```
RRRRRRRRRRR      UUU          UUU  NNN         NNN     000000000     FFFFFFFFFFFFFFF   FFFFFFFFFFFFFFF
RRRRRRRRRRRR     UUU          UUU  NNN         NNN     000000000     FFFFFFFFFFFFFFF   FFFFFFFFFFFFFFF
RRRRRRRRRRRR     UUU          UUU  NNN         NNN     000000000     FFFFFFFFFFFFFFF   FFFFFFFFFFFFFFF
RRR          RRR UUU          UUU  NNN         NNN  000          000 FFF               FFF
RRR          RRR UUU          UUU  NNN         NNN  000          000 FFF               FFF
RRR          RRR UUU          UUU  NNN         NNN  000          000 FFF               FFF
RRR          RRR UUU          UUU  NNNNNN      NNN  000          000 FFF               FFF
RRR          RRR UUU          UUU  NNNNNN      NNN  000          000 FFF               FFF
RRR          RRR UUU          UUU  NNNNNN      NNN  000          000 FFF               FFF
RRRRRRRRRRR      UUU          UUU  NNN   NNN   NNN  000          000 FFFFFFFFFFF       FFFFFFFFFFF
RRRRRRRRRRRR     UUU          UUU  NNN   NNN   NNN  000          000 FFFFFFFFFFF       FFFFFFFFFFF
RRRRRRRRRRRR     UUU          UUU  NNN   NNN   NNN  000          000 FFFFFFFFFFF       FFFFFFFFFFF
RRR   RRR        UUU          UUU  NNN       NNNNNN 000          000 FFF               FFF
RRR   RRR        UUU          UUU  NNN       NNNNNN 000          000 FFF               FFF
RRR   RRR        UUU          UUU  NNN       NNNNNN 000          000 FFF               FFF
RRR      RRR     UUU          UUU  NNN          NNN 000          000 FFF               FFF
RRR      RRR     UUU          UUU  NNN          NNN 000          000 FFF               FFF
RRR      RRR     UUU          UUU  NNN          NNN 000          000 FFF               FFF
RRR         RRR  UUUUUUUUUUUUUUU  NNN          NNN    000000000     FFF               FFF
RRR         RRR  UUUUUUUUUUUUUUU  NNN          NNN    000000000     FFF               FFF
RRR         RRR  UUUUUUUUUUUUUUU  NNN          NNN    000000000     FFF               FFF
RRR         RRR  UUUUUUUUUUUUUUU  NNN          NNN    000000000     FFF               FFF
RRR         RRR  UUUUUUUUUUUUUUU  NNN          NNN    000000000     FFF               FFF
```

```
_$2

Sym
---
NDX
NDX
NUM
NUM
OPE
OUT
PAC
PAC
PAC
PAC
PAC
PAC
PAC
PAD
PAG
PAG
PAG
PAG
PAG
PAG
PAG
PER
PUT
RCO
RIN

RLI
RNO
RNO
RTY
SAV
STR
STR
STR
STR
STR
STR

STR
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STR
STR
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STR
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STR
```

FILEID**CNTVMS

```
  CCCCCCCC  NN      NN  TTTTTTTTTT  VV      VV  MM      MM    SSSSSSSS
  CCCCCCCC  NN      NN  TTTTTTTTTT  VV      VV  MM      MM    SSSSSSSS
CC          NN      NN      TT      VV      VV  MMMM  MMMM  SS
CC          NN      NN      TT      VV      VV  MMMM  MMMM  SS
CC          NNNN    NN      TT      VV      VV  MM  MM  MM  SS
CC          NNNN    NN      TT      VV      VV  MM  MM  MM  SS
CC          NN  NN  NN      TT      VV      VV  MM      MM    SSSSSS
CC          NN  NN  NN      TT      VV      VV  MM      MM    SSSSSS
CC          NN    NNNN      TT      VV      VV  MM      MM          SS
CC          NN    NNNN      TT      VV      VV  MM      MM          SS
CC          NN      NN      TT        VV  VV    MM      MM          SS      ....
