```
PPPPPPPPPPPP        AAAAAAAAA        SSSSSSSSSSS  RRRRRRRRRRR     TTTTTTTTTTTTTTT  LLL
PPPPPPPPPPPP        AAAAAAAAA        SSSSSSSSSSS  RRRRRRRRRRR     TTTTTTTTTTTTTTT  LLL
PPPPPPPPPPPP        AAAAAAAAA        SSSSSSSSSSS  RRRRRRRRRRR     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     RRRRRRRRRRR        TTT        LLL
PPPPPPPPPPPP       AAA         AAA     SSSSSSSSS     RRRRRRRRRRR        TTT        LLL
PPPPPPPPPPPP       AAA         AAA     SSSSSSSSS     RRRRRRRRRRR        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  SSSSSSSSSSS   RRR         RRR     TTT        LLLLLLLLLLLLLLL
PPP                AAA         AAA  SSSSSSSSSSS   RRR         RRR     TTT        LLLLLLLLLLLLLLL
PPP                AAA         AAA  SSSSSSSSSSS   RRR         RRR     TTT        LLLLLLLLLLLLLLL
PPP                AAA         AAA  SSSSSSSSSSS   RRR         RRR     TTT        LLLLLLLLLLLLLLL
```

FILEID**PASWRIRFF

```
PPPPPPPP      AAAAAA      SSSSSSSS  WW      WW  RRRRRRRR     IIIIII    RRRRRRRR    FFFFFFFFFF  FFFFFFFFFF
PPPPPPPP      AAAAAA      SSSSSSSS  WW      WW  RRRRRRRR     IIIIII    RRRRRRRR    FFFFFFFFFF  FFFFFFFFFF
PP      PP   AA    AA   SS          WW      WW  RR      RR     II      RR      RR  FF          FF
PP      PP   AA    AA   SS          WW      WW  RR      RR     II      RR      RR  FF          FF
PP      PP   AA    AA   SS          WW      WW  RR      RR     II      RR      RR  FF          FF
PP      PP   AA    AA   SS          WW      WW  RR      RR     II      RR      RR  FF          FF
PPPPPPPP     AA    AA     SSSSSS    WW      WW  RRRRRRRR       II      RRRRRRRR    FFFFFFF     FFFFFFF
PPPPPPPP     AA    AA     SSSSSS    WW      WW  RRRRRRRR       II      RRRRRRRR    FFFFFFF     FFFFFFF
PP           AAAAAAAAAA           SS WW  WW  WW  RR  RR         II      RR  RR      FF          FF
PP           AAAAAAAAAA           SS WW  WW  WW  RR  RR         II      RR  RR      FF          FF
PP           AA    AA             SS WWWW  WWWW  RR    RR       II      RR    RR    FF          FF          ....
PP           AA    AA             SS WWWW  WWWW  RR    RR       II      RR    RR    FF          FF          ....
PP           AA    AA   SSSSSSSS    WW      WW  RR      RR   IIIIII    RR      RR  FF          FF          ....
PP           AA    AA   SSSSSSSS    WW      WW  RR      RR   IIIIII    RR      RR  FF          FF          ....

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$WRITE_REALF_F ( %TITLE 'Write an F_floating in F format'
;     2          0002  0                  IDENT = '1-002'                     ! File: PASWRIRFF.B32 Edit: SBL1002
;     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                               *
;     9          0009  1 !*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.                 *
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;    14          0014  1 !*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR  ANY  OTHER   *
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;    20          0020  1 !*  AND  SHOULD  NOT  BE  CONSTRUED AS  A COMMITMENT BY DIGITAL EQUIPMENT   *
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;    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 writes an F_floating in
;    36          0036  1 !       fixed-point notation to a textfile.
;    37          0037  1 !
;    38          0038  1 ! ENVIRONMENT:  User mode - AST reentrant
;    39          0039  1 !
;    40          0040  1 ! AUTHOR: Steven B. Lionel, CREATION DATE: 1-April-1981
;    41          0041  1 !
;    42          0042  1 ! MODIFIED BY:
;    43          0043  1 !
;    44          0044  1 ! 1-001 - Original.  SBL 1-April-1981
;    45          0045  1 ! 1-002 - Make total-width a longword.  SBL 30-June-1982
;    46          0046  1 !--
;    47          0047  1
```

```
;    49          0048  1 %SBTTL 'Declarations'
;    50          0049  1 !
;    51          0050  1 ! PROLOGUE DEFINITIONS:
;    52          0051  1 !
;    53          0052  1
;    54          0053  1 REQUIRE 'RTLIN:PASPROLOG';                  ! Externals, linkages, PSECTs, structures
;    55          0117  1
;    56          0118  1 !
;    57          0119  1 ! TABLE OF CONTENTS:
;    58          0120  1 !
;    59          0121  1
