;  367      M 0748  1      IF .FILE_SPEC_LEN  LEQU HD1$S_FILEID
;  368      M 0749  1         THEN
;  369      M 0750  1         BEGIN
;  370      M 0751  1            IF .MVL[MVL$B_STDVER] GTR 3
;  371      M 0752  1              THEN
;  372      M 0753  1                  HDR4[HD4$B_FILEID_EXT_SIZE] = 0
;  373      M 0754  1              ELSE
;  374      M 0755  1                  CH$FILL('0',HD4$S_FILEID_EXT_V3,HDR4[HD4$T_FILEID_EXT_V3]);
;  375      M 0756  1         END
```

```
        ELSE
        BEGIN
           IF .MVL[MVL$B_STDVER] GTR 3
             THEN
                  HDR4[HD4$B_FILEID_EXT_SIZE] = .FILE_SPEC_LEN - HD1$S_FILEID
             ELSE
             BEGIN
                 LOCAL LEN;
                 LEN = .FILE_SPEC_LEN - HD1$S_FILEID;
                 DESCR[0] = HD4$S_FILEID_EXT_V3;
                 DESCR[1] = HDR4[HD4$T_FILEID_EXT_V3];
                 $FAO(CVT2,0,DESCR,.LEN);
             END;
          END;
    END;

! if enter function return file name string to user
!
IF .LOCAL_FIB [ FIB$W_DID_NUM ] NEQ 0
THEN
    RESULTANT_STRING ( .ANSI_NAME_SIZE LSS 0,
                        FILE_SPEC_MAX,
                        FILE_ID[0],
                        .VERSION );

! transform the VMS file version number into ANSI format
!
CALC_TAPE_VER ( .VERSION, GEN_NUM_VER );
DESCRIPT [ 0 ] = HD1$S_GENNO + HD1$S_GENVER;
DESCRIPT [ 1 ] = HDR1 [ HD1$T_GENNO ];
SYS$FAO ( DESCRIPTOR ( '!4ZL!2ZL' ), 0, DESCRIPT,
          .GEN_NUM_VER [ 0 ], .GEN_NUM_VER [ 1 ] );

END;
%;                                      ! end of macro FORMAT_FILE_NAME
```

```
1 GLOBAL ROUTINE FORMAT_HDRS : COMMON_CALL NOVALUE =
1
1 !++
1 !
1 ! FUNCTIONAL DESCRIPTION:
1 !       This routine formats HDR1, HDR2, HDR3 and HDR4.
1 !
1 ! CALLING SEQUENCE:
1 !       FORMAT_HDRS()
1 !
1 ! INPUT PARAMETERS:
1 !       none
1 !
1 ! IMPLICIT INPUTS:
1 !       CURRENT_VCB - address of current vcb
1 !       HDR1 - address of HDR1 label
1 !       HDR2 - address of HDR2 label
1 !       HDR3 - address of HDR3 label
1 !       HDR4 - address of HDR4 label
1 !       LOCAL_FIB - copy of user's fib
1 !
1 ! OUTPUT PARAMETERS:
1 !       none
1 !
1 ! IMPLICIT OUTPUTS:
1 !       HDR1, HDR2, HDR3, and HDR4 formatted
1 !
1 ! ROUTINE VALUE:
1 !       none
1 !
1 ! SIDE EFFECTS:
1 !       none
1 !
1 !--
1
2     BEGIN
2
2     EXTERNAL ROUTINE
2         CONVDATE_R2J,                              ! convert regular date to
2                                                    !  Julian for tape
2         SYS$ASCTIM       : ADDRESSING_MODE(ABSOLUTE),! get ASCII date/time
2         SYS$FAO          : ADDRESSING_MODE(ABSOLUTE),! format ASCII output
2         WRITE_ATTRIBUTE : COMMON_CALL;             ! write user supplied attrbts
2
2
2     EXTERNAL REGISTER
2         COMMON_REG;
2
2     EXTERNAL
2         CURRENT_UCB : REF BBLOCK,                  ! address of current UCB
2         HDR1        : REF BBLOCK,                  ! address of HDR1(EOF1) label
2         HDR2        : REF BBLOCK,                  ! address of HDR2(EOF2) label
2         HDR3        : REF BBLOCK,                  ! address of HDR3(EOF3) label
2         HDR4        : REF BBLOCK,                  ! address of HDR3(EOF4) label
2         IO_PACKET   : REF BBLOCK,                  ! address of IO request packet
2         LOCAL_FIB   : BBLOCK;                      ! copy of user file info block
2
```

