```
PPPPPPPPPPPP       AAAAAAAAA       SSSSSSSSSSSS   RRRRRRRRRRRR   TTTTTTTTTTTTTTT   LLL
PPPPPPPPPPPP       AAAAAAAAA       SSSSSSSSSSSS   RRRRRRRRRRRR   TTTTTTTTTTTTTTT   LLL
PPPPPPPPPPPP       AAAAAAAAA       SSSSSSSSSSSS   RRRRRRRRRRRR   TTTTTTTTTTTTTTT   LLL
PPP        PPP   AAA       AAA   SSS              RRR        RRR        TTT        LLL
PPP        PPP   AAA       AAA   SSS              RRR        RRR        TTT        LLL
PPP        PPP   AAA       AAA   SSS              RRR        RRR        TTT        LLL
PPP        PPP   AAA       AAA   SSS              RRR        RRR        TTT        LLL
PPP        PPP   AAA       AAA   SSS              RRR        RRR        TTT        LLL
PPP        PPP   AAA       AAA   SSS              RRR        RRR        TTT        LLL
PPPPPPPPPPPP     AAA       AAA     SSSSSSSSS      RRRRRRRRRRRR        TTT        LLL
PPPPPPPPPPPP     AAA       AAA     SSSSSSSSS      RRRRRRRRRRRR        TTT        LLL
PPPPPPPPPPPP     AAA       AAA     SSSSSSSSS      RRRRRRRRRRRR        TTT        LLL
PPP              AAAAAAAAAAAAAAA          SSS     RRR   RRR          TTT        LLL
PPP              AAAAAAAAAAAAAAA          SSS     RRR   RRR          TTT        LLL
PPP              AAAAAAAAAAAAAAA          SSS     RRR   RRR          TTT        LLL
PPP              AAA       AAA           SSS     RRR        RRR      TTT        LLL
PPP              AAA       AAA           SSS     RRR        RRR      TTT        LLL
PPP              AAA       AAA           SSS     RRR        RRR      TTT        LLL
PPP              AAA       AAA   SSSSSSSSSSSS     RRR        RRR      TTT        LLLLLLLLLLLLLLL
PPP              AAA       AAA   SSSSSSSSSSSS     RRR        RRR      TTT        LLLLLLLLLLLLLLL
PPP              AAA       AAA   SSSSSSSSSSSS     RRR        RRR      TTT        LLLLLLLLLLLLLLL
```

```
PPPPPPPP      AAAAAA       SSSSSSSS  RRRRRRRR       AAAAAA     BBBBBBBB
PPPPPPPP      AAAAAA       SSSSSSSS  RRRRRRRR       AAAAAA     BBBBBBBB
PP     PP   AA      AA   SS          RR      RR   AA      AA   BB      BB
PP     PP   AA      AA   SS          RR      RR   AA      AA   BB      BB
PP     PP   AA      AA   SS          RR      RR   AA      AA   BB      BB
PP     PP   AA      AA   SS          RR      RR   AA      AA   BB      BB
PPPPPPPP    AA      AA     SSSSSS    RRRRRRRR     AA      AA   BBBBBBBB
PPPPPPPP    AA      AA     SSSSSS    RRRRRRRR     AA      AA   BBBBBBBB
PP          AAAAAAAAAA          SS   RR   RR      AAAAAAAAAA   BB      BB
PP          AAAAAAAAAA          SS   RR   RR      AAAAAAAAAA   BB      BB
PP          AA      AA          SS   RR     RR    AA      AA   BB      BB
PP          AA      AA          SS   RR     RR    AA      AA   BB      BB
PP          AA      AA   SSSSSSSS    RR      RR   AA      AA   BBBBBBBB
PP          AA      AA   SSSSSSSS    RR      RR   AA      AA   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
```

```
    1   0001   0  MODULE PAS$RAB  ( %TITLE 'Get RAB address of file'
    2   0002   0                    IDENT = '1-001'              ! File: PASRAB.B32 Edit: SBL1001
    3   0003   0                    ) =
    4   0004   1  BEGIN
    5   0005   1  !
    6   0006   1  !***********************************************************************
    7   0007   1  !*                                                                     *
    8   0008   1  !*   COPYRIGHT (c) 1978, 1980, 1982, 1984 BY                           *
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   18   0018   1  !*                                                                     *
   19   0019   1  !*   THE INFORMATION IN THIS SOFTWARE IS  SUBJECT TO CHANGE WITHOUT NOTICE  *
   20   0020   1  !*   AND  SHOULD  NOT  BE  CONSTRUED AS  A COMMITMENT BY DIGITAL EQUIPMENT  *