;    60          0122  1 FORWARD ROUTINE
;    61          0123  1     PAS$WRITE_REALF_F: NOVALUE,             ! Write to textfile
;    62          0124  1     PAS$WRITEV_REALF_F: NOVALUE;            ! Write to string
;    63          0125  1
;    64          0126  1 !
;    65          0127  1 ! MACROS:
;    66          0128  1 !
;    67          0129  1 !       NONE
;    68          0130  1 !
;    69          0131  1 ! EQUATED SYMBOLS:
;    70          0132  1 !
;    71          0133  1 !       NONE
;    72          0134  1 !
;    73          0135  1 ! FIELDS:
;    74          0136  1 !
;    75          0137  1 !       NONE
;    76          0138  1 !
;    77          0139  1 ! OWN STORAGE:
;    78          0140  1 !
;    79          0141  1 !       NONE
;    80          0142  1 !
```

```
;    82          0143  1 %SBTTL 'PAS$WRITE_REALF_F - Write F_floating in F format to textfile'
;    83          0144  1 GLOBAL ROUTINE PAS$WRITE_REALF_F (
;    84          0145  1         PFV: REF $PAS$PFV_FILE_VARIABLE,                ! File variable
;    85          0146  1         VALUE,                                          ! Value to write
;    86          0147  1         TOTAL_WIDTH: SIGNED,                            ! Total field width
;    87          0148  1         FRAC_DIGITS: SIGNED,                            ! Digits in fraction
;    88          0149  1         ERROR                                           ! Error unwind address
;    89          0150  1     ): NOVALUE =
;    90          0151  1
;    91          0152  1 !++
;    92          0153  1 ! FUNCTIONAL DESCRIPTION:
;    93          0154  1 !
;    94          0155  1 !       This procedure writes an F_floating value in fixed-point notation
;    95          0156  1 !       to the specified textfile.
;    96          0157  1 !
;    97          0158  1 ! CALLING SEQUENCE:
;    98          0159  1 !
;    99          0160  1 !       CALL PAS$WRITE_REALF_F (PFV.mr.r, VALUE.rf.v , TOTAL_WIDTH.rl.v,
;   100          0161  1 !                               FRAC_DIGITS.rl.v [, ERROR.ja.r]])
;   101          0162  1 !
;   102          0163  1 ! FORMAL PARAMETERS:
;   103          0164  1 !
;   104          0165  1 !       PFV             - The Pascal File Variable (PFV) passed by reference.
;   105          0166  1 !                         The structure of the PFV is defined in PASPFV.REQ.
;   106          0167  1 !
;   107          0168  1 !       VALUE           - The F_floating value to write.
;   108          0169  1 !
;   109          0170  1 !       TOTAL_WIDTH     - Total field width.
;   110          0171  1 !
;   111          0172  1 !       FRAC_DIGITS     - Number of digits in fraction.
;   112          0173  1 !
;   113          0174  1 !       ERROR           - Optional.  Address to unwind to if an error occurs.
;   114          0175  1 !
;   115          0176  1 ! IMPLICIT INPUTS:
;   116          0177  1 !
;   117          0178  1 !       NONE
;   118          0179  1 !
;   119          0180  1 ! IMPLICIT OUTPUTS:
;   120          0181  1 !
;   121          0182  1 !       NONE
;   122          0183  1 !
;   123          0184  1 ! ROUTINE VALUE:
;   124          0185  1 !
;   125          0186  1 !       NONE
;   126          0187  1 !
;   127          0188  1 ! SIDE EFFECTS:
;   128          0189  1 !
;   129          0190  1 !       If the file is the standard file OUTPUT, it is implicitly opened.
;   130          0191  1 !
;   131          0192  1 ! SIGNALLED ERRORS:
;   132          0193  1 !
;   133          0194  1 !       LINTOOLON - line too long
;   134          0195  1 !       NEGWIDDIG - negative Width or Digits specification is not allowed
;   135          0196  1 !
;   136          0197  1 !--
;   137          0198  1
;   138          0199  2     BEGIN
```

```
;  139          0200  2
;  140          0201  2      BUILTIN
;  141          0202  2          ACTUALCOUNT;
;  142          0203  2
;  143          0204  2      LOCAL
;  144          0205  2          FCB: REF $PAS$FCB_CONTROL_BLOCK,                ! File control block
;  145          0206  2          FIELD_WIDTH,                                    ! Minimum/actual field width
;  146          0207  2          REMAINING_WIDTH,                                ! Width remaining on line