```
;  470       0850 2         BIND
;  471       0851 2             CVT4        = DESCRIPTOR ( '!4XW' ),
;  472       0852 2             CVT5        = DESCRIPTOR ( '!5ZW' ),
;  473       0853 2             DEFAULT     = UPLIT ('00512'),
;  474       0854 2             DEF_HEX     = UPLIT ('0200'),
;  475       0855 2             STARID      = UPLIT ('DECFILE11A');
;  476       0856 2
;  477       0857 2         GLOBAL
;  478       0858 2             NMBLOCK         : BBLOCK [10];                  ! name block
;  479       0859 2
;  480       0860 2         LOCAL
;  481       0861 2             DESCR           : VECTOR [2],                   ! general Pdescriptor
;  482       0862 2             MVL             : REF BBLOCK,                   ! magtape volume list
;  483       0863 2             TODAY           : VECTOR [12, BYTE];            ! regular date string
;  484       0864 2
;  485       0865 2
;  486       0866 2         ! Blank fill the headers and default the fields
;  487       0867 2         ! in HDR1, HDR2, HDR3, and HDR4
;  488       0868 2
;  489       0869 2         CH$FILL(' ', 320, .HDR1);
;  490       0870 2         HDR1[HD1$L_HD1LID] = 'HDR1';
;  491       0871 2         MVL = .CURRENT_VCB[VCB$L_MVL];
;  492       0872 2         CH$MOVE(HD1$S_FILESETID, MVL[MVL$T_SET_ID], HDR1[HD1$T_FILESETID]);
;  493       0873 2         CH$FILL('0', HD1$S_BLOCKCNT, HDR1[HD1$T_BLOCKCNT]);
;  494       0874 2
;  495       0875 2         ! If volume is for interchange do not write any VMS specific fields.
;  496       0876 2
;  497       0877 2         IF NOT .CURRENT_VCB[VCB$V_INTCHG]
;  498       0878 2             THEN
;  499       0879 2                CH$MOVE(10, STARID, HDR1[HD1$T_SYSCODE]);
;  500       0880 2
;  501       0881 2         ! default expiration and creation date
;  502       0882 2         !
;  503       0883 2         DESCR[0] = 12;
;  504       0884 2         DESCR[1] = TODAY;
;  505       0885 2         SYS$ASCTIM(0, DESCR, 0, 0);                 ! get today's date in dd-mmm-yyyy
;  506       0886 2         CONVDATE_R2J(TODAY, HDR1[HD1$T_CREATEDT]);
;  507       0887 2         CH$MOVE(HD1$S_CREATEDT, HDR1[HD1$T_CREATEDT], HDR1[HD1$T_EXPIREDT]);
;  508       0888 2
;  509       0889 2         !++
;  510       0890 2         !
;  511       0891 2         ! format HDR2 defaults
;  512       0892 2         !
;  513       0893 2         !--
;  514       0894 2         HDR2[HD2$L_HD2LID] = 'HDR2';
;  515       0895 2         HDR2[HD2$B_RECFORMAT] = 'F';
;  516       0896 2         DESCR[0] = HD2$S_BLOCKLEN;
;  517       0897 2         DESCR[1] = HDR2[HD2$T_BLOCKLEN];
;  518       0898 2
;  519       0899 2         ! fill in the blocksize
;  520       0900 2         !
;  521       0901 3         IF NOT $FAO(CVT5, 0, DESCR, .CURRENT_UCB[UCB$W_DEVBUFSIZ])
;  522       0902 2         THEN CH$MOVE(HD2$S_BLOCKLEN, DEFAULT, HDR2[HD2$T_BLOCKLEN]);
;  523       0903 2
;  524       0904 2         ! default the the record size to be the blocksize
;  525       0905 2         !
;  526       0906 2         CH$MOVE(HD2$S_RECLEN, HDR2[HD2$T_BLOCKLEN], HDR2[HD2$T_RECLEN]);
```

```
2
2       ! use the record size if it exists
2
2       IF .CURRENT_VCB[VCB$W_RECORDSZ] NEQ 0
2       THEN
3           BEGIN
3           DESCR[0] = HD2$S_RECLEN;
3           DESCR[1] = HDR2[HD2$T_RECLEN];
3
4           IF NOT $FAO(CVT5, 0, DESCR, .CURRENT_VCB[VCB$W_RECORDSZ])
3           THEN
3               CH$MOVE(HD2$S_RECLEN, HDR2[HD2$T_BLOCKLEN], HDR2[HD2$T_RECLEN]);
3           END;
2
2       HDR2[HD2$T_BUFOFF] = '00';
2
2       !++
2       !
2       ! default HDR3 ( sequencial files, fixed lenght block size )
2       !
2       !--
2       HDR3[HD3$L_HD3LID] = 'HDR3';
2       CH$FILL('0', HD3$S_RECATR, HDR3[HD3$T_RECATR]);
2       (HDR3[HD3$T_RECATR] + 4)<0, 32> = '0201';
2
2       !++
2       !
2       ! default HDR4 no long file name, make the default dependant on the
2       ! ANSI version type
2       !
2       !--
2       HDR4[HD4$L_HD4LID] = 'HDR4';
2       IF .MVL[MVL$B_STDVER] GTR 3
2           THEN
2               HDR4[HD4$B_FILEID_EXT_SIZE] = 0
2           ELSE
2               CH$FILL('0', HD4$S_FILEID_EXT_V3, HDR4[HD4$T_FILEID_EXT_V3]);
2
2       !++
2       !
2       ! fill in the RMS default record size
2       !    if record size on mount then use it
2       !    else if blocks size the use it
2       !    else default
2       !
2       !--
2       DESCR[0] = 4;
2       DESCR[1] = HDR3[HD3$T_RECATR];
2       IF .CURRENT_VCB[VCB$W_RECORDSZ] NEQ 0
2       THEN
3           BEGIN
4           IF NOT $FAO( CVT4, 0, DESCR, .CURRENT_VCB[VCB$W_RECORDSZ] )
3           THEN
4               BEGIN
5               IF NOT $FAO( CVT4, 0, DESCR, .CURRENT_UCB[UCB$W_DEVBUFSIZ] )
4               THEN CH$MOVE ( 4, DEF_HEX, HDR3[HD3$T_RECATR] );
3               END;
```

