D 16

```
FFFFFFFFFFFFFFF        111              111           AAAAAAAAA
FFFFFFFFFFFFFFF        111              111           AAAAAAAAA
FFFFFFFFFFFFFFF        111              111           AAAAAAAAA
FFF                 111111           111111        AAA         AAA
FFF                 111111           111111        AAA         AAA
FFF                 111111           111111        AAA         AAA
FFF                    111              111        AAA         AAA
FFF                    111              111        AAA         AAA
FFF                    111              111        AAA         AAA
FFFFFFFFFFFF           111              111        AAA         AAA
FFFFFFFFFFFF           111              111        AAA         AAA
FFFFFFFFFFFF           111              111        AAA         AAA
FFF                    111              111        AAAAAAAAAAAAAAA
FFF                    111              111        AAAAAAAAAAAAAAA
FFF                    111              111        AAAAAAAAAAAAAAA
FFF                    111              111        AAA         AAA
FFF                    111              111        AAA         AAA
FFF                    111              111        AAA         AAA
FFF                 111111111        111111111     AAA         AAA
FFF                 111111111        111111111     AAA         AAA
FFF                 111111111        111111111     AAA         AAA
```

```
**FILE**ID**GETFIB                                   L 11



  GGGGGGGG  EEEEEEEEEE  TTTTTTTTTT  FFFFFFFFFF    IIIIII    BBBBBBBB
  GGGGGGGG  EEEEEEEEEE  TTTTTTTTTT  FFFFFFFFFF    IIIIII    BBBBBBBB
GG          EE              TT      FF              II      BB      BB
GG          EE              TT      FF              II      BB      BB
GG          EE              TT      FF              II      BB      BB
GG          EE              TT      FF              II      BB      BB
GG          EEEEEEEE        TT      FFFFFFFF        II      BBBBBBBB
GG          EEEEEEEE        TT      FFFFFFFF        II      BBBBBBBB
GG  GGGGGG  EE              TT      FF              II      BB      BB
GG  GGGGGG  EE              TT      FF              II      BB      BB
GG      GG  EE              TT      FF              II      BB      BB      ....
GG      GG  EE              TT      FF              II      BB      BB      ....
  GGGGGG    EEEEEEEEEE      TT      FF            IIIIII    BBBBBBBB        ....
  GGGGGG    EEEEEEEEEE      TT      FF            IIIIII    BBBBBBBB        ....

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
```

GET
V04

```
0 MODULE GETFIB (
0                 LANGUAGE (BLISS32),
0                 IDENT = 'V04-000'
0                 ) =
1 BEGIN
1
1 !
1 !****************************************************************************
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1 !*                                                                          *
1 !****************************************************************************
1
1 !++
1 !
1 ! FACILITY:  F11ACP Structure Level 1
1 !
1 ! ABSTRACT:
1 !
1 !       This routine obtains the address of the FIB for this operation.
1 !
1 ! ENVIRONMENT:
1 !
1 !       STARLET operating system, including privileged system services
1 !       and internal exec routines.
1 !
1 !--
1 !
1 !
1 ! AUTHOR:  Andrew C. Goldstein,  CREATION DATE:  7-Jan-1977  01:02
1 !
1 ! MODIFIED BY:
1 !
1 !       V03-001 LMP0219         L. Mark Pilant,         24-Mar-1984  23:15
1 !               Preset FIB$L_ACL_STATUS to SS$_NORMAL.
1 !
1 !       A0100   ACG0001         Andrew C. Goldstein,  10-Oct-1978  20:01
1 !               Previous revision history moved to F11A.REV
1 !
1 !**
```

```
1
1
1 LIBRARY 'SYS$LIBRARY:LIB.L32';
1 REQUIRE 'SRC$:FCPDEF.B32';
```

```
1 GLOBAL ROUTINE GET_FIB (ABD) =
1
1 !++
1 !
1 ! FUNCTIONAL DESCRIPTION:
1 !
1 !       This routine obtains the address of the FIB for this operation.
1 !       It copies the FIB from the buffer packet into local storage
1 !       and zero extends it to maximum length.
1 !
1 ! CALLING SEQUENCE:
1 !       GET_FIB (ARG1)
1 !
1 ! INPUT PARAMETERS:
1 !       ARG1: buffer descriptor list
1 !
1 ! IMPLICIT INPUTS:
1 !       CURRENT_WINDOW: address of user's window or 0
1 !       IO_PACKET: address of user's I/O packet
1 !
1 ! OUTPUT PARAMETERS:
1 !       NONE
1 !
1 ! IMPLICIT OUTPUTS:
1 !       NONE
1 !
1 ! ROUTINE VALUE:
1 !       address of FIB
1 !