;  147          0208  2          PFV_ADDR: VOLATILE,                             ! Enable argument
;  148          0209  2          UNWIND_ACT: VOLATILE,                           ! Enable argument
;  149          0210  2          ERROR_ADDR: VOLATILE;                           ! Enable argument
;  150          0211  2
;  151          0212  2      ENABLE
;  152          0213  2          PAS$$IO_HANDLER (PFV_ADDR, UNWIND_ACT, ERROR_ADDR);     ! Enable error handler
;  153          0214  2
;  154          0215  2      !+
;  155          0216  2      ! Get ERROR parameter, if present.
;  156          0217  2      !-
;  157          0218  2
;  158          0219  2      IF ACTUALCOUNT () GEQU 5
;  159          0220  2      THEN
;  160          0221  2          ERROR_ADDR = .ERROR;            ! Set unwind address
;  161          0222  2
;  162          0223  2      PFV_ADDR = PFV [PFV$R_PFV];         ! Set PFV address
;  163          0224  2
;  164          0225  2      !+
;  165          0226  2      ! Validate PFV and get PFV.
;  166          0227  2      !-
;  167          0228  2
;  168          0229  2      PAS$$VALIDATE_PFV (PFV [PFV$R_PFV]; FCB);
;  169          0230  2
;  170          0231  2      !+
;  171          0232  2      ! Set unwind action to unlock file.
;  172          0233  2      !-
;  173          0234  2
;  174          0235  2      UNWIND_ACT = PAS$K_UNWIND_UNLOCK;                                                  ;
;  175          0236  2
;  176          0237  2      !+
;  177          0238  2      ! Do common initialization.                                                        ;
;  178          0239  2      !-                                                                                 ;
;  179          0240  2
;  180          0241  2      PAS$$INIT_WRITE (PFV [PFV$R_PFV], FCB [FCB$R_FCB]; FCB);
;  181          0242  2
;  182          0243  2      !+
;  183          0244  2      ! Get minimum and maximum field widths.  Check for valid field width
;  184          0245  2      ! and number of digits.
;  185          0246  2      !-
;  186          0247  2
;  187          0248  2      FIELD_WIDTH = .TOTAL_WIDTH;
;  188          0249  3      IF (.FIELD_WIDTH LSS 0) OR (.FRAC_DIGITS LSS 0)
;  189          0250  2      THEN
;  190          0251  2          $PAS$IO_ERROR (PAS$_NEGWIDDIG,0);
;  191          0252  2      REMAINING_WIDTH = .FCB [FCB$A_RECORD_END] - .FCB [FCB$A_RECORD_CUR];
;  192          0253  2
;  193          0254  2      !+
;  194          0255  2      ! Do the convert.  If it fails, signal an error.
;  195          0256  2      !-
```

```
;  196          0257  2
;  197          0258  2      IF NOT PAS$CVT_F_T (VALUE,                      ! Value to convert
;  198          0259  2                         .FCB [FCB$A_RECORD_CUR],    ! Destination
;  199          0260  2                         FIELD_WIDTH,                ! Minimum/actual width
;  200          0261  2                         .REMAINING_WIDTH,           ! Maximum width
;  201          0262  2                         .FRAC_DIGITS)               ! Fraction digits
;  202          0263  2      THEN
;  203          0264  2          $PAS$IO_ERROR (PAS$_LINTOOLON,1,(.FIELD_WIDTH-.REMAINING_WIDTH));
;  204          0265  2
;  205          0266  2      !+
;  206          0267  2      ! Update buffer pointer.
;  207          0268  2      !-
;  208          0269  2
;  209          0270  2      FCB [FCB$A_RECORD_CUR] = .FCB [FCB$A_RECORD_CUR] + .FIELD_WIDTH;
;  210          0271  2
;  211          0272  2      !+
;  212          0273  2      ! Call WRITE epilogue routine to move the last character written to the
;  213          0274  2      ! user's buffer and to unlock the file variable.
;  214          0275  2      !-
;  215          0276  2
;  216          0277  2      PAS$$END_WRITE (PFV [PFV$R_PFV], FCB [FCB$R_FCB]);
;  217          0278  2
;  218          0279  2      RETURN;
;  219          0280  2
;  220          0281  1      END;                                           ! End of routine PAS$WRITE_REALF_F


                                                                .TITLE  PAS$WRITE_REALF_F Write an F_floating in F form
;                                                                       at