```
3              END
2       ELSE
3          BEGIN
4          IF NOT $FAO( CVT4, 0, DESCR, .CURRENT_UCB[UCB$W_DEVBUFSIZ] )
3          THEN CH$MOVE ( 4, DEF_HEX, HDR3[HD3$T_RECATR] );
2          END;
2
2
2       ! pickup user supplied attributes
2       !
2       CH$FILL ( 0, 10, NMBLOCK );
2       WRITE_ATTRIBUTE ();
2
2       !+
2       !
2       ! set up the file specification
2       !
2       !-
2       FORMAT_FILE_NAME;
2
1       END;                                            ! end of routine FORMAT_HDRS

                                                         .TITLE  FRMHDR
                                                         .IDENT  \V04-000\

                                                         .PSECT  $CODE$,NOWRT,2

                          57  58  34  21  00000 P.AAB:   .ASCII  \!4XW\
                              00000004    00004 P.AAA:   .LONG   4
                              00000000'   00008          .ADDRESS P.AAB
                          57  5A  35  21  0000C P.AAD:   .ASCII  \!5ZW\
                              00000004    00010 P.AAC:   .LONG   4
                              00000000'   00014          .ADDRESS P.AAD
          00  00  00  32  31  35  30  30  00018 P.AAE:   .ASCII  \00512\<0><0><0>
                          30  30  32  30  00020 P.AAF:   .ASCII  \0200\
  00  00  41  31  31  45  4C  49  46  43  45  44  00024 P.AAG:   .ASCII  \DECFILE11A\<0><0>
                          57  5A  32  21  00030 P.AAI:   .ASCII  \!2ZW\
                              00000004    00034 P.AAH:   .LONG   4
                              00000000'   00038          .ADDRESS P.AAI
          4C  5A  32  21  4C  5A  34  21  0003C P.AAK:   .ASCII  \!4ZL!2ZL\
                              00000008    00044 P.AAJ:   .LONG   8
                              00000000'   00048          .ADDRESS P.AAK

                                                         .PSECT  $LOCKEDD1$,NOEXE,2

                                    00000 NMBLOCK::
                                                         .BLKB   10

                                         CVT4=                   P.AAA
                                         CVT5=                   P.AAC
                                         DEFAULT=                P.AAE
                                         DEF_HEX=                P.AAF
                                         STARID=                 P.AAG
                                         CVT2=                   P.AAH
                                                         .EXTRN  CONVDATE_R2J, SYS$ASCTIM
                                                         .EXTRN  SYS$FAO, WRITE_ATTRIBUTE
```

```
                                                                         .EXTRN   CURRENT_UCB, HDR1
                                                                         .EXTRN   HDR2, HDR3, HDR4
                                                                         .EXTRN   IO_PACKET, LOCAL_FIB
                                                                         .EXTRN   CALC_TAPE_VER, PARSE_NAME_TYPE
                                                                         .EXTRN   PARSE_QUOTED_NAME
                                                                         .EXTRN   RESULTANT_STRING
                                                                         .EXTRN   STRIP_VERSION, ANSI_NAME_SIZE
                                                                         .EXTRN   WORK_AREA

