H 5

```
FFFFFFFFFFFFFFF         111              111         XXX         XXX
FFFFFFFFFFFFFFF         111              111         XXX         XXX
FFFFFFFFFFFFFFF         111              111         XXX         XXX
FFF                  111111           111111         XXX         XXX
FFF                  111111           111111         XXX         XXX
FFF                  111111           111111         XXX         XXX
FFF                     111              111            XXX   XXX
FFF                     111              111            XXX   XXX
FFF                     111              111            XXX   XXX
FFFFFFFF.FFF            111              111               XXX
FFFFFFFFFFFF            111              111               XXX
FFFFFFFFFFFF            111              111               XXX
FFF                     111              111            XXX   XXX
FFF                     111              111            XXX   XXX
FFF                     111              111            XXX   XXX
FFF                     111              111         XXX         XXX
FFF                     111              111         XXX         XXX
FFF                     111              111         XXX         XXX
FFF                  111111111        111111111      XXX         XXX
FFF                  111111111        111111111      XXX         XXX
FFF                  111111111        111111111      XXX         XXX
```

```
_$25

Symb
----
IOC1
IO_C
IO_C
IO_D
IO_F
IO_S
KILL

KILL
KILL
LB_E
LB_D
LB_F
LB_H
LB_L
LOCA
LOCA
LOCK

LOCK
LOCK
LOCK
LOC_
LOC_
L_CO
L_CO
L_DA
L_DA
MAIN
MAKE
MAKE
MAKE
MAKE
MAKE
MAKE

MAKE
MAKE
MAP_
MAP_

MAP
MARK
MARK
MARK
MARK
MARK
```

```
**FILE**ID**GETREQ
```

```
  GGGGGGGG  EEEEEEEEEE  TTTTTTTTTT  RRRRRRRR    EEEEEEEEEE    QQQQQQ
  GGGGGGGG  EEEEEEEEEE  TTTTTTTTTT  RRRRRRRR    EEEEEEEEEE    QQQQQQ
GG          EE              TT      RR      RR  EE          QQ      QQ
GG          EE              TT      RR      RR  EE          QQ      QQ
GG          EE              TT      RR      RR  EE          QQ      QQ
GG          EE              TT      RR      RR  EE          QQ      QQ
GG          EEEEEEEE        TT      RRRRRRRR    EEEEEEEE    QQ      QQ
GG          EEEEEEEE        TT      RRRRRRRR    EEEEEEEE    QQ      QQ
GG  GGGGGG  EE              TT      RR  RR      EE          QQ  QQ  QQ
GG  GGGGGG  EE              TT      RR  RR      EE          QQ  QQ  QQ
GG      GG  EE              TT      RR    RR    EE          QQ    QQ        ....
GG      GG  EE              TT      RR    RR    EE          QQ    QQ        ....
  GGGGGG    EEEEEEEEEE      TT      RR      RR  EEEEEEEEEE    QQQQ  QQ      ....
  GGGGGG    EEEEEEEEEE      TT      RR      RR  EEEEEEEEEE    QQQQ  QQ      ....


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

; R

```
0 MODULE GETREQ (
0                 LANGUAGE (BLISS32),
0                 IDENT = 'V04-000'
0                 ) =
1 BEGIN
1
1 !
1 !****************************************************************************
1 !*                                                                          *
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1 !*                                                                          *
1 !*                                                                          *
1 !****************************************************************************
1
1 !++
1 !
1 ! FACILITY:  F11ACP Structure Level 1
1 !
1 ! ABSTRACT:
1 !
1 !       This routine gets the next I/O request from the ACP queue.
1 !       If no requests are queued, it hibernates.
1 !
1 ! ENVIRONMENT:
1 !
1 !       STARLET operating system, including privileged system services
1 !       and internal exec routines. This routine must be called
1 !       in kernel mode.
1 !
1 !--
1 !
1 !
1 ! AUTHOR:  Andrew C. Goldstein,  CREATION DATE:  19-Dec-1976  17:26
1 !
1 ! MODIFIED BY:
1 !
1 !       V03-012 CDS0008         Christian D. Saether    29-July-1984
1 !               Reflect the addition of a fourth buffer pool.
1 !
1 !       V03-011 CDS0007         Christian D. Saether     8-July-1984
1 !               Break up routine into more blocks with their own
```