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   22   0022   1  !*                                                                     *
   23   0023   1  !*   DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE  OR  RELIABILITY OF ITS  *
   24   0024   1  !*   SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.           *
   25   0025   1  !*                                                                     *
   26   0026   1  !*                                                                     *
   27   0027   1  !***********************************************************************
   28   0028   1  !
   29   0029   1
   30   0030   1  !++
   31   0031   1  ! FACILITY:       Pascal Language Support
   32   0032   1
   33   0033   1  ! ABSTRACT:
   34   0034   1  !
   35   0035   1  !      This module contains a procedure which returns a pointer to the
   36   0036   1  !      RMS RAB for a specified file.
   37   0037   1  !
   38   0038   1  ! ENVIRONMENT:  User mode - AST reentrant
   39   0039   1  !
   40   0040   1  ! AUTHOR: Steven B. Lionel, CREATION DATE: 19-October-1981
   41   0041   1  !
   42   0042   1  ! MODIFIED BY:
   43   0043   1  !
   44   0044   1  ! 1-001 - Original.  SBL 19-October-1981
   45   0045   1  !--
```

```
   47    0046  1  %SBTTL 'Declarations'
   48    0047  1  !
   49    0048  1  ! PROLOGUE DEFINITIONS:
   50    0049  1  !
   51    0050  1
   52    0051  1  REQUIRE 'RTLIN:PASPROLOG';                          ! Externals, linkages, PSECTs, structures
   53    0115  1
   54    0116  1  !
   55    0117  1  ! TABLE OF CONTENTS:
   56    0118  1  !
   57    0119  1
   58    0120  1  FORWARD ROUTINE
   59    0121  1      PAS$RAB;                                        ! Get RAB address of file
   60    0122  1
   61    0123  1  !
   62    0124  1  ! MACROS:
   63    0125  1  !
   64    0126  1  !     NONE
   65    0127  1  !
   66    0128  1  ! EQUATED SYMBOLS:
   67    0129  1  !
   68    0130  1  !     NONE
   69    0131  1  !
   70    0132  1  ! FIELDS:
   71    0133  1  !
   72    0134  1  !     NONE
   73    0135  1  !
   74    0136  1  ! OWN STORAGE:
   75    0137  1  !
   76    0138  1  !     NONE
   77    0139  1  !
```

```
 79    0140  1  %SBTTL 'PAS$RAB - Get RAB address of file'
 80    0141  1  GLOBAL ROUTINE PAS$RAB  (                              ! Get RAB address of file
 81    0142  1          PFV: REF $PAS$PFV_FILE_VARIABLE                ! File variable
 82    0143  1      ) =
 83    0144  1
 84    0145  1  !++
 85    0146  1  ! FUNCTIONAL DESCRIPTION:
 86    0147  1  !
 87    0148  1  !       This procedure returns a pointer to the RMS Record Attributes
 88    0149  1  !       Block (RAB) for the specified file, if one exists.
 89    0150  1  !
 90    0151  1  ! CALLING SEQUENCE:
 91    0152  1  !
 92    0153  1  !       rab.wa.v = PAS$RAB (pfv.rr.r)
 93    0154  1  !
 94    0155  1  ! FORMAL PARAMETERS:
 95    0156  1  !
 96    0157  1  !       PFV                 - The Pascal File Variable (PFV) passed by reference.
 97    0158  1  !                             The structure of the PFV is defined in PASPFV.REQ.
 98    0159  1  !
 99    0160  1  ! IMPLICIT INPUTS:
100    0161  1  !
101    0162  1  !       NONE
102    0163  1  !
103    0164  1  ! IMPLICIT OUTPUTS:
104    0165  1  !
105    0166  1  !       NONE
106    0167  1  !
107    0168  1  ! ROUTINE VALUE:
108    0169  1  !
109    0170  1  !       The address of the file's RAB if there is one, otherwise zero.
110    0171  1  !
111    0172  1  ! SIDE EFFECTS:
112    0173  1  !
113    0174  1  !       Opens INPUT or OUTPUT.
114    0175  1  !
115    0176  1  ! SIGNALLED ERRORS:
116    0177  1  !
117    0178  1  !       NONE
118    0179  1  !
119    0180  1  !--
120    0181  1
121    0182  2      BEGIN
122    0183  2
123    0184  2      LOCAL