                                                                         .PSECT   $CODE$,NOWRT,2

                                                       07FC  00000       .ENTRY   FORMAT_HDRS, Save R2,R3,R4,R5,R6,R7,R8,R9,-     ; 0793
                                                                                  R10                                             ;
                                         5A 00000000G 00  9E 00002       MOVAB    SYS$FAO, R10                                    ;
                                         5E      FF24 CE  9E 00009       MOVAB    -220(SP), SP                                    ;
                                         56     0000G CF  D0 0000E       MOVL     HDR1, R6                                        ; 0869
0140    8F                20             6E           00  2C 00013       MOVC5    #0, (SP), #32, #320, (R6)                       ;
                                                      66     0001A                                                                ;
                                         66  31524448 8F  D0 0001B       MOVL     #827475016, (R6)                                ; 0870
                                         57        34 AB  D0 00022       MOVL     52(CURRENT_VCB), MVL                            ; 0871
                    15    A6         0C  A7           06  28 00026       MOVC3    #6, 12(MVL), 21(R6)                             ; 0872
        06                30             6E           00  2C 0002C       MOVC5    #0, (SP), #48, #6, 54(R6)                       ; 0873
                                                   36 A6     00031                                                                ;
                          06         2C  AB           04  E0 00033       BBS      #4, 44(CURRENT_VCB), 1$                         ; 0877
                    3C    A6         9C  AF           0A  28 00038       MOVC3    #10, STARID, 60(R6)                             ; 0879
                                     F8  AD           0C  D0 0003E 1$:   MOVL     #12, DESCR                                      ; 0883
                                     FC  AD        EC AD  9E 00042       MOVAB    TODAY, DESCR+4                                  ; 0884
                                                      7E  7C 00047       CLRQ     -(SP)                                           ; 0885
                                                   F8 AD  9F 00049       PUSHAB   DESCR                                           ;
                                                      7E  D4 0004C       CLRL     -(SP)                                           ;
                              00000000G  9F           04  FB 0004E       CALLS    #4, @#SYS$ASCTIM                                ;
                          7E      0000G  CF           29  C1 00055       ADDL3    #41, HDR1, -(SP)                                ; 0886
                                                   EC AD  9F 0005B       PUSHAB   TODAY                                           ;
                                  0000G  CF           02  FB 0005E       CALLS    #2, CONVDATE_R2J                                ;
                                         50     0000G CF  D0 00063       MOVL     HDR1, R0                                        ; 0887
                    2F    A0         29  A0           06  28 00068       MOVC3    #6, 41(R0), 47(R0)                              ;
                                         50     0000G CF  D0 0006E       MOVL     HDR2, R0                                        ; 0894
                                         60  32524448 8F  D0 00073       MOVL     #844252232, (R0)                                ;
                                     04  A0        46 8F  90 0007A       MOVB     #70, 4(R0)                                      ; 0895
                                     F8  AD           05  D0 0007F       MOVL     #5, DESCR                                       ; 0896
                                     FC  AD        05 A0  9E 00083       MOVAB    5(R0), DESCR+4                                  ; 0897
                                         50     0000G CF  D0 00088       MOVL     CURRENT_UCB, R0                                 ; 0901
                                         7E        42 A0  3C 0008D       MOVZWL   66(R0), -(SP)                                   ;
                                                   F8 AD  9F 00091       PUSHAB   DESCR                                           ;
                                                      7E  D4 00094       CLRL     -(SP)                                           ;
                                                 FF2A CF  9F 00096       PUSHAB   CVT5                                            ;
                                         6A           04  FB 0009A       CALLS    #4, SYS$FAO                                     ;
                                         0C           50  E8 0009D       BLBS     R0, 2$                                          ;
                                         50     0000G CF  D0 000A0       MOVL     HDR2, R0                                        ; 0902
                    05    A0       FF22  CF           05  28 000A5       MOVC3    #5, DEFAULT, 5(R0)                              ;
                                         56     0000G CF  D0 000AC 2$:   MOVL     HDR2, R6                                        ; 0906
                    0A    A6         05  A6           05  28 000B1       MOVC3    #5, 5(R6), 10(R6)                               ;
                                         58        50 AB  3C 000B7       MOVZWL   80(CURRENT_VCB), R8                             ; 0910
                                                      59  D4 000BB       CLRL     R9                                              ;
                                                      58  D5 000BD       TSTL     R8                                              ;
                                                      27  13 000BF       BEQL     3$                                              ;
                                                      59  D6 000C1       INCL     R9                                              ;
```