CC          NN      NN      TT        VV  VV    MM      MM          SS      ....
  CCCCCCCC  NN      NN      TT          VV      MM      MM  SSSSSSSS        ....
  CCCCCCCC  NN      NN      TT          VV      MM      MM  SSSSSSSS        ....


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 %TITLE 'CNTVMS - CONTENTS VMS command Line Interface'
;     2          0002  0 MODULE cntvms   (IDENT = 'V04-000',
;     3          0003  0                 ADDRESSING_MODE (EXTERNAL = LONG_RELATIVE, NONEXTERNAL = LONG_RELATIVE)
;     4          0004  0                 ) =
;     5          0005  1 BEGIN
;     6          0006  1
;     7          0007  1 !
;     8          0008  1 !*****************************************************************************
;     9          0009  1 !*                                                                           *
;    10          0010  1 !*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY                                  *
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;    27          0027  1 !*                                                                           *
;    28          0028  1 !*                                                                           *
;    29          0029  1 !*****************************************************************************
;    30          0030  1 !
;    31          0031  1
;    32          0032  1 !++
;    33          0033  1 ! FACILITY:
;    34          0034  1 !   DSR (Digital Standard RUNOFF) /DSRPLUS DSRTOC/CONTENTS Utility
;    35          0035  1 !
;    36          0036  1 ! ABSTRACT:
;    37          0037  1 !   This module contains the command line interface for CONTENTS.
;    38          0038  1 !
;    39          0039  1 ! ENVIRONMENT:   VAX/VMS User Mode
```

```
;    41     0040  1 !
;    42     0041  1 ! AUTHOR:        JPK
;    43     0042  1 !
;    44     0043  1 ! CREATION DATE: April 1982
;    45     0044  1 !
;    46     0045  1 ! MODIFIED BY:
;    47     0046  1 !
;    48     0047  1 !       013     REM00013        Ray Marshall    13-Feb-1984
;    49     0048  1 !               Enabled /REQUIRE for DSRTOC.
;    50     0049  1 !
;    51     0050  1 !       012     KFA00012        29-Aug-1983
;    52     0051  1 !               Modified tms ==> TMS11.
;    53     0052  1 !
;    54     0053  1 !       011     JPK00012        27-May-1983
;    55     0054  1 !               Modified source modules to include REQ: in REQUIRE statements.
;    56     0055  1 !
;    57     0056  1 !       010     JPK00008        09-Mar-1983
;    58     0057  1 !               Modified CONTENTS and CAPTION to support new BRN formats,
;    59     0058  1 !               support SEND CONTENTS, /DOUBLE_SPACE, page numbered chapters,
;    60     0059  1 !               guarantee space after section number and to write new
;    61     0060  1 !               prologue and epilog for RUNOFF output.
;    62     0061  1 !               Modified FORMAT to quote only the RUNOFF flags used by CONTENTS.
;    63     0062  1 !               Modified CNTVMS to fix default for /DOUBLE_SPACE and do more
;    64     0063  1 !               value checking.
;    65     0064  1 !
;    66     0065  1 !       009     JPK00007        14-Feb-1983
;    67     0066  1 !               Global edit of all sources for CONTENTS/DSRTOC:
;    68     0067  1 !               - module names are now consistant with file names
;    69     0068  1 !               - copyright dates have been updated
;    70     0069  1 !               - facility names have been updated
;    71     0070  1 !               - revision history was updated to be consistant with DSR/DSRPLUS
;    72     0071  1 !
;    73     0072  1 !       008     JPK00006        14-Feb-1983
;    74     0073  1 !               Modified CNTVMS, CONTENTS, FORMAT and CNTVMSMSG to generate
;    75     0074  1 !               error messages for DSRTOC or CONTENTS depending on the
;    76     0075  1 !               compiletime variant for DSRPLUS (/VARIANT:8192)
;    77     0076  1 !
;    78     0077  1 !       007     JPK00004        11-Feb-1983
;    79     0078  1 !               Changed the global variable name INDENT to LINE_INDENT in
;    80     0079  1 !               modules CONTENTS, CAPTION, FORMAT and GBLDCL.