124    0185  2          FCB: REF $PAS$FCB_CONTROL_BLOCK;          ! File Control Block
125    0186  2
126    0187  2      !+
127    0188  2      ! Check for a valid FCB pointer.
128    0189  2      !-
129    0190  2
130    0191  2      IF NOT .PFV [PFV$V_FCB_VALID]
131    0192  2      THEN
132    0193  3          BEGIN
133    0194  3
134    0195  3          !+
135    0196  3          ! The FCB pointer is not valid.  Chec. to see if the file
```

```
  136    0197  3                   ! is INPUT or OUTPUT and if so, whether or not it should be
  137    0198  3                   ! implicitly opened.  If so, do it.
  138    0199  3                   !-
  139    0200  3
  140    0201  3                   IF (PFV [PFV$R_PFV] EQLA PAS$FV_INPUT) AND NOT .PAS$$GV_INPUT_OPENED
  141    0202  3                   THEN
  142    0203  3                       PAS$RESET2 (PFV [PFV$R_PFV])
  143    0204  3                   ELSE IF (PFV [PFV$R_PFV] EQLA PAS$FV_OUTPUT) AND NOT .PAS$$GV_OUTPUT_OPENED
  144    0205  3                   THEN
  145    0206  3                       PAS$REWRITE2 (PFV [PFV$R_PFV]);
  146    0207  2                   END;
  147    0208  2
  148    0209  2           !+
  149    0210  2           ! The file may or may not have been opened.  If the FCB link is shown
  150    0211  2           ! as valid, return it, otherwise return zero.
  151    0212  2           !-
  152    0213  2
  153    0214  2           IF .PFV [PFV$V_FCB_VALID]
  154    0215  2           THEN
  155    0216  3               BEGIN
  156    0217  3               FCB = .PFV [PFV$A_FCB];
  157    0218  3               IF NOT .FCB [FCB$V_STRING]
  158    0219  3               THEN
  159    0220  3                   RETURN .PFV [PFV$A_FCB]
  160    0221  3               ELSE
  161    0222  3                   RETURN 0;
  162    0223  3               END
  163    0224  2           ELSE
  164    0225  2               RETURN 0;
  165    0226  2
  166    0227  1           END;                                      ! End of routine PAS$RAB


                                                    .TITLE   PAS$RAB Get RAB address of file
                                                    .IDENT   \1-001\

                                                    .EXTRN   PAS$RAB, PAS$$GV_INPUT_OPENED
                                                    .EXTRN   PAS$RESET2, PAS$$GV_OUTPUT_OPENED
                                                    .EXTRN   PAS$REWRITE2
                                                    .WEAK    PAS$FV_INPUT, PAS$FV_OUTPUT

                                                    .PSECT   _PAS$CODE,NOWRT,  SHR,  PIC,2

                                  0004 00000        .ENTRY   PAS$RAB, Save R2                        ; 0141
                      52    04 AC  D0 00002          MOVL    PFV, R2                                 ; 0191
               3F     07 A2       06 E0 00006        BBS     #6, 7(R2), 3$
               50 00000000G       00 9E 0000B        MOVAB   PAS$FV_INPUT, R0                        ; 0201
               50                 52 D1 00012        CMPL    R2, R0
                                  12 12 00015        BNEQ    1$
               0B 00000000G       00 E8 00017        BLBS    PAS$$GV_INPUT_OPENED, 1$
                                  52 DD 0001E        PUSHL   R2                                      ; 0203
         00000000G 00             01 FB 00020        CALLS   #1, PAS$RESET2
                                  1C 11 00027        BRB     2$
               50 00000000G       00 9E 00029 1$:    MOVAB   PAS$FV_OUTPUT, R0                       ; 0204
               50                 52 D1 00030        CMPL    R2, R0
                                  10 12 00033        BNEQ    2$
               09 00000000G       00 E8 00035        BLBS    PAS$$GV_OUTPUT_OPENED, 2$
```