```
1 !                     bind_common declaration so compiler does not
1 !                     generate so many cse pointers.
1 !
1 !             V03-010 ACG0424         Andrew C. Goldstein,    26-Apr-1984  21:50
1 !                     Don't convert BYPASS to SYSPRV in building LOCAL_ARB;
1 !                     include READALL in CLF_SYSPRV.
1 !
1 !             V03-009 LMP0221         L. Mark Pilant,         27-Mar-1984  13:22
1 !                     Change UCB$L_OWNUIC to ORB$L_OWNER and UCB$W_VPROT to
1 !                     ORB$W_PROT.
1 !
1 !             V03-008 ACG0408         Andrew C. Goldstein,    20-Mar-1984  16:13
1 !                     Reduce size of LOCAL_ARB
1 !
1 !             V03-007 CDS0006         Christian D. Saether    13-Feb-1984
1 !                     Do not initialize BUFFER_NEW anymore - it's gone.
1 !
1 !             V03-006 CDS0005         Christian D. Saether    19-Dec-1983
1 !                     Use BIND_COMMON macro to reduce number of
1 !                     external declarations.
1 !                     Move COMMON initialization and context save/restore
1 !                     routines here such that COMMON module contains only
1 !                     data declarations.
1 !
1 !             V03-005 CDS0004         Christian D. Saether    15-Sep-1983
1 !                     Call the per request init routine here only if
1 !                     a packet is actually present.
1 !
1 !             V03-004 CDS0003         Christian D. Saether     2-Sep-1983
1 !                     Don't save channel ucb here.  It may have already
1 !                     been changed from a previous operation that got
1 !                     put on the queue.
1 !
1 !             V03-003 CDS0002         Christian D. Saether    27-Aug-1983
1 !                     Move get_ccb routine to inifcp module.  Use IO_CCB
1 !                     instead of calling get_ccb.
1 !
1 !             V03-002 CDS0001         C Saether               18-Jul-1982
1 !                     Changes to support procedure based file system.
1 !
1 !             V03-001 LMP0037         L. Mark Pilant,         28-Jun-1982  15:10
1 !                     Remove the addressing mode module switch.
1 !
1 !             V02-008 LMP0003         L. Mark Pilant,          9-Dec-1981  13:30
1 !                     Make external references use general mode addressing
1 !
1 !             V02-007 ACG38100        Andrew C. Goldstein,     3-Jun-1981  12:00
1 !                     Fix granting of SYSPRV to volume owner
1 !
1 !             V02-006 ACG0167         Andrew C. Goldstein,    16-Apr-1980  19:26
1 !                     Previous revision history moved to F11B.REV
1 !**
1
1
1 LIBRARY 'SYS$LIBRARY:LIB.L32';
1 REQUIRE 'SRC$:FCPDEF.B32';
1
```

```
;  115          1105  1 FORWARD ROUTINE
;  116          1106  1         INIT_COMMON     : L_NORM NOVALUE; ! initialize common
;  117          1107  1
```

```
1 GLOBAL ROUTINE GET_REQUEST : L_NORM =
1
1 !++
1 !
1 ! FUNCTIONAL DESCRIPTION:
1 !
1 !       This routine gets the next I/O request from the ACP queue.
1 !
1 ! CALLING SEQUENCE:
1 !       GET_REQUEST ()
1 !
1 ! INPUT PARAMETERS:
1 !       NONE
1 !
1 ! IMPLICIT INPUTS:
1 !       XQP_QUEUE: Queue of request packets for this process
1 !       IO_CHANNEL: I/O channel number
1 !
1 ! OUTPUT PARAMETERS:
1 !       NONE
1 !
1 ! IMPLICIT OUTPUTS:
1 !       CURRENT_UCB: address of UCB of request
1 !       CURRENT_VCB: address of VCB of request
1 !       CURRENT_WINDOW: window of file if accessed
1 !       PRIMARY_FCB: FCB of file if accessed
1 !
1 ! ROUTINE VALUE:
1 !       address of request I/O packet
1 !       0 if no more packets.
1 !
1 ! SIDE EFFECTS:
1 !       I/O channel assigned to device of request
1 !
1 !--
1
2 BEGIN
2
2 LOCAL
2       ORB             : REF BBLOCK,   ! local address of ORB
2       ABD             : REF BBLOCKVECTOR [,ABD$C_LENGTH],
2                                       ! pointer to buffer descriptor packet
2       ARB             : REF BBLOCK,   ! pointer to caller's ARB
2       PACKET          : REF BBLOCK;   ! address of new I/O packet
2
2 EXTERNAL
2       EXE$GL_SYSUIC   : ADDRESSING_MODE (ABSOLUTE);
2                                       ! highest SYSTEM UIC
2
2 BIND_COMMON;
2
2 EXTERNAL ROUTINE
2       PMS_START       : L_NORM;       ! init pms database.
2
2 ! Attempt to dequeue a packet. If unsuccessful, return 0.
2 !
2
```