;    81     0080  1 !               Removed declarations of PDENTS in modules CNTVMS, CONTENTS,
;    82     0081  1 !               and CAPTION and replaced with a module wide BIND using the
;    83     0082  1 !               new name INDENTS.
;    84     0083  1 !               Changed handling of INDENTS [1]. It no longer represents the
;    85     0084  1 !               sum of the chapter and title indents.
;    86     0085  1 !
;    87     0086  1 !       006     JPK00003        11-Feb-1983
;    88     0087  1 !               Added condition handler to CNTVMS to set program exit status.
;    89     0088  1 !
;    90     0089  1 !       005     JPK00002        10-Feb-1983
;    91     0090  1 !               Merged in change KFA00002 to modules CNTVMS, CNTCLIDMP and
;    92     0091  1 !               CNTCLI.REQ. This change was done without reserving and
;    93     0092  1 !               replacing the files in the CMS Library. This work involved
;    94     0093  1 !               replacing CONTENTS$G_LM_INDENT, CONTENTS$G_HL1_INDENT through
;    95     0094  1 !               CONTENTS$G_HL6_INDENT and CONTENTS$G_HLN_INDENT with
;    96     0095  1 !               CONTENTS$AG_HL_INDENT.
;    97     0096  1 !               CONTENTS$V_TEX was removed - it was no longer needed.
```

```
;   98          0097  1 !                 Changed /TMS to /FORMAT=(DSR ! TMS).
;   99          0098  1 !                 Added code for /DOUBLE_SPACE.
;  100          0099  1 !
;  101          0100  1 !       004       RER00002        20-Jan-1983
;  102          0101  1 !                 Modified CNTVMS and CNTCLI.REQ to add new fields for new and
;  103          0102  1 !                 expanded qualifiers:
;  104          0103  1 !                 CONTENTS$V_TEX - for tex output,
;  105          0104  1 !                 CONTENTS$G_DOUBLE_SPACE - for /DOUBLE_SPACE,
;  106          0105  1 !                 CONTENTS$G_HL2_INDENT through CONTENTS$G_HL6_INDENT for /INDENT.
;  107          0106  1 !
;  108          0107  1 !       003       RER00001        17-Dec-1982
;  109          0108  1 !                 Added code to CNTVMS to treat keyword NORUNNING in same way as
;  110          0109  1 !                 keyword STANDARD.
;  111          0110  1 !                 Changed header level default value from 99 to 6.
;  112          0111  1 !                 Deleted foreign-command code; CONTENTS is now called
;  113          0112  1 !                 as a subcommand of DSR.
;  114          0113  1 !                 Conditionalized code to compile for DSRPLUS if BLISS
;  115          0114  1 !                 /VARIANT = 8192 is used; otherwise, to compile for DSR.
;  116          0115  1 !
;  117          0116  1 !       002       KFA00002        14-Oct-1982
;  118          0117  1 !                 Modified CNTVMS, CONTENTS, CAPTION and CNTCLI.REQ to handle
;  119          0118  1 !                 new syntax for /INDENT qualifier. All indents are now
;  120          0119  1 !                 stored in the vector CMDBLK [CONTENTS$AG_HL_INDENT []],
;  121          0120  1 !                 where 0 = chapter indent, 1 = header level one indent, etc.
;  122          0121  1 !
;  123          0122  1 !--
```

```
;  125     0123  1 !
;  126     0124  1 ! INCLUDE FILES:
;  127     0125  1 !