PAS$RAB   Get RAB address of file   M 1
                                                             16-Sep-1984 01:52:20   VAX-11 Bliss-32 V4.0-742   Page 5   PAS
1-001   PAS$RAB - Get RAB address of file   14-Sep-1984 12:51:42   [PASRTL.SRC]PASRAB.B32;1   (3)

```
                                            52  DD 0003C          PUSHL   R2                          ; 0206
                     00000000G  00          01  FB 0003E          CALLS   #1, PAS$REWRITE2            ; 0214
              OF           07  A2            06  E1 00045 2$:      BBC     #6, 7(R2), 4$              ; 0217
                          50      0C         A2  DO 0004A 3$:      MOVL    12(R2), FCB                ; 0218
              06           FE  AO            04  EO 0004E          BBS     #4, -2(FCB), 4$            ; 0222
                          52      0C         A2  DO 00053          MOVL    12(R2), R2                 ; 0225
                                             02  11 00057          BRB     5$                         ; 0227
                                             52  D4 00059 4$:      CLRL    R2
                          50                 52  DO 0005B 5$:      MOVL    R2, RO
                                             04 0005E             RET
```

; Routine Size: 95 bytes,   Routine Base: _PAS$CODE + 0000

; 167   0228 1
; 168   0229 1 !<BLF/PAGE>
; 169   0230 1 END   ! End of module PAS$RAB
; 170   0231 1
; 171   0232 0 ELUDOM

                          PSECT SUMMARY

;   Name   Bytes   Attributes

; _PAS$CODE   95 NOVEC,NOWRT, RD , EXE, SHR, LCL, REL, CON, PIC,ALIGN(2)

                      Library Statistics

;   -------- Symbols --------   Pages   Processing
;   File   Total   Loaded   Percent   Mapped   Time

; _255DUA28:[SYSLIB]STARLET.L32;1   9776   0   0   581   00:01.0
; _255DUA28:[PASRTL.OBJ]PASLIB.L32;1 427   85   19   33   00:00.4

                          COMMAND QUALIFIERS

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

; Size: 95 code + 0 data bytes
; Run Time: 00:04.3
; Elapsed Time: 00:16.1
; Lines/CPU Min: 3229
; Lexemes/CPU-Min: 7962

; Memory Used: 59 pages
; Compilation Complete

PASREABOO
LIS

PASREAST1
LIS

PASREAREH
LIS

PASRESETK
LIS

PASREAREG
LIS

PASRAB
LIS

PASRESET2
LIS

PASREADLN
LIS

PASREAREF
LIS

PASREAVAR
LIS

PASREARED
LIS

PASREACHA
LIS

PASREADUT
LIS

PASREAENU
LIS

PASREAUNS
LIS

PASREAINT
LIS

PASREASTR
LIS