```
2 IF REMQUE (.XQP_QUEUE, PACKET)
2 THEN RETURN 0;
2
2 ! Initialize common and start pms monitering.
2 !
2
2 PMS_START ();
2 INIT_COMMON ();
2
2 ! First check the type code in the packet.
2 !
2
2 IF .PACKET[IRP$B_TYPE] NEQ DYN$C_IRP
2 THEN BUG_CHECK (NOTIRPAQB, FATAL, 'Not IRP pointer in AQB');
2
2 ! Set up the UCB and VCB pointers and assign the I/O channel to the UCB.
2 ! Check the type codes on all packets and control blocks.
2 !
2
2 CURRENT_UCB = .PACKET[IRP$L_UCB];
2 IF .CURRENT_UCB[UCB$B_TYPE] NEQ DYN$C_UCB
2 THEN BUG_CHECK (NOTUCBIRP, FATAL, 'Not UCB pointer in IRP');
2
2 CURRENT_FIB = LOCAL_FIB;
2
2 ! Get the window and FCB addresses if there is a file open on the channel.
2 ! If the low bit of the window pointer is on, ignore the pointer (deaccess pending).
2 !
2
2 CURRENT_WINDOW = .PACKET[IRP$L_WIND];
2 IF .(PACKET[IRP$L_WIND])<0,1>
2 THEN CURRENT_WINDOW = 0;
2 IF .(PACKET[IRP$L_WIND])<1,2> NEQ 0
2 THEN BUG_CHECK (BADWCBPT, FATAL, 'Bad WCB pointer in IRP');
2
2 IF .CURRENT_WINDOW NEQ 0
2 THEN
3     BEGIN
3     IF .CURRENT_WINDOW[WCB$B_TYPE] NEQ DYN$C_WCB
3     THEN BUG_CHECK (NOTWCBIRP, FATAL, 'Not WCB Pointer in IRP');
3
3     IF .CURRENT_WINDOW[WCB$V_NOTFCP]
3     THEN BUG_CHECK (NOTFCPWCB, FATAL, 'Not FCP window in IRP');
3
3     CURRENT_UCB = .CURRENT_WINDOW[WCB$L_ORGUCB];
3     IF .CURRENT_UCB[UCB$B_TYPE] NEQ DYN$C_UCB
3     THEN BUG_CHECK (NOTUCBWCB, FATAL, 'Bad UCB pointer in window');
3
3     PRIMARY_FCB = .CURRENT_WINDOW[WCB$L_FCB];
3     IF .PRIMARY_FCB[FCB$B_TYPE] NEQ DYN$C_FCB
3     THEN BUG_CHECK (NOTFCBWCB, FATAL, 'Bad FCB pointer in window');
3
3     CH$MOVE (FID$C_LENGTH, PRIMARY_FCB[FCB$W_FID], LOCAL_FIB[FIB$W_FID]);
2     END;
2 ORB = .CURRENT_UCB[UCB$L_ORB];
2
2 CURRENT_VCB = .CURRENT_UCB[UCB$L_VCB];
```

```
2 IF .CURRENT_VCB[VCB$B_TYPE] NEQ DYN$C_VCB
2 THEN BUG_CHECK (NOTVCBUCB, FATAL, 'Not VCB pointer in UCB');
2
2 CURRENT_RVT = .CURRENT_VCB[VCB$L_RVT];
2 IF .CURRENT_RVT[RVT$B_TYPE] NEQ DYN$C_RVT
2 AND .CURRENT_RVT[RVT$B_TYPE] NEQ DYN$C_UCB
2 THEN BUG_CHECK (NOTRVTVCB, FATAL, 'Not RVT pointer in VCB');
2
2 CURRENT_RVN = .CURRENT_VCB[VCB$W_RVN];
2
2 ! Stuff the UCB of the device we want into our channel.
2 !
2
2 IO_CCB[CCB$L_UCB] = .CURRENT_UCB;
2
2 ! If this is a normal file processor request (as opposed to a window turn),
2 ! clear the byte count in the descriptor for the channel window pointer
2 ! to inhibit write-back. Set the spool file bit is this is I/O to a spool file.
2 ! This is denoted for ACP functions by noting that IRP$L_UCB is different
2 ! from IRP$L_MEDIA (the latter containing the spooled device UCB address.
2 !
2
2 IF .PACKET[IRP$V_COMPLX]
2 THEN
3     BEGIN
3     ABD = .BBLOCK [.PACKET[IRP$L_SVAPTE], AIB$L_DESCRIPT];
3     ABD[ABD$C_WINDOW, ABD$W_COUNT] = 0;
3     IF .PACKET[IRP$L_UCB] NEQ .PACKET[IRP$L_MEDIA]
3     THEN CLEANUP_FLAGS[CLF_SPOOLFILE] = 1;
3     END
3
3 ! If there is no buffer packet, the function must be an ACP control function.
3 !
3
2 ELSE
3     BEGIN
3     IF .PACKET[IRP$V_FCODE] GTRU IO$_LOGICAL
3     AND .PACKET[IRP$V_FCODE] NEQ IO$_ACPCONTROL
3     THEN BUG_CHECK (NOBUFPCKT, FATAL, 'Required buffer packet not present');
2     END;
2
2 ! Set the system privilege flag bit, based on the caller's UIC and
2 ! privileges.
2 !
2
2 ARB = .PACKET[IRP$L_ARB];
2 CH$MOVE (ARB$C_HEADER, .ARB, LOCAL_ARB);
2 IF .(ARB[ARB$L_UIC])<16,16> LEQU .EXE$GL_SYSUIC
2 OR
3     BEGIN
3     IF .ARB[ARB$L_UIC] EQL .ORB[ORB$L_OWNER]
3     THEN
4         BEGIN
4         CLEANUP_FLAGS[CLF_VOLOWNER] = 1;
4         1
4         END
3     ELSE 0
```