```
                               F8   AD          05  D0 000C3          MOVL     #5, DESCR                          ; 0913
                               FC   AD      0A  A6  9E 000C7          MOVAB    10(R6), DESCR+4                    ; 0914
                                                58  DD 000CC          PUSHL    R8                                 ; 0916
                                            F8  AD  9F 000CE          PUSHAB   DESCR                              ;
                                                7E  D4 000D1          CLRL     -(SP)                              ;
                                          FEED  CF  9F 000D3          PUSHAB   CVT5                               ;
                                    6A          04  FB 000D7          CALLS    #4, SYS$FAO                        ;
                                    0B          50  E8 000DA          BLBS     R0, 3$                             ;
                                    50   0000G  CF  D0 000DD          MOVL     HDR2, R0                           ; 0918
                  0A    A0     05   A0          05  28 000E2          MOVC3    #5, 5(R0), 10(R0)                  ;
                                    50   0000G  CF  D0 000E8 3$:      MOVL     HDR2, R0                           ; 0921
                               32   A0    3030  8F  B0 000ED          MOVW     #12336, 50(R0)                     ;
                                    56   0000G  CF  D0 000F3          MOVL     HDR3, R6                           ; 0928
                                    66 33524448 8F  D0 000F8          MOVL     #861029448, (R6)                   ;
    0040    8F          30          6E          00  2C 000FF          MOVC5    #0, (SP), #48, #64, 4(R6)          ; 0929
                                            04  A6     00106                                                      ;
                               08   A6 31303230 8F  D0 00108          MOVL     #825242160, 8(R6)                  ; 0930
                                    50   0000G  CF  D0 00110          MOVL     HDR4, R0                           ; 0938
                                    60 34524448 8F  D0 00115          MOVL     #877806664, (R0)                   ;
                                    03      22  A7  91 0011C          CMPB     34(MVL), #3                        ; 0939
                                                05  1B 00120          BLEQU    4$                                 ;
                                            04  A0  94 00122          CLRB     4(R0)                              ; 0941
                                                06  11 00125          BRB      5$                                 ;
                               43   A0    3030  8F  B0 00127 4$:      MOVW     #12336, 67(R0)                     ; 0943
                               F8   AD          04  D0 0012D 5$:      MOVL     #4, DESCR                          ; 0953
                               FC   AD      04  A6  9E 00131          MOVAB    4(R6), DESCR+4                     ; 0954
                                    11          59  E9 00136          BLBC     R9, 6$                             ; 0955
                                                58  DD 00139          PUSHL    R8                                 ; 0958
                                            F8  AD  9F 0013B          PUSHAB   DESCR                              ;
                                                7E  D4 0013E          CLRL     -(SP)                              ;
                                          FE74  CF  9F 00140          PUSHAB   CVT4                               ;
                                    6A          04  FB 00144          CALLS    #4, SYS$FAO                        ;
                                    23          50  E8 00147          BLBS     R0, 7$                             ;
                                    50   0000G  CF  D0 0014A 6$:      MOVL     CURRENT_UCB, R0                    ; 0967
                                    7E      42  A0  3C 0014F          MOVZWL   66(R0), -(SP)                      ;
                                            F8  AD  9F 00153          PUSHAB   DESCR                              ;
                                                7E  D4 00156          CLRL     -(SP)                              ;
                                          FE5C  CF  9F 00158          PUSHAB   CVT4                               ;
                                    6A          04  FB 0015C          CALLS    #4, SYS$FAO                        ;
                                    0B          50  E8 0015F          BLBS     R0, 7$                             ;
                                    50   0000G  CF  D0 00162          MOVL     HDR3, R0                           ; 0968
                               04   A0    FE69  CF  D0 00167          MOVL     DEF_HEX, 4(R0)                     ;
            0A                 00   6E          00  2C 0016D 7$:      MOVC5    #0, (SP), #0, #10, NMBLOCK         ; 0974
                                         0000'  CF     00172                                                      ;
                          0000G     CF          00  FB 00175          CALLS    #0, WRITE_ATTRIBUTE                ; 0975
                                    50   0000G  CF  D0 0017A          MOVL     IO_PACKET, R0                      ;
                                    50      2C  B0  D0 0017F          MOVL     @44(R0), ABD                       ;
                                            12  A0  B5 00183          TSTW     18(ABD)                            ;
                                                03  13 00186          BEQL     8$                                 ;
                                              0099  31 00188          BRW      19$                                ;
                                            0C  AE  D4 0018B 8$:      CLRL     FILE_SPEC_LEN                      ;
                                                54  D4 0018E          CLRL     K                                  ;
                                    04          54  E9 00190 9$:      BLBC     K, 10$                             ;
                                                55  D4 00193          CLRL     R5                                 ;
                                                03  11 00195          BRB      11$                                ;
                                    55          02  D0 00197 10$:     MOVL     #2, R5                             ;
                                    50          01  CE 0019A 11$:     MNEGL    #1, I                              ;
```