;  128     0126  1
;  129     0127  1 LIBRARY 'SYS$LIBRARY:STARLET';
;  130     0128  1
;  131     0129  1 LIBRARY 'SYS$LIBRARY:TPAMAC';    ! TPARSE macros
;  132     0130  1
;  133     0131  1 LIBRARY 'SYS$LIBRARY:XPORT';
;  134     0132  1
;  135     0133  1 SWITCHES LIST (REQUIRE);
;  136     0134  1
;  137     0135  1 REQUIRE 'REQ:CNTCLI';           ! Command line information block definition
```

```
;  R0136  1
;  R0137  1        Version:      'V04-000'
;  R0138  1
;  R0139  1        ;*****************************************************************************
;  R0140  1        *                                                                           *
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;  R0158  1        *                                                                           *
;  R0159  1        *                                                                           *
;  R0160  1        ;*****************************************************************************
;  R0161  1
;  R0162  1
;  R0163  1        ;++
;  R0164  1        ; FACILITY:
;  R0165  1        ;   DSR (Digital Standard RUNOFF) /DSRPLUS DSRTOC/CONTENTS Utility
;  R0166  1        ;
;  R0167  1        ; ABSTRACT:
;  R0168  1        ;   CONTENTS Command Line Data Structure Definitions
;  R0169  1        ;
;  R0170  1        ; ENVIRONMENT:   Transportable
;  R0171  1        ;
;  R0172  1        ; AUTHOR:        JPK
;  R0173  1        ;
;  R0174  1        ; CREATION DATE: April 1982
;  R0175  1        ;
;  R0176  1        ; MODIFIED BY:
;  R0177  1        ;
;  R0178  1        ;       005     JPK00007        14-Feb-1983
;  R0179  1        ;               Global edit of all sources for CONTENTS/DSRTOC:
;  R0180  1        ;               - module names are now consistant with file names
;  R0181  1        ;               - copyright dates have been updated
;  R0182  1        ;               - facility names have been updated
;  R0183  1        ;               - revision history was updated to be consistant with DSR/DSRPLUS
;  R0184  1        ;
;  R0185  1        ;       004     JPK00002        10-Feb-1983
;  R0186  1        ;               Merged in change KFA00002 to modules CNTVMS, CNTCLIDMP and
;  R0187  1        ;               CNTCLI.REQ. This change was done without reserving and
;  R0188  1        ;               replacing the files in the CMS Library. This work involved
;  R0189  1        ;               replacing CONTENTS$G_LM_INDENT, CONTENTS$G_HL1_INDENT through
;  R0190  1        ;               CONTENTS$G_HL6_INDENT and CONTENTS$G_HLN_INDENT with
;  R0191  1        ;               CONTENTS$AG_HL_INDENT.
;  R0192  1        ;               CONTENTS$V_TEX was removed - it was no longer needed.
```

```
;  R0193  1        !               Changed /TMS to /FORMAT={DSR | TMS}.
;  R0194  1        !               Added code for /DOUBLE_SPACE.
;  R0195  1        !
;  R0196  1        !       003     RER00002        20-Jan-1983
;  R0197  1        !               Modified CNTVMS and CNTCLI.REQ to add new fields for new and
;  R0198  1        !               expanded qualifiers:
;  R0199  1        !               CONTENTS$V_TEX - for tex output,
;  R0200  1        !               CONTENTS$G_DOUBLE_SPACE - for /DOUBLE_SPACE,
;  R0201  1        !               CONTENTS$G_HL2_INDENT through CONTENTS$G_HL6_INDENT for /INDENT.
;  R0202  1        !
;  R0203  1        !       002     KFA00002        14-Oct-1982
;  R0204  1        !               Modified CNTVMS, CONTENTS, CAPTION and CNTCLI.REQ to handle
;  R0205  1        !               new syntax for /INDENT qualifier. All indents are now
;  R0206  1        !               stored in the vector CMDBLK [CONTENTS$AG_HL_INDENT []],
;  R0207  1        !               where 0 = chapter indent, 1 = header level one indent, etc.
;  R0208  1        !
;  R0209  1        !--
;  R0210  1        !
;  R0211  1        !
;  R0212  1        !  Contents command fields:
;  R0213  1        !