```
;  290          1279  3       END
;  291          1280  2 OR
;  292          1281  3       BEGIN
;  293          1282  4       IF (.(ARB[ARB$L_UIC])<16,16> EQL .(ORB[ORB$L_OWNER])<16,16>
;  294          1283  4       AND .BBLOCK [LOCAL_ARB[ARB$Q_PRIV], PRV$V_GRPPRV])
;  295          1284  3       THEN
;  296          1285  4           BEGIN
;  297          1286  4           CLEANUP_FLAGS[CLF_VOLOWNER] = 1;
;  298          1287  4           CLEANUP_FLAGS[CLF_GRPOWNER] = 1;
;  299          1288  4           1
;  300          1289  4           END
;  301          1290  3       ELSE 0
;  302          1291  3       END
;  303          1292  2 THEN BBLOCK [LOCAL_ARB[ARB$Q_PRIV], PRV$V_SYSPRV] = 1;
;  304          1293  2
;  305          1294  2 IF .BBLOCK [LOCAL_ARB[ARB$Q_PRIV], PRV$V_SYSPRV]
;  306          1295  2 OR .BBLOCK [LOCAL_ARB[ARB$Q_PRIV], PRV$V_BYPASS]
;  307          1296  2 OR .BBLOCK [LOCAL_ARB[ARB$Q_PRIV], PRV$V_READALL]
;  308          1297  2 THEN CLEANUP_FLAGS[CLF_SYSPRV] = 1;
;  309          1298  2
;  310          1299  2 RETURN .PACKET;
;  311          1300  2
;  312          1301  1 END;                                        ! end of routine GETREQ


                                                                      .TITLE   GETREQ
                                                                      .IDENT   \V04-000\

                                                                      .EXTRN   EXE$GL_SYSUIC, PMS_START
                                                                      .EXTRN   BUG$_NOTIRPAQB, BUG$_NOTUCBIRP
                                                                      .EXTRN   BUG$_BADWCBPT, BUG$_NOTWCBIRP
                                                                      .EXTRN   BUG$_NOTFCPWCB, BUG$_NOTUCBWCB
                                                                      .EXTRN   BUG$_NOTFCBWCB, BUG$_NOTVCBUCB
                                                                      .EXTRN   BUG$_NOTRVTVCB, BUG$_NOBUFPCKT

                                                                      .PSECT   $CODE$,NOWRT,2

                                                03FC 00000            .ENTRY   GET_REQUEST, Save R2,R3,R4,R5,R6,R7,R8,R9   ; 1108
                           57         94    AA   9E 00002             MOVAB    -108(BASE), R7                               ; 1154
                           52         0C    AA   9E 00006             MOVAB    12(BASE), R2                                 ;
                           53       0204    CA   9E 0000A             MOVAB    516(BASE), R3                                ;
                           58       0284    CA   9E 0000F             MOVAB    644(BASE), R8                                ;
                           56       FF40    DA   0F 00014             REMQUE   @-192(BASE), PACKET                          ; 1165
                                            03   1C 00019             BVC      1$                                           ;
                                          014A   31 0001B             BRW      20$                                          ;
                    0000G  CF               00   FB 0001E  1$:        CALLS    #0, PMS_START                                ; 1171
                    0000V  CF               00   FB 00023             CALLS    #0, INIT_COMMON                              ; 1172
                           0A         0A    A6   91 00028             CMPB     10(PACKET), #10                              ; 1177
                                            04   13 0002C             BEQL     2$                                           ;
                                              FEFF 0002E              BUGW                                                  ; 1178
                                             0000* 00030              .WORD    <BUG$_NOTIRPAQB!4>                           ;
                           67         1C    A6   D0 00032  2$:        MOVL     28(PACKET), (R7)                             ; 1184
                           50               67   D0 00036             MOVL     (R7), R0                                     ; 1185
                           10         0A    A0   91 00039             CMPB     10(R0), #16                                  ;
                                            04   13 0003D             BEQL     3$                                           ;
                                              FEFF 0003F              BUGW                                                  ; 1186
                                             0000* 00041              .WORD    <BUG$_NOTUCBIRP!4>                           ;
```