                                                                .IDENT  \1-002\

                                                                .EXTRN  PAS$WRITE_REALF_F
                                                                .EXTRN  PAS$WRITEV_REALF_F
                                                                .EXTRN  PAS$$IO_HANDLER
                                                                .EXTRN  PAS$$VALIDATE_PFV
                                                                .EXTRN  PAS$$INIT_WRITE
                                                                .EXTRN  PAS$$SIGNAL, PAS$K_NEGWIDDIG
                                                                .EXTRN  PAS$CVT_F_T, PAS$K_LINTOOLON
                                                                .EXTRN  PAS$$END_WRITE

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

                                                01FC 00000      .ENTRY  PAS$WRITE_REALF_F, Save R2,R3,R4,R5,R6,R7,-     ; 0144
                                                                        R8
                58 00000000G   00   9E 000C2                    MOVAB   PAS$$SIGNAL, R8                                 ;
                5E                  10   C2 00009              SUBL2   #16, SP                                         ;
                         04     AE   7C 0000C                  CLRQ    ERROR_ADDR                                      ; 0199
                         0C     AE   D4 0000F                  CLRL    PFV_ADDR                                        ;
                6D       006F   CF   DE 00012                  MOVAL   5$, (FP)                                        ;
                05                  6C   91 00017              CMPB    (AP), #5                                        ; 0219
                                    05   1F 0001A              BLSSU   1$                                              ;
04              AE          14      AC   D0 0001C              MOVL    ERROR, ERROR_ADDR                               ; 0221
                56          04      AC   D0 00021  1$:         MOVL    PFV, R6                                         ; 0223
0C              AE                  56   D0 00025              MOVL    R6, PFV_ADDR                                    ;
                   00000000G        00   16 00029              JSB     PAS$$VALIDATE_PFV                               ; 0229
08              AE                  01   D0 0002F              MOVL    #1, UNWIND_ACT                                  ; 0235
                   00000000G        00   16 00033              JSB     PAS$$INIT_WRITE                                 ; 0241
```

```
                         6E        0C    AC  D0 00039          MOVL    TOTAL_WIDTH, FIELD_WIDTH                ; 0248
                                   05    19  0003D          BLSS    2$                                      ; 0249
                                   10    AC  D5 0003F          TSTL    FRAC_DIGITS
                                   0A    18  00042          BGEQ    3$
                                   7E    D4  00044 2$:      CLRL    -(SP)                                   ; 0251
                         7E        00G   8F  9A 00046          MOVZBL  #PAS$K_NEGWIDDIG, -(SP)
                         68              02  FB 0004A          CALLS   #2, PAS$$SIGNAL
                                         04  0004D          RET
                   52    F0    A7        EC  A7  C3 0004E 3$:      SUBL3   -20(FCB), -16(FCB), REMAINING_WIDTH     ; 0252
                                   10    AC  DD 00054          PUSHL   FRAC_DIGITS                             ; 0262
                                   52    DD  00057          PUSHL   REMAINING_WIDTH                         ; 0261
                                   08    AE  9F 00059          PUSHAB  FIELD_WIDTH                             ; 0258
                                   EC    A7  DD 0005C          PUSHL   -20(FCB)                                ; 0259
                                   08    AC  9F 0005F          PUSHAB  VALUE                                   ; 0258
                      00000000G    00        05  FB 00062          CALLS   #5, PAS$CVT_F_T