;  R0214  1        $field contents_cmd_fields =
;  R0215  1            SET
;  R0216  1
;  R0217  1            contents$v_options          = [$short_integer],     ! Command option indicators:
;  R0218  1
;  R0219  1                $overlay (contents$v_options)
;  R0220  1
;  R0221  1                contents$v_output               = [$bit],       ! Generate output file
;  R0222  1                contents$v_tms11                = [$bit],       ! Generate TMS11 output
;  R0223  1                contents$v_require              = [$bit],       ! Require file specified
;  R0224  1                contents$v_standard_page        = [$bit],       ! Use section type page numbers
;  R0225  1                contents$v_include_sections     = [$bit],       ! Include section numbers in entry
;  R0226  1                contents$v_log                  = [$bit],       ! Generate /LOG message
;  R0227  1
;  R0228  1                $continue
;  R0229  1
;  R0230  1            contents$h_leader           = [$short_integer],     ! Align to next fullword
;  R0231  1
;  R0232  1                $overlay (contents$h_leader)
;  R0233  1
;  R0234  1                contents$c_leader_char  = [$string(1)],         ! Leader dot character
;  R0235  1
;  R0236  1                $continue
;  R0237  1
;  R0238  1            contents$g_headers          = [$integer],           ! Deepest header level to include
;  R0239  1            contents$g_page_level       = [$integer],           ! Deepest level to include page references
;  R0240  1            contents$g_underline        = [$integer],           ! Deepest level to include underlining
;  R0241  1            contents$g_bold             = [$integer],           ! Deepest level to include bolding
;  R0242  1            contents$g_sections         = [$integer],           ! Deepest level to include section numbers
;  R0243  1            contents$g_page_width       = [$integer],           ! Page width (for RUNOFF only)
;  R0244  1            contents$g_double_space     = [$integer],           ! Double space value
;  R0245  1            contents$ag_hl_indent       = [$sub_block (7)],     ! Left margin and HL 1-6 indents
;  R0246  1            contents$t_input_file       = [$descriptor(dynamic)], ! Input file name descriptor
;  R0247  1            contents$t_output_file      = [$descriptor(dynamic)], ! Output file name descriptor
;  R0248  1            contents$t_require_file     = [$descriptor(dynamic)], ! Require file name descriptor
;  R0249  1            contents$t_command_line     = [$descriptor(dynamic)]  ! Copy of entire command line
```

```
;  R0250  1
;  R0251  1          TES;
;  R0252  1
;  R0253  1      !  End of contents_cmd_fields
;  R0254  1
;  R0255  1      LITERAL
;  R0256  1          contents_cmd$k_length = $field_set_size;
;  R0257  1
;  R0258  1      MACRO
;  R0259  1          $contents_cmd = BLOCK [contents_cmd$k_length] FIELD (contents_cmd_fields) %;
;  R0260  1
;  R0261  1      !
;  R0262  1      !--     End of CNTCLI.REQ
```

```
;  138          0263  1
;  139          0264  1 REQUIRE 'REQ:CNTVMSREQ';        ! VMS error messages
```

```
;  R0265  1
;  R0266  1        Version:      'V04-000'
;  R0267  1
;  R0268  1        ****************************************************************************
;  R0269  1        *                                                                          *
;  R0270  1        *  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY                                *
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;  R0287  1        *                                                                          *
;  R0288  1        *                                                                          *
;  R0289  1        ****************************************************************************
;  R0290  1
;  R0291  1
;  R0292  1        !++
;  R0293  1        ! FACILITY:
;  R0294  1        !   DSR (Digital Standard RUNOFF) /DSRPLUS DSRTOC/CONTENTS Utility
;  R0295  1        !
;  R0296  1        ! ABSTRACT:
;  R0297  1        !       This file contains external references to the error message numbers
;  R0298  1        !       for DSRTOC/CONTENTS.
;  R0299  1        !
;  R0300  1        !       New messages must be defined in CNTVMSMSG.MSG and referenced here:
;  R0301  1        !       both in the MACRO section (for DSRTOC) and the EXTERNAL LITERAL
;  R0302  1        !       section (for CONTENTS)
;  R0303  1        !
;  R0304  1        ! ENVIRONMENT:   VAX/VMS User Mode
;  R0305  1        !
;  R0306  1        ! AUTHOR:        JPK
;  R0307  1        !
;  R0308  1        ! CREATION DATE: February 1983
;  R0309  1        !
;  R0310  1        ! MODIFIED BY:
;  R0311  1        !