```
                  10    AA           53  D0 00043 3$:     MOVL    R3, 16(BASE)                                        ; 1188
                        62     18    A6  D0 00047         MOVL    24(PACKET), (R2)                                    ; 1194
                        02     18    A6  E9 0004B         BLBC    24(PACKET), 4$                                      ; 1195
                                     62  D4 0004F         CLRL    (R2)                                                ; 1196
                        06     18    A6  93 00051 4$:     BITB    24(PACKET), #6                                      ; 1197
                                     04  13 00055         BEQL    5$                                                  ;
                                       FEFF 00057         BUGW                                                        ; 1198
                                      0000* 00059         .WORD   <BJG$_BADWCBPT!4>                                   ;
                        50           62  D0 0005B 5$:     MOVL    (R2), R0                                            ; 1200
                                     4A  13 0005E         BEQL    10$                                                 ;
                        12     0A    A0  91 00060         CMPB    10(R0), #18                                         ; 1203
                                     04  13 00064         BEQL    6$                                                  ;
                                       FEFF 00066         BUGW                                                        ; 1204
                                      0000* 00068         .WORD   <BUG$_NOTWCBIRP!4>                                  ;
                        50           62  D0 0006A 6$:     MOVL    (R2), R0                                            ; 1206
           04     0B    A0           02  E1 0006D         BBC     #2, 11(R0), 7$                                      ;
                                       FEFF 00072         BUGW                                                        ; 1207
                                      0000* 00074         .WORD   <BUG$_NOTFCPWCB!4>                                  ;
                        50           62  D0 00076 7$:     MOVL    (R2), R0                                            ; 1209
                        67     10    A0  D0 00079         MOVL    16(R0), (R7)                                        ;
                        50           67  D0 0007D         MOVL    (R7), R0                                            ; 1210
                        10     0A    A0  91 00080         CMPB    10(R0), #16                                         ;
                                     04  13 00084         BEQL    8$                                                  ;
                                       FEFF 00086         BUGW                                                        ; 1211
                                      0000* 00088         .WORD   <BUG$_NOTUCBWCB!4>                                  ;
                        50           62  D0 0008A 8$:     MOVL    (R2), R0                                            ; 1213
                  08    AA     18    A0  D0 0008D         MOVL    24(R0), 8(BASE)                                     ;
                        50     08    AA  D0 00092         MOVL    8(BASE), R0                                         ; 1214
                        07     0A    A0  91 00096         CMPB    10(R0), #7                                          ;
                                     04  13 0009A         BEQL    9$                                                  ;
                                       FEFF 0009C         BUGW                                                        ; 1215
                                      0000* 0009E         .WORD   <BUG$_NOTFCBWCB!4>                                  ;
                        50     08    AA  D0 000A0 9$:     MOVL    8(BASE), R0                                         ; 1217
      04   A3     24    A0           06  28 000A4         MOVC3   #6, 36(R0), 4(R3)                                   ;
                        50           67  D0 000AA 10$:    MOVL    (R7), R0                                            ; 1219
                        59     1C    A0  D0 000AD         MOVL    28(R0), ORB                                         ;
                        50           67  D0 000B1         MOVL    (R7), R0                                            ; 1221
                  98    AA     34    A0  D0 000B4         MOVL    52(R0), -104(BASE)                                  ;
                        50     98    AA  D0 000B9         MOVL    -104(BASE), R0                                      ; 1222
                        11     0A    A0  91 000BD         CMPB    10(R0), #17                                         ;
                                     04  13 000C1         BEQL    11$                                                 ;
                                       FEFF 000C3         BUGW                                                        ; 1223
                                      0000* 000C5         .WORD   <BUG$_NOTVCBUCB!4>                                  ;
                        50     98    AA  D0 000C7 11$:    MOVL    -104(BASE), R0                                      ; 1225
                  9C    AA     20    A0  D0 000CB         MOVL    32(R0), -100(BASE)                                  ;
                        50     9C    AA  D0 000D0         MOVL    -100(BASE), R0                                      ; 1226
                        0E     0A    A0  91 000D4         CMPB    10(R0), #14                                         ;
                                     0A  13 000D8         BEQL    12$                                                 ;
                        10     0A    A0  91 000DA         CMPB    10(R0), #16                                         ; 1227
                                     04  13 000DE         BEQL    12$                                                 ;
                                       FEFF 000E0         BUGW                                                        ; 1228
                                      0000* 000E2         .WORD   <BUG$_NOTRVTVCB!4>                                  ;
                        50     98    AA  D0 000E4 12$:    MOVL    -104(BASE), R0                                      ; 1230
                  A0    AA     0E    A0  3C 000E8         MOVZWL  14(R0), -96(BASE)                                   ; 1235
                FF74    DA           67  D0 000ED         MOVL    (R7), @-140(BASE)                                   ; 1244
           14     2A    A6           03  E1 000F2         BBC     #3, 42(PACKET), 13$                                 ; 1247
                        50     2C    B6  D0 000F7         MOVL    @44(PACKET), ABD                                    ;
```

```
                                            02    A0  B4 000FB          CLRW    2(ABD)                                      ; 1248
                               38    A6     1C    A6  D1 000FE          CMPL    28(PACKET), 56(PACKET)                      ; 1249
                                                  1A  13 00103          BEQL    14$                                         ;
                                     6A     80    8F  88 00105          BISB2   #128, (BASE)                                ; 1250
                                                  14  11 00109          BRB     14$                                         ; 1244
           2F        20     A6       06           00  ED 0010B   13$:   CMPZV   #0, #6, 32(PACKET), #47                     ; 1258
                                                  0C  1B 00111          BLEQU   14$                                         ;
           38        20     A6       06           00  ED 00113          CMPZV   #0, #6, 32(PACKET), #56                     ; 1259
                                                  04  13 00119          BEQL    14$                                         ;
                                                    FEFF 0011B          BUGW                                                ; 1260
                                                   0000* 0011D          .WORD   <BUG$_NOBUFPCKT!4>                          ;
                                     57     58    A6  D0 0011F   14$:   MOVL    88(PACKET), ARB                             ; 1267
                            68       67           30  28 00123          MOVC3   #48, (ARB), (R8)                            ; 1268
00000000G  9F        3A     A7       10           00  ED 00127          CMPZV   #0, #16, 58(ARB), @#EXE$GL_SYSUIC           ; 1269
                                                  1C  1B 00131          BLEQU   16$                                         ;
                                     69     38    A7  D1 00133          CMPL    56(ARB), (ORB)                              ; 1272
                                                  06  12 00137          BNEQ    15$                                         ;
                               01    AA           10  88 00139          BISB2   #16, 1(BASE)                                ; 1275
                                                  10  11 0013D          BRB     16$                                         ;
                               02    A9     3A    A7  B1 0013F   15$:   CMPW    58(ARB), 2(ORB)                             ; 1282
                                                  0D  12 00144          BNEQ    17$                                         ;
                            08 04    A8           02  E1 00146          BBC     #2, 4(R8), 17$                              ; 1283
                               01    AA           30  88 0014B          BISB2   #48, 1(BASE)                                ; 1287
                               03    A8           10  88 0014F   16$:   BISB2   #16, 3(R8)                                  ; 1292
                            09       68           1C  E0 00153   17$:   BBS     #28, (R8), 18$                              ; 1294
                            05       68           1D  E0 00157          BBS     #29, (R8), 18$                              ; 1295
                            04 04    A8           03  E1 0015B          BBC     #3, 4(R8), 19$                              ; 1296
                               01    AA           01  88 00160   18$:   BISB2   #1, 1(BASE)                                 ; 1297
                                     50           56  D0 00164   19$:   MOVL    PACKET, R0                                  ; 1299
                                                      04 00167          RET                                                 ;
                                                  50  D4 00168   20$:   CLRL    R0                                          ; 1301
                                                      04 0016A          RET                                                 ;