                         0E              50  E8 00069          BLBS    R0, 4$
                   7E              6E        52  C3 0006C          SUBL3   REMAINING_WIDTH, FIELD_WIDTH, -(SP)     ; 0264
                                   01        DD 00070          PUSHL   #1
                         7E        00G   8F  9A 00072          MOVZBL  #PAS$K_LINTOOLON, -(SP)
                         68              03  FB 00076          CALLS   #3, PAS$$SIGNAL
                                         04  00079          RET
                         EC    A7              6E  C0 0007A 4$:      ADDL2   FIELD_WIDTH, -20(FCB)           ; 0270
                                  00000000G    00  16 0007E          JSB     PAS$$END_WRITE                  ; 0277
                                         04  00084          RET                                             ; 0281
                                       0000  00085 5$:      .WORD   Save nothing                            ; 0199
                         50        08    AC  D0 00087          MOVL    8(AP), R0
                         50        04    A0  D0 0008B          MOVL    4(R0), R0
                                   F4    A0  9F 0008F          PUSHAB  ERROR_ADDR
                                   F8    A0  9F 00092          PUSHAB  UNWIND_ACT
                                   FC    A0  9F 00095          PUSHAB  PFV_ADDR
                                   03        DD 00098          PUSHL   #3
                                   5E        DD 0009A          PUSHL   SP
                            7E         04    AC  7D 0009C          MOVQ    4(AP), -(SP)
                   00000000G    00              03  FB 000A0          CALLS   #3, PAS$$IO_HANDLER
                                         04  000A7          RET

; Routine Size:  168 bytes,    Routine Base:  _PAS$CODE + 0000

;  221          0282  1
;  222          0283  1 !<BLF/PAGE>
```

```
;  224          0284  1 %SBTTL 'PAS$WRITEV_REALF_F - Write F_floating in F format to string'
;  225          0285  1 GLOBAL ROUTINE PAS$WRITEV_REALF_F (
;  226          0286  1         MAX_LENGTH: WORD,                          ! Maximum length of string
;  227          0287  1         STRING_LINE: REF VECTOR [, WORD],          ! String to write to
;  228          0288  1         VALUE,                                     ! Value to write
;  229          0289  1         TOTAL_WIDTH: WORD SIGNED,                  ! Total field width
;  230          0290  1         FRAC_DIGITS: SIGNED,                       ! Number of fraction digits
;  231          0291  1         ERROR                                      ! Error unwind address
;  232          0292  1     ) : NOVALUE =
;  233          0293  1
;  234          0294  1 !++
;  235          0295  1 ! FUNCTIONAL DESCRIPTION:
;  236          0296  1 !
;  237          0297  1 !       This procedure writes an F_floating in fixed-point format
;  238          0298  1 !       to the specified string.
;  239          0299  1 !
;  240          0300  1 ! CALLING SEQUENCE:
;  241          0301  1 !
;  242          0302  1 !       CALL PAS$WRITEV_REALF_F (MAX_LENGTH.rw.v, STRING_LINE.wvt.r,
;  243          0303  1 !          VALUE.rf.v, TOTAL_WIDTH.rw.v, FRAC_DIGITS.rl.v [, ERROR.j.r])
;  244          0304  1 !
;  245          0305  1 ! FORMAL PARAMETERS:
;  246          0306  1 !
;  247          0307  1 !       MAX_LENGTH      - The maximum length of STRING_LINE.
;  248          0308  1 !
;  249          0309  1 !       STRING_LINE     - A varying string to which the output will be appended.
;  250          0310  1 !
;  251          0311  1 !       VALUE           - The value to write.
;  252          0312  1 !
;  253          0313  1 !       TOTAL_WIDTH     - The width of the field to write.                          ;
;  254          0314  1 !
;  255          0315  1 !       FRAC_DIGITS     - The number of digits in the fraction field.
;  256          0316  1 !                                                                                   ;
;  257          0317  1 !       ERROR           - Optional.  If specified, the address to unwind to         ;
;  258          0318  1 !                         in case of an error.
;  259          0319  1 !
;  260          0320  1 ! IMPLICIT INPUTS:
;  261          0321  1 !
;  262          0322  1 !       NONE
;  263          0323  1 !
;  264          0324  1 ! IMPLICIT OUTPUTS:
;  265          0325  1 !
;  266          0326  1 !       NONE
;  267          0327  1 !
;  268          0328  1 ! ROUTINE VALUE:
;  269          0329  1 !
;  270          0330  1 !       NONE
;  271          0331  1 !
;  272          0332  1 ! SIDE EFFECTS:
;  273          0333  1 !
;  274          0334  1 !       NONE
;  275          0335  1 !
;  276          0336  1 ! SIGNALLED ERRORS:
;  277          0337  1 !
;  278          0338  1 !       See PAS$WRITE_REALF_F
;  279          0339  1 !
;  280          0340  1 !--
```

```
;  281          0341  1
;  282          0342  2      BEGIN
;  283          0343  2
;  284          0344  2      LOCAL
;  285          0345  2          PFV: $PAS$PFV_FILE_VARIABLE,     ! Pascal File Variable
;  286          0346  2          ARG_LIST: VECTOR [5, LONG],      ! Argument list
;  287          0347  2          PFV_ADDR: VOLATILE,              ! Enable argument
;  288          0348  2          UNWIND_ACT: VOLATILE,            ! Enable argument
;  289          0349  2          ERROR_ADDR: VOLATILE;            ! Enable argument
;  290          0350  2
;  291          0351  2      BUILTIN
;  292          0352  2          ACTUALCOUNT;                     ! Count of arguments
;  293          0353  2
;  294          0354  2      ENABLE
;  295          0355  2          PAS$$IO_HANDLER (PFV_ADDR, UNWIND_ACT, ERROR_ADDR);     ! Enable error handler
;  296          0356  2
;  297          0357  2      !+
;  298          0358  2      ! Get ERROR parameter, if present.
;  299          0359  2      !-
;  300          0360  2
;  301          0361  2      IF ACTUALCOUNT () GEQU 6
;  302          0362  2      THEN
;  303          0363  2          ERROR_ADDR = .ERROR;             ! Set unwind address
;  304          0364  2
;  305          0365  2      PFV_ADDR = PFV [PFV$R_PFV];          ! Set PFV address
;  306          0366  2
;  307          0367  2      !+
;  308          0368  2      ! Set up ARG_LIST.
;  309          0369  2      !-
;  310          0370  2
;  311          0371  2      ARG_LIST [0] = 4;                    ! Four arguments
;  312          0372  2      ARG_LIST [1] = PFV [PFV$R_PFV];      ! PFV address
;  313          0373  2      ARG_LIST [2] = .VALUE;               ! Value to write
;  314          0374  2      ARG_LIST [3] = .TOTAL_WIDTH;         ! Width of field
;  315          0375  2      ARG_LIST [4] = .FRAC_DIGITS;         ! Fraction digits
;  316          0376  2
;  317          0377  2      !+
;  318          0378  2      ! Call PAS$$DO_WRITEV to do the work, giving it the address of
;  319          0379  2      ! PAS$WRITE_REALF_F to call.
;  320          0380  2      !-
;  321          0381  2
;  322          0382  2      PAS$$DO_WRITEV (PFV [PFV$R_PFV], .MAX_LENGTH, STRING_LINE [0], ARG_LIST,
;  323          0383  2          PAS$WRITE_REALF_F);
;  324          0384  2
;  325          0385  2      RETURN;
;  326          0386  2
;  327          0387  1      END;                                 ! End of routine PAS$WRITEV_REALF_F


                                                    .EXTRN  PAS$$DO_WRITEV

                                        007C 00000  .ENTRY  PAS$WRITEV_REALF_F, Save R2,R3,R4,R5,R6     ; 0285
                                5E          2C  C2  SUBL2   #44, SP                                     ;
                                            7E  D4  CLRL    ERROR_ADDR                                  ; 0342
                                      04    AE  7C  CLRQ    UNWIND_ACT                                  ;
                                6D    0043  CF  DE  MOVAL   2$, (FP)                                    ;
```

```
                                06              6C  91 0000F           CMPB    (AP), #6                                ; 0361
                                                04  1F 00012           BLSSU   1$                                      ;
                                6E          18  AC  D0 00014           MOVL    ERROR, ERROR_ADDR                       ; 0363
                          08    AE          20  AE  9E 00018 1$:       MOVAB   PFV, PFV_ADDR                           ; 0365