1 ! SIDE EFFECTS:
1 !       file ID may be written into FIB
1 !       channel window pointer write-back inhibited
1 !       result string buffers zeroed
1 !
1 !--
1
2 BEGIN
2
2 MAP
2       ABD             : REF BBLOCKVECTOR [,ABD$C_LENGTH];
2                                       ! buffer descriptors
2
2 LOCAL
2       FCB             : REF BBLOCK,   ! FCB of file
2       FIBL;                           ! length of user FIB
2
2 EXTERNAL
2       LOCAL_FIB       : BBLOCK,       ! internal copy of user FIB
2       IO_PACKET       : REF BBLOCK,   ! I/O packet of this operation
2       PRIMARY_FCB     : REF BBLOCK,   ! FCB of current file
2       CURRENT_FIB     : REF BBLOCK,   ! pointer to current FIB in use
2       CURRENT_WINDOW  : REF BBLOCK;   ! user's window
2
2
2 ! Get the length of the user-supplied FIB. If there is a window,
2 ! and there is no user FIB, use the file ID from
2 ! the window's FCB. Also use the FCB's file ID if the file number
```

```
2 ! in the user FIB is zero.
2 !
2
2 FIBL = .ABD[ABD$C_FIB, ABD$W_COUNT];
2
2 CH$COPY (.FIBL,
2         .ABD[ABD$C_FIB, ABD$W_TEXT] + ABD[ABD$C_FIB, ABD$W_TEXT] + 1,
2         0,
2         FIB$C_LENGTH,
2         LOCAL_FIB);
2 CURRENT_FIB = LOCAL_FIB;
2
2 LOCAL_FIB[FIB$L_ACL_STATUS] = SS$_NORMAL;                 ! Preset to success
2
2 IF .CURRENT_WINDOW NEQ 0
2 THEN
3     BEGIN
3     FCB = .CURRENT_WINDOW[WCB$L_FCB];
3     IF .LOCAL_FIB[FIB$W_FID_NUM] EQL 0
3     THEN CH$MOVE (FIB$S_FID, FCB[FCB$W_FID], LOCAL_FIB[FIB$W_FID]);
3
3 ! If the file ID in the FIB does not match that in the FCB, this operation
3 ! is not on the open file; clear the FCB and window addresses (except in
3 ! the case of a DEACCESS, in which we force the file ID to that of the open
3 ! file and signal an error).
3 !
3
3     IF .LOCAL_FIB[FIB$W_FID_NUM] NEQ .FCB[FCB$W_FID_NUM]
3     OR .LOCAL_FIB[FIB$W_FID_RVN] NEQ .FCB[FCB$W_FID_RVN]
3     THEN
4         BEGIN
4         IF .IO_PACKET[IRP$V_FCODE] EQL IO$_DEACCESS
4         THEN
5             BEGIN
5             CH$MOVE (FIB$S_FID, FCB[FCB$W_FID], LOCAL_FIB[FIB$W_FID]);
5             ERR_STATUS (SS$_BADPARAM);
5             END
4         ELSE
5             BEGIN
5             CURRENT_WINDOW = 0;
5             PRIMARY_FCB = 0;
4             END;
3         END;
3     END
3
3 ! If there is no file open, there must be a minimum FIB.
3 !
3
2 ELSE
3     BEGIN
3     IF .FIBL LSS FIB$C_ACCDATA
3     THEN ERR_EXIT (SS$_INSFARG);
2     END;
2
2 ! If the directory ID is -1,-1, convert it to 4,4,0 to be compatible with
2 ! the old RSX MFD kluge.
2 !