; Routine Size:  363 bytes,    Routine Base:  $CODE$ + 0000
```

```
  ROUTINE INIT_COMMON : L_NORM NOVALUE =

1 !++
1 !
1 ! FUNCTIONAL DESCRIPTION:
1 !
1 !       This routine contains the impure data base for FCP, and is called
1 !       to initialize it.
1 !
1 ! CALLING SEQUENCE:
1 !       INIT_COMMON ()
1 !
1 ! INPUT PARAMETERS:
1 !       NONE
1 !
1 ! IMPLICIT INPUTS:
1 !       NONE
1 !
1 ! OUTPUT PARAMETERS:
1 !       NONE
1 !
1 ! IMPLICIT OUTPUTS:
1 !       NONE
1 !
1 ! ROUTINE VALUE:
1 !       NONE
1 !
1 ! SIDE EFFECTS:
1 !       DATABASE INITIALIZED
1 !
1 !--
1
2 BEGIN
2
2 BIND_COMMON;
2
2 EXTERNAL LITERAL
2       IMPURE_SIZE;
2
2 LOCAL
2       BFRQ;
2
2 ! Initialization consists of zeroing the impure area and then setting the
2 ! user request status to 1 (success).
2 ! Also init the per-process buffer queues.  These can be moved out of
2 ! per-request initialized common and only initialized at process creation.
2 !
2
2 CH$FILL (0, IMPURE_SIZE, IMPURE_START);
2 USER_STATUS[0] = 1;
2
2 BFRQ = BFR_LIST;
2
2 INCR POOL FROM 0 TO 3
2 DO
3     BEGIN
3     .BFRQ = .BFRQ;
```

```
;  371           1359  3      BFRQ = .BFRQ + 4;
;  372           1360  3      .BFRQ = .BFRQ - 4;
;  373           1361  3      BFRQ = .BFRQ + 4;
;  374           1362  2      END;
;  375           1363  2
;  376           1364  1  END;                                           ! end of routine INIT_COMMON



                                                                    .EXTRN  IMPURE_SIZE

                                                        003C 00000 INIT_COMMON:
                                                                    .WORD   Save R2,R3,R4,R5                                ; 1302
    0000G  8F          00            6E              00  2C 00002   MOVC5   #0, (SP), #0, #IMPURE_SIZE, -128(BASE)           ; 1350
                                              80     AA     00009
                                80   AA              01  D0 0000B   MOVL    #1, -128(BASE)                                  ; 1351
                                     50       CC     AA  9E 0000F   MOVAB   -52(BASE), BFRQ                                 ; 1353
                                                     51  D4 00013   CLRL    POOL                                            ; 1355
                                     80              50  D0 00015 1$:  MOVL    BFRQ, (BFRQ)+                                ; 1358
                                     80       FC     A0  9E 00018   MOVAB   -4(R0), (BFRQ)+                                 ; 1360
                       F5            51              03  F3 0001C   AOBLEQ  #3, POOL, 1$                                    ; 1355
                                                         04 00020   RET                                                     ; 1364