```
                                                      5B 11 0019D         BRB     17$
                         51             50            54 C1 0019F   12$:  ADDL3   K, I, R1
                                        52     0000GCF41 3C 001A3         MOVZWL  NMBLOCK[R1], R2
                         51             52 00000640   8F C7 001A9         DIVL3   #1600, R2, R1
                                        6E            51 90 001B1         MOVB    R1, CHARS
                         51             52            28 C7 001B4         DIVL3   #40, R2, R1
           7E            00             51            01 7A 001B8         EMUL    #1, R1, #0, -(SP)
           51            51             8E            28 7B 001BD         EDIV    #40, (SP)+, R1, R1
                                   01   AE            51 90 001C2         MOVB    R1, CHARS+1
           7E            00             52            01 7A 001C6         EMUL    #1, R2, #0, -(SP)
           51            51             8E            28 7B 001CB         EDIV    #40, (SP)+, R1, R1
                                   02   AE            51 90 001D0         MOVB    R1, CHARS+2
                                                      51 D4 001D4         CLRL    J
                                        53          6E41 9A 001D6   13$:  MOVZBL  CHARS[J], R3
                                                      1A 13 001DA         BEQL    16$
                                        52       70   AE 9E 001DC         MOVAB   NAME_STRING, R2
                                        1E            53 91 001E0         CMPB    R3, #30
                                                      06 1E 001E3         BGEQU   14$
                                        53       40   A3 9E 001E5         MOVAB   64(R3), R3
                                                      03 11 001E9         BRB     15$
                                        53            12 C0 001EB   14$:  ADDL2   #18, R3
                                   0C BE42            53 90 001EE   15$:  MOVB    R3, @FILE_SPEC_LEN[R2]
                                                 0C   AE D6 001F3         INCL    FILE_SPEC_LEN
                         DC             51            02 F3 001F6   16$:  AOBLEQ  #2, J, 13$
                         A1             50            55 F3 001FA   17$:  AOBLEQ  R5, I, 12$
                                                      54 D5 001FE         TSTL    K
                                                      0C 12 00200         BNEQ    18$
                                        50       70   AE 9E 00202         MOVAB   NAME_STRING, R0
                                   0C BE40            2E 90 00206         MOVB    #46, @FILE_SPEC_LEN[R0]
                                                 0C   AE D6 0020B         INCL    FILE_SPEC_LEN
         FF7C            54             03            03 F1 0020E   18$:  ACBL    #3, #3, K, 9$
                                        57    0000G   CF B0 00214         MOVW    NMBLOCK+8, VERSION
                                   08   AE       70   AE 9E 00219         MOVAB   NAME_STRING, FILE_SPEC_PTR
                                   04   AE            01 8A 0021E         BICB2   #1, QUOTED_NAME
                                                      25 11 00222         BRB     20$
                                   0C   AE       12   A0 3C 00224   19$:  MOVZWL  18(ABD), FILE_SPEC_LEN
                                        51       10   A0 9E 00229         MOVAB   16(ABD), R1
                                        50            61 3C 0022D         MOVZWL  (R1), R0
                                   08   AE       01 A140 9E 00230         MOVAB   1(R1)[R0], FILE_SPEC_PTR
                                                 04   AE 9F 00236         PUSHAB  QUOTED_NAME
                                                      7E D4 00239         CLRL    -(SP)
                                                 10   AE 9F 0023B         PUSHAB  FILE_SPEC_PTR
                                                 18   AE 9F 0023E         PUSHAB  FILE_SPEC_LEN
                                0000G   CF            04 FB 00241         CALLS   #4, STRIP_VERSION
                                        57            50 B0 00246         MOVW    R0, VERSION
                                 7FFF   8F            57 B1 00249   20$:  CMPW    VERSION, #32767
                                                      04 1B 0024E         BLEQU   21$
                                               0820   8F BF 00250         CHMU    #2080
     004F  8F            20             6E            00 2C 00254   21$:  MOVC5   #0, (SP), #32, #79, FILE_ID
                                                 20   AE    0025B
                                              0000G   CF 95 0025D         TSTB    ANSI_NAME_SIZE
                                                      3A 18 00261         BGEQ    23$
                                   E4   AD       4F   8F 9A 00263         MOVZBL  #79, DESCRIPT
                                   E8   AD       20   AE 9E 00268         MOVAB   FILE_ID, DESCRIPT+4
                                        15       04   AE E9 0026D         BLBC    QUOTED_NAME, 22$
                                                 E4   AD 9F 00271         PUSHAB  DESCRIPT
                                                 0C   AE DD 00274         PUSHL   FILE_SPEC_PTR
```