```

```
;   177        0490  2
;   178        0491  2 IF .LOCAL_FIB[FIB$W_DID_NUM] EQL 65535
;   179        0492  2 AND .LOCAL_FIB[FIB$W_DID_SEQ] EQL 65535
;   180        0493  2 THEN
;   181        0494  3     BEGIN
;   182        0495  3     LOCAL_FIB[FIB$W_DID_NUM] = 4;
;   183        0496  3     LOCAL_FIB[FIB$W_DID_SEQ] = 4;
;   184        0497  3     LOCAL_FIB[FIB$W_DID_RVN] = 0;
;   185        0498  2     END;
;   186        0499  2
;   187        0500  2 RETURN LOCAL_FIB;
;   188        0501  2
;   189        0502  1 END;                                        ! end of routine GET_FIB


                                                                  .TITLE  GETFIB
                                                                  .IDENT  \V04-000\

                                                                  .EXTRN  LOCAL_FIB, IO_PACKET
                                                                  .EXTRN  PRIMARY_FCB, CURRENT_FIB
                                                                  .EXTRN  CURRENT_WINDOW, USER_STATUS

                                                                  .PSECT  $CODE$,NOWRT,2

                                              01FC 00000          .ENTRY  GET_FIB, Save R2,R3,R4,R5,R6,R7,R8       ; 0376
                          58 00000000G   00   9E 00002          MOVAB   USER_STATUS, R8                          ;
                          57     0000G   CF   9E 00009          MOVAB   LOCAL_FIB+4, R7                          ;
                          50        04   AC   D0 0000E          MOVL    ABD, R0                                  ; 0436
                          56        0A   A0   3C 00012          MOVZWL  10(R0), FIBL                             ;
                          51        08   A0   9E 00016          MOVAB   8(R0), R1                                ; 0439
                          50             61   3C 0001A          MOVZWL  (R1), R0                                 ;
 0040   8F        00      01 A140        56   2C 0001D          MOVC5   FIBL, 1(R1)[R0], #0, #64, LOCAL_FIB      ; 0438
                                    FC   A7      00026
               0000G   CF           FC   A7   9E 00028          MOVAB   LOCAL_FIB, CURRENT_FIB                   ; 0443
                  30   A7                01   D0 0002E          MOVL    #1, LOCAL_FIB+52                         ; 0445
                          50     0000G   CF   D0 00032          MOVL    CURRENT_WINDOW, R0                       ; 0447
                                         3E   13 00037          BEQL    4$                                       ;
                          56        18   A0   D0 00039          MOVL    24(R0), FCB                              ; 0450
                                         67   B5 0003D          TSTW    LOCAL_FIB+4                              ; 0451
                                         05   12 0003F          BNEQ    1$                                       ;
                  67      24   A6        06   28 00041          MOVC3   #6, 36(FCB), LOCAL_FIB+4                 ; 0452
                          24   A6        67   B1 00046 1$:      CMPW    LOCAL_FIB+4, 36(FCB)                     ; 0460
                                         07   12 0004A          BNEQ    2$                                       ;
                          28   A6   04   A7   B1 0004C          CMPW    LOCAL_FIB+8, 40(FCB)                     ; 0461
                                         2E   13 00051          BEQL    5$                                       ;
                          50     0000G   CF   D0 00053 2$:      MOVL    IO_PACKET, R0                            ; 0464
         34      20   A0      06         00   ED 00058          CMPZV   #0, #6, 32(R0), #52                      ;
                                         0D   12 0005E          BNEQ    3$                                       ;
                  67      24   A6        06   28 00060          MOVC3   #6, 36(FCB), LOCAL_FIB+4                 ; 0467
                               19        68   E9 00065          BLBC    USER_STATUS, 5$                          ; 0468
                               68        14   B0 00068          MOVW    #20, USER_STATUS                         ;
                                         14   11 0006B          BRB     5$                                       ; 0464
                                 0000G   CF   D4 0006D 3$:      CLRL    CURRENT_WINDOW                           ; 0472
                                 0000G   CF   D4 00071          CLRL    PRIMARY_FCB                              ; 0473
                                         0A   11 00075          BRB     5$                                       ; 0460
                               0A        56   D1 00077 4$:      CMPL    FIBL, #10                                ; 0483
                                         05   18 0007A          BGEQ    5$                                       ;
```

```
                                     0114   8F   BF 0007C          CHMU    #276                                              ; 0484
                                                 04 00080          RET                                                       ;
                         FFFF   8F     06   A7   B1 00081 5$:      CMPW    LOCAL_FIB+10, #65535                              ; 0491
                                            13   12 00087          BNEQ    6$                                                ;
                         FFFF   8F     08   A7   B1 00089          CMPW    LOCAL_FIB+12, #65535                              ; 0492
                                            0B   12 0008F          BNEQ    6$                                                ;
                           06   A7 00040004 8F   D0 00091          MOVL    #262148, LOCAL_FIB+10                             ; 0495
                                       0A   A7   B4 00099          CLRW    LOCAL_FIB+14                                      ; 0497
                                50     FC   A7   9E 0009C 6$:      MOVAB   LOCAL_FIB, R0                                     ; 0500
                                                 04 000A0          RET                                                       ; 0502

; Routine Size:  161 bytes,    Routine Base:  $CODE$ + 0000


;  190          0503  1
;  191          0504  1 END
;  192          0505  0 ELUDOM




;                                    PSECT SUMMARY
;
;       Name                      Bytes                          Attributes
;
;   $CODE$                             161  NOVEC,NOWRT,  RD ,  EXE,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        24         0         1000            00:01.9



;                                      COMMAND QUALIFIERS

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

; Size:           161 code + 0 data bytes
; Run Time:          00:07.4
; Elapsed Time:      00:27.9
; Lines/CPU Min:      4105
; Lexemes/CPU-Min: 15105
; Memory Used:   97 pages
; Compilation Complete
```

0165 AH-BT13A-SE
VAX/VMS V4.0

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