; Routine Size:  33 bytes,    Routine Base:  $CODE$ + 016B
```

```
1 GLOBAL ROUTINE SAVE_CONTEXT : L_NORM NOVALUE =
1
1 !++
1 !
1 ! FUNCTIONAL DESCRIPTION:
1 !
1 !       This routine saves the reentrant context area in the context save
1 !       area and initializes the context for a secondary operation.
1 !
1 !
1 ! CALLING SEQUENCE:
1 !       SAVE_CONTEXT ()
1 !
1 ! INPUT PARAMETERS:
1 !       NONE
1 !
1 ! IMPLICIT INPUTS:
1 !       ACP impure area
1 !
1 ! OUTPUT PARAMETERS:
1 !       NONE
1 !
1 ! IMPLICIT OUTPUTS:
1 !       NONE
1 !
1 ! ROUTINE VALUE:
1 !       NONE
1 !
1 ! SIDE EFFECTS:
1 !       NONE
1 !
1 !--
1
2 BEGIN
2
2 BIND_COMMON;
2
2 MAP
2         CONTEXT_SAVE    : BITVECTOR;
2
2 ! Check for excessive recursion in the ACP; then save the context and do the
2 ! setup.
2 !
2
2 IF .CONTEXT_SAVE NEQ 0
2 THEN BUG_CHECK (ACPRECURS, FATAL, 'Attempted recursion in ACP secondary operation');
2
2 CH$MOVE (CONTEXT_SIZE, CONTEXT_START, CONTEXT_SAVE);
2 CH$FILL (0, CONTEXT_SIZE, CONTEXT_START);
2 CH$FILL (0, FIB$C_LENGTH, SECOND_FIB);
2 CURRENT_FIB = SECOND_FIB;
2 CONTEXT_SAVE[CLF_CLEANUP] = 1;
2
1 END;                                    ! end of routine SAVE_CONTEXT
```

```
                                                                   .EXTRN  BUG$_ACPRECURS

                                            003C 00000             .ENTRY  SAVE_CONTEXT, Save R2,R3,R4,R5                ; 1365
                                    36   AA   D5 00002             TSTL    54(BASE)                                      ; 1409
                                         04   13 00005             BEQL    1$
                                            FEFF 00007             BUGW                                                  ; 1410
                                           0000* 00009             .WORD   <BUG$_ACPRECURS!4>
                  36    AA          6A       36   28 0000B 1$:     MOVC3   #54, (BASE), 54(BASE)                         ; 1412
         36             00          6E       00   2C 00010         MOVC5   #0, (SP), #0, #54, (BASE)                     ; 1413
                                             6A      00015
   0040  8F             00          6E       00   2C 00016         MOVC5   #0, (SP), #0, #64, 580(BASE)                  ; 1414
                                      0244   CA      0001D
                             10     AA   0244   CA   9E 00020      MOVAB   580(BASE), 16(BASE)                           ; 1415
                             37     AA       02   88 00026         BISB2   #2, 55(BASE)                                  ; 1416
                                                  04 0002A         RET                                                   ; 1418

; Routine Size:  43 bytes,    Routine Base:  $CODE$ + 018C
;  433          1419  1 GLOBAL ROUTINE RESTORE_CONTEXT : L_NORM NOVALUE =
;  434          1420  1
;  435          1421  1 !++
;  436          1422  1 !
;  437          1423  1 ! FUNCTIONAL DESCRIPTION:
;  438          1424  1 !
;  439          1425  1 !       This routine restores the reentrant context area from the context save
;  440          1426  1 !       area.
;  441          1427  1 !
;  442          1428  1 !
;  443          1429  1 ! CALLING SEQUENCE:
;  444          1430  1 !       RESTORE_CONTEXT ()
;  445          1431  1 !
;  446          1432  1 ! INPUT PARAMETERS:
;  447          1433  1 !       NONE
;  448          1434  1 !
;  449          1435  1 ! IMPLICIT INPUTS:
;  450          1436  1 !       ACP impure area
;  451          1437  1 !
;  452          1438  1 ! OUTPUT PARAMETERS:
;  453          1439  1 !       NONE
;  454          1440  1 !
;  455          1441  1 ! IMPLICIT OUTPUTS:
;  456          1442  1 !       NONE
;  457          1443  1 !
;  458          1444  1 ! ROUTINE VALUE:
;  459          1445  1 !       NONE
;  460          1446  1 !
;  461          1447  1 ! SIDE EFFECTS:
;  462          1448  1 !       NONE
;  463          1449  1 !
;  464          1450  1 !--
;  465          1451  1
;  466          1452  2 BEGIN
;  467          1453  2
;  468          1454  2 BIND_COMMON;
;  469          1455  2
;  470          1456  2 ! Check for excessive unstacking in the ACP; then restore the context.
;  471          1457  2 !
;  472          1458  2
;  473          1459  2 IF .CONTEXT_SAVE EQL 0
;  474          1460  2 THEN BUG_CHECK (ACPUNSTAK, FATAL, 'Attempted unstack in ACP primary context');
;  475          1461  2
;  476          1462  2 CH$MOVE (CONTEXT_SIZE, CONTEXT_SAVE, CONTEXT_START);
;  477          1463  2 CLEANUP_FLAGS[CLF_CLEANUP] = 0;
;  478          1464  2 CONTEXT_SAVE = 0;
;  479          1465  2
;  480          1466  1 END;                                      ! end of routine RESTORE_CONTEXT


                                                       .EXTRN  BUG$_ACPUNSTAK

                                 003C 00000            .ENTRY  RESTORE_CONTEXT, Save R2,R3,R4,R5           ; 1419
                          36   AA  D5 00002            TSTL    54(BASE)                                    ; 1459
                               04  12 00005            BNEQ    1$                                          ;
                                 FEFF 00007            BUGW                                                ; 1460
```

```
                                                        0000* 00009          .WORD    <BUG$_ACPUNSTAK!4>                            ;
                        6A          36   AA                36  28 0000B 1$:      MOVC3    #54, 54(BASE), (BASE)                         ; 1462
                                    01   AA                02  8A 00010          BICB2    #2, 1(BASE)                                   ; 1463
                                                 36        AA  D4 00014          CLRL     54(BASE)                                      ; 1464
                                                               04 00017          RET                                                    ; 1466