```
                           14   AE DD 00277            PUSHL    FILE_SPEC_LEN
            0000G   CF          03 FB 0027A            CALLS    #3, PARSE_QUOTED_NAME
            0000G   CF          01 90 0027F            MOVB     #1, ANSI_NAME_SIZE
                                17 11 00284            BRB      23$
                           E4   AD 9F 00286 22$:       PUSHAB   DESCRIPT
                           0C   AE DD 00289            PUSHL    FILE_SPEC_PTR
                           14   AE DD 0028C            PUSHL    FILE_SPEC_LEN
                                7E D4 0028F            CLRL     -(SP)
            0000G   CF          04 FB 00291            CALLS    #4, PARSE_NAME_TYPE
                    04          50 E8 00296            BLBS     R0, 23$
                         0818   8F BF 00299            CHMU     #2072
                        0000G   CF 95 0029D 23$:       TSTB     ANSI_NAME_SIZE
                                24 15 002A1            BLEQ     24$
               E4   AD     4F   8F 9A 002A3            MOVZBL   #79, DESCRIPT
               E8   AD  0000G   CF 9E 002A8            MOVAB    WORK_AREA, DESCRIPT+4
                           E4   AD 9F 002AE            PUSHAB   DESCRIPT
                           24   AE 9F 002B1            PUSHAB   FILE_ID
                    7E     4F   8F 9A 002B4            MOVZBL   #79, -(SP)
                                7E D4 002B8            CLRL     -(SP)
            0000G   CF          04 FB 002BA            CALLS    #4, PARSE_NAME_TYPE
                    05          50 E9 002BF            BLBC     R0, 24$
            0000G   CF          01 8E 002C2            MNEGB    #1, ANSI_NAME_SIZE
                    50  0000G   CF D0 002C7 24$:       MOVL     HDR1, R0
04    A0       20   AE          11 28 002CC            MOVC3    #17, FILE_ID, 4(R0)
                    56  0000G   CF D0 002D2            MOVL     HDR4, R6
05    A6       31   AE          3E 28 002D7            MOVC3    #62, FILE_ID+17, 5(R6)
                    50     34   AB D0 002DD            MOVL     52(CURRENT_VCB), MVL
                    11     0C   AE D1 002E1            CMPL     FILE_SPEC_[EN, #17
                                13 1A 002E5            BGTRU    26$
                    03     22   A0 91 002E7            CMPB     34(MVL), #3
                                05 1B 002EB            BLEQU    25$
                           04   A6 94 002ED            CLRB     4(R6)
                                33 11 002F0            BRB      28$
               43   A6   3030   8F B0 002F2 25$:       MOVW     #12336, 67(R6)
                                2B 11 002F8            BRB      28$
      51       0C   AE          11 C3 002FA 26$:       SUBL3    #17, FILE_SPEC_LEN, R1
                    03     22   A0 91 002FF            CMPB     34(MVL), #3
                                06 1B 00303            BLEQU    27$
               04   A6          51 90 00305            MOVB     R1, 4(R6)
                                1A 11 00309            BRB      28$
                    50          51 D0 0030B 27$:       MOVL     R1, LEN
               10   AE          02 D0 0030E            MOVL     #2, DESCR
               14   AE     43   A6 9E 00312            MOVAB    67(R6), DESCR+4
                                50 DD 00317            PUSHL    LEN
                           14   AE 9F 00319            PUSHAB   DESCR
                                7E D4 0031C            CLRL     -(SP)
                         FCC6   CF 9F 0031E            PUSHAB   CVT2
                    6A          04 FB 00322            CALLS    #4, SYS$FAO
                        0000G   CF B5 00325 28$:       TSTW     LOCAL_FIB+10
                                19 13 00329            BEQL     30$
                    7E          57 3C 0032B            MOVZWL   VERSION, -(SP)
                           24   AE 9F 0032E            PUSHAB   FILE_ID
                    7E     4F   8F 9A 00331            MOVZBL   #79, -(SP)
                                7E D4 00335            CLRL     -(SP)
                        0000G   CF 95 00337            TSTB     ANSI_NAME_SIZE
                                02 18 0033B            BGEQ     29$
                                6E D6 0033D            INCL     (SP)
                    0000G  CF                04  FB 0033F 29$:    CALLS   #4, RESULTANT_STRING                        ;
                               18            AE  9F 00344 30$:    PUSHAB  GEN_NUM_VER                                 ;
                        7E                   57  3C 00347         MOVZWL  VERSION, -(SP)                              ;
                    0000G  CF                02  FB 0034A         CALLS   #2, CALC_TAPE_VER                           ;
                       E4  AD                06  D0 0034F         MOVL    #6, DESCRIPT                                ;
         E8    AD   0000G  CF                23  C1 00353         ADDL3   #35, HDR1, DESCRIPT+4                       ;
                               1C            AE  DD 0035A         PUSHL   GEN_NUM_VER+4                               ;
                               1C            AE  DD 0035D         PUSHL   GEN_NUM_VER                                 ;
                               E4            AD  9F 00360         PUSHAB  DESCRIPT                                    ;
                                             7E  D4 00363         CLRL    -(SP)                                       ;
                             FC8F            CF  9F 00365         PUSHAB  P.AAJ                                       ;
                        6A                   05  FB 00369         CALLS   #5, SYS$FAO                                 ;
                                                 04 0036C         RET                                                 ; 0984

; Routine Size:  877 bytes,    Routine Base:  $CODE$ + 004C


;  605          0985  1
;  606          0986  1 END
;  607          0987  1
;  608          0988  0 ELUDOM





;                               PSECT SUMMARY
;
;      Name                        Bytes                        Attributes
;
;   $CODE$                           953  NOVEC,NOWRT,  RD ,  EXE,NOSHR,  LCL,  REL,  CON,NOPIC,ALIGN(2)
;   $LOCKEDD1$                        10  NOVEC,  WRT,  RD ,NOEXE,NOSHR,  LCL,  REL,  CON,NOPIC,ALIGN(2)




;                          Library Statistics
;
;                                        -------- Symbols --------        Pages       Processing
;      File                              Total    Loaded   Percent        Mapped      Time
;
;   _$255$DUA28:[SYSLIB]LIB.L32;1        18619       50         0         1000          00:01.9