                          0C    AE              04  D0 0001D           MOVL    #4, ARG_LIST                            ; 0371
                          10    AE          20  AE  9E 00021           MOVAB   PFV, ARG_LIST+4                         ; 0372
                          14    AE          0C  AC  D0 00026           MOVL    VALUE, ARG_LIST+8                       ; 0373
                          18    AE          10  AC  32 0002B           CVTWL   TOTAL_WIDTH, ARG_LIST+12                ; 0374
                          1C    AE          14  AC  D0 00030           MOVL    FRAC_DIGITS, ARG_LIST+16                ; 0375
                                55      FF1F    CF  9E 00035           MOVAB   PAS$WRITE_REALF_F, R5                   ; 0382
                                54          0C  AE  9E 0003A           MOVAB   ARG_LIST, R4                            ;
                                56          20  AE  9E 0003E           MOVAB   PFV, R6                                 ;
                                53          08  AC  D0 00042           MOVL    STRING_LINE, R3                         ;
                                52          04  AC  3C 00046           MOVZWL  MAX_LENGTH, R2                          ;
                                   00000000G    00  16 0004A           JSB     PAS$$DO_WRITEV                          ;
                                                04  00050             RET                                             ; 0387
                                                    0000 00051 2$:      .WORD   Save nothing                            ; 0342
                                50          08  AC  D0 00053           MOVL    8(AP), R0                               ;
                                50          04  A0  D0 00057           MOVL    4(R0), R0                               ;
                                            D0  A0  9F 0005B           PUSHAB  ERROR_ADDR                              ;
                                            D4  A0  9F 0005E           PUSHAB  UNWIND_ACT                              ;
                                            D8  A0  9F 00061           PUSHAB  PFV_ADDR                                ;
                                                03  DD 00064           PUSHL   #3                                      ;
                                                5E  DD 00066           PUSHL   SP                                      ;
                                7E          04  AC  7D 00068           MOVQ    4(AP), -(SP)                            ;
                        00000000G   00              03  FB 0006C       CALLS   #3, PAS$$IO_HANDLER                     ;
                                                    04  00073         RET                                             ;

; Routine Size:  116 bytes,    Routine Base:  _PAS$CODE + 00A8

;  328          0388  1
;  329          0389  1 !<BLF/PAGE>
```

```
;  331          0390  1 END                                   ! End of module PAS$WRITE_REALF_F
;  332          0391  1
;  333          0392  0 ELUDOM
```

```
;                                   PSECT SUMMARY

;       Name                    Bytes                           Attributes

;  _PAS$CODE                       284  NOVEC,NOWRT,  RD ,  EXE,  SHR,  LCL,  REL,  CON,  PIC,ALIGN(2)
```

```
;                                 Library Statistics

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

;  _$255$DUA28:[SYSLIB]STARLET.L32;1        9776          0         0          581        00:01.0
;  _$255$DUA28:[PASRTL.OBJ]PASLIB.L32;1      427         97        22           33        00:00.4
```

```
;                                  COMMAND QUALIFIERS

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

; Size:          284 code + 0 data bytes
; Run Time:          00:07.4
; Elapsed Time:      00:17.4
; Lines/CPU Min:      3178
; Lexemes/CPU-Min:   12624
; Memory Used:   82 pages
; Compilation Complete
```

PASWRIREH LIS

PASWRITEL LIS

PASWRIREG LIS

PATDEF MDL

PASWRISTR LIS

PATCH

PASWRIREF LIS

PATCH MAP

SRMDEF MDL

PASWRIRFH LIS

PASWRIVAR LIS

PASWRIRED LIS

PASWRIUNS LIS

PASWRIINT LIS

PASWRIOCT LIS

PASWRIRFG LIS

BSTRUC REQ

PASWRIRFF LIS

CHRKEY REQ

PASWRIRFD LIS