; Routine Size:  24 bytes,    Routine Base:  $CODE$ + 01B7


;  481            1467  1
;  482            1468  1 END
;  483            1469  0 ELUDOM




;                                   PSECT SUMMARY
;
;       Name                        Bytes                          Attributes
;
;  $CODE$                              463  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        59         0          1000           00:02.0





;                                   COMMAND QUALIFIERS

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

; Size:            463 code + 0 data bytes
; Run Time:           00:43.0
; Elapsed Time:       01:26.0
; Lines/CPU Min:       2050
; Lexemes/CPU-Min: 64943
; Memory Used:  274 pages
; Compilation Complete
```

0170 AH-BT13A-SE
VAX/VMS V4.0

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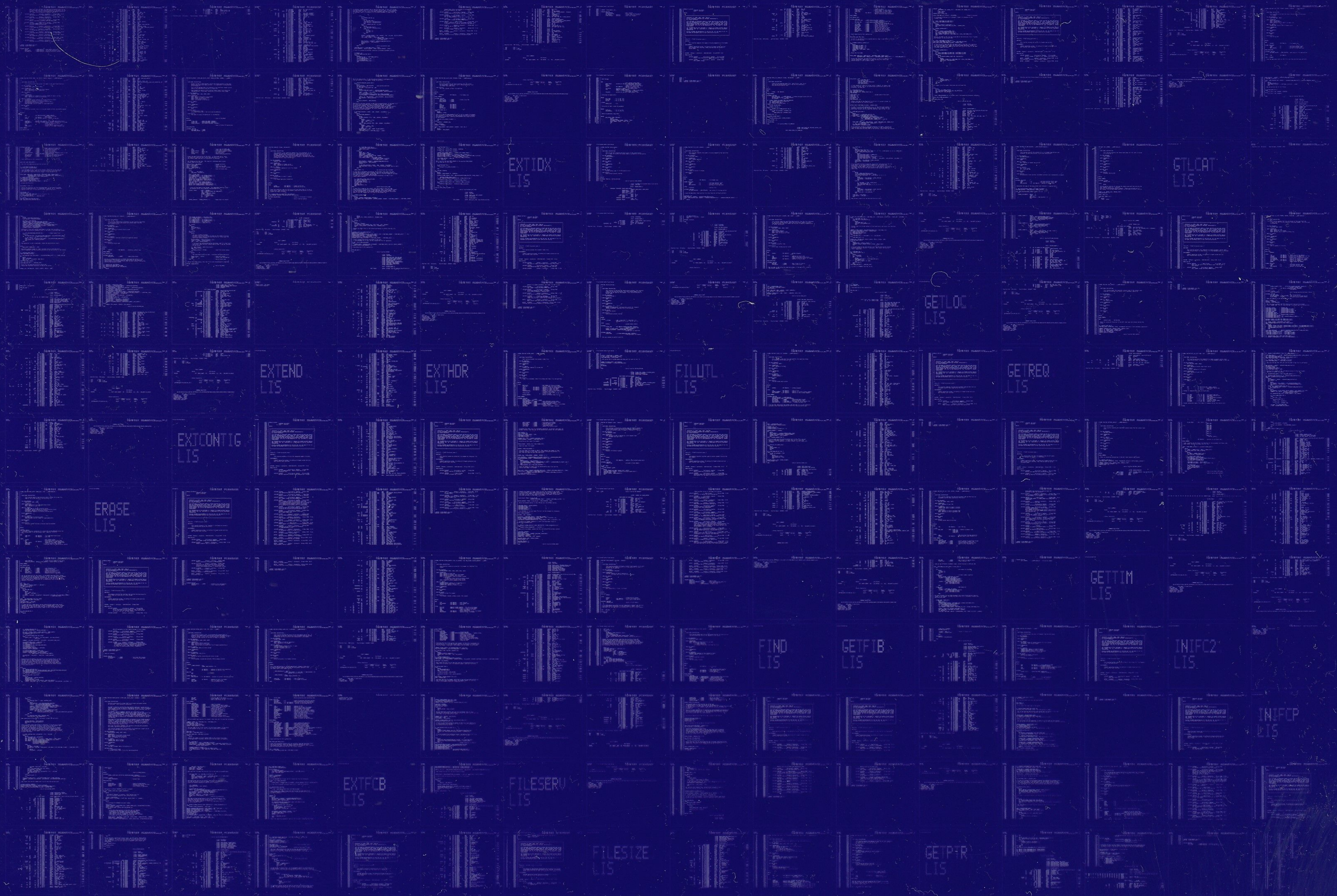

EXTIDX
LIS

GTLCAT
LIS

GETLOC
LIS

EXTEND
LIS

EXTHDR
LIS

FILUTL
LIS

GETREQ
LIS

EXTCONTIG
LIS

ERASE
LIS

GETTIM
LIS

FIND
LIS

GETFIB
LIS

INIFC2
LIS

INIFCP
LIS

EXTFCB
LIS

FILESERV
LIS

FILESIZE
LIS

GETPTR
LIS