;                               COMMAND QUALIFIERS

;      BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/LIS=LIS$:FRMHDR/OBJ=OBJ$:FRMHDR MSRC$:FRMHDR/UPDATE=(ENH$:FRMHDR)

;  609          0989  0
; Size:         877 code + 86 data bytes
; Run Time:        00:19.9
; Elapsed Time:       00:38.7
; Lines/CPU Min:        2989
; Lexemes/CPU-Min: 23271
; Memory Used:  299 pages
; Compilation Complete
```

0254 AH-BT13A-SE
VAX/VMS V4.0

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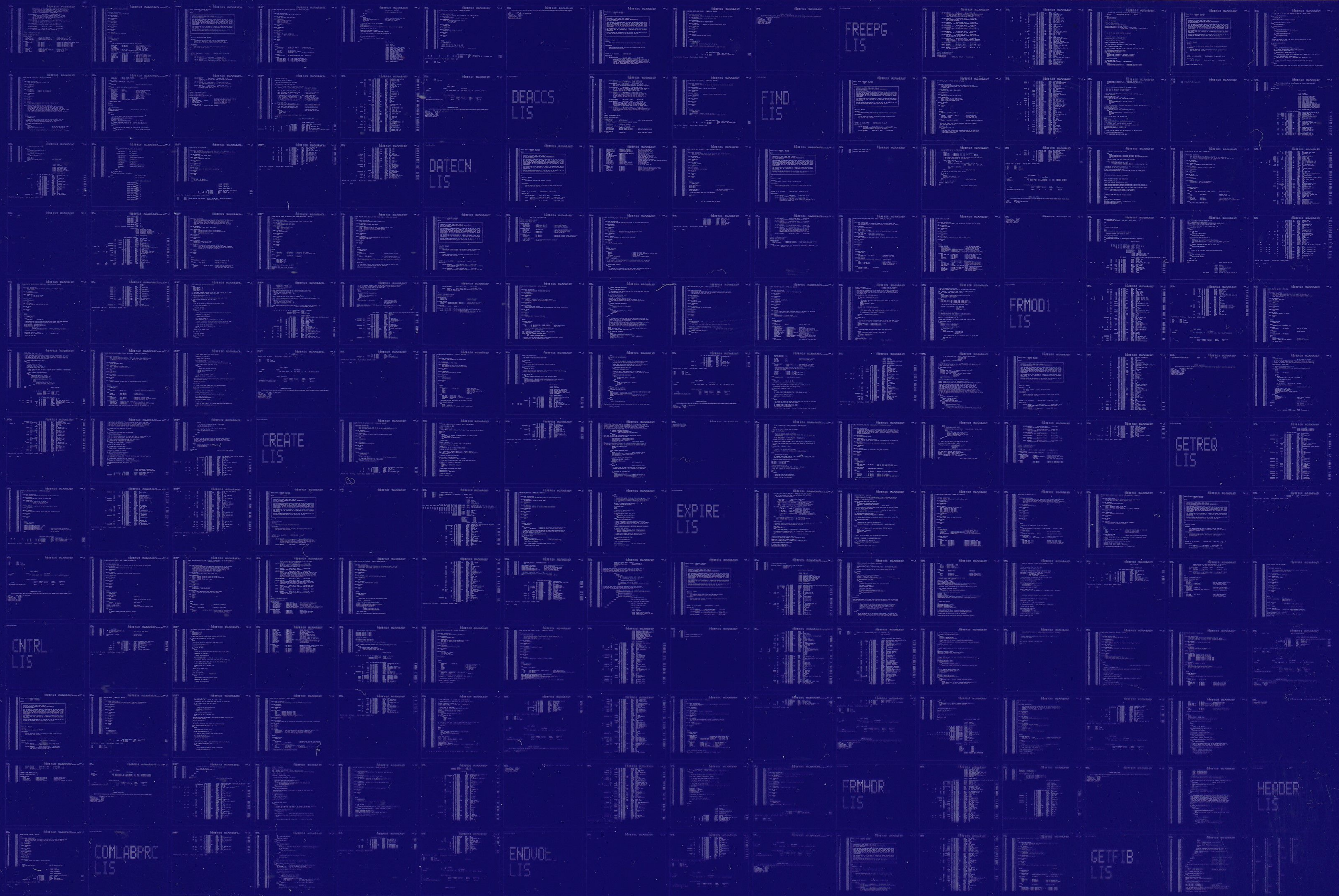

FREEPG
LIS

DEACCS
LIS

FIND
LIS

DATECN
LIS

FRMOD1
LIS

CREATE
LIS

GETREQ
LIS

EXPIRE
LIS

CNTRL
LIS

FRMHDR
LIS

HEADER
LIS

COMLABPRC
LIS

ENDVOL
LIS

GETFIB
LIS