;  R0312  1        !       002     JPK00009        24-Mar-1983
;  R0313  1        !               Modified CNTT20 to support new command line syntax.
;  R0314  1        !               Modified CONTENTS adding routines PROCESS_PAGE,
;  R0315  1        !               PROCESS_ENTITY_INFO and PROCESS_ENTITY_TXT to remove
;  R0316  1        !               code from routine TOC so that CONTENTS will compile on TOPS-20
;  R0317  1        !               Modified CNTVMSREQ to remove conditional require of RNODEF.
;  R0318  1        !
;  R0319  1        !--
;  R0320  1
;  R0321  1        REQUIRE 'REQ:RNODEF';
```

```
;  R0322  1
;  R0323  1        ! Version:      'V04-000'
;  R0324  1        !
;  R0325  1        !****************************************************************************
;  R0326  1        !*                                                                          *
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;  R0345  1        !*                                                                          *
;  R0346  1        !****************************************************************************
;  R0347  1        !
;  R0348  1
;  R0349  1        !++
;  R0350  1        ! FACILITY:      DSR (Digital Standard RUNOFF) / DSRPLUS
;  R0351  1        !
;  R0352  1        ! ABSTRACT:
;  R0353  1        !       Converts BLISS/VARIANT values into useful names.
;  R0354  1        !
;  R0355  1        ! ENVIRONMENT:   Transportable BLISS
;  R0356  1        !
;  R0357  1        ! AUTHOR:        Rich Friday
;  R0358  1        !
;  R0359  1        ! CREATION DATE: 1978
;  R0360  1        !
;  R0361  1        ! MODIFIED BY:
;  R0362  1        !
;  R0363  1        !       016     KAD00016        Ray Marshall    19-Mar-1984
;  R0364  1        !               Added GERMAN, FRENCH, & ITALIAN.
;  R0365  1        !
;  R0366  1        !       015     KAD00015        Keith Dawson    18-Apr-1983
;  R0367  1        !               Made the LN01 conditional the default for vanilla DSR --
;  R0368  1        !                 its value is 0 (no variant supplied).
;  R0369  1        !
;  R0370  1        !       014     KAD00014        Keith Dawson    22-Mar-1983
;  R0371  1        !               Asserted the LN01 conditional when DSRPLUS is asserted.
;  R0372  1        !
;  R0373  1        !       013     KAD00013        Keith Dawson    20-Mar-1983
;  R0374  1        !               Removed all references to .BIX and .BTC files.
;  R0375  1        !
;  R0376  1        !       012     KAD00012        Keith Dawson    07-Mar-1983
;  R0377  1        !               Global edit of all modules. Updated module names, idents,
;  R0378  1        !               copyright dates. Changed require files to BLISS library.
```

```
;  R0379  1      !
;  R0380  1      !--
;  R0381  1
;  R0382  1      !++
;  R0383  1      !       D E F I N I T I O N   O F  /VARIANT   B I T S
;  R0384  1      !
;  R0385  1      !       The bit assignments are as follows:
;  R0386  1      !
;  R0387  1      !       Bit  Weight   Meaning
;  R0388  1      !-------------------------------------------------------------------------
;  R0389  1      !       --      0     If no /VARIANT is supplied (as for vanilla DSR),
;  R0390  1      !                     compile with LN01 support. LN01 support is also
;  R0391  1      !                     implied by the DSRPLUS variant.
;  R0392  1      !
;  R0393  1      !        0      1     CLEAR =   Unassigned
;  R0394  1      !                     SET   =   Unassigned
;  R0395  1      !
;  R0396  1      !        1      2     CLEAR =   Normal compile
;  R0397  1      !                     SET   =   Compile for DSRPLUS
;  R0398  1      !
;  R0399  1      !       4-6    16     CLEAR =   English (American) version
;  R0400  1      !                     SET   =   16 = German (Austrian)
;  R0401  1      !                               32 = French
;  R0402  1      !                               48 = Italian
;  R0403  1      !--
;  R0404  1
;  R0405  1      !-----------------------------------------------------------------------
;  R0406  1      !   This variable (LN01) controls whether or not to compile an LN01-flavored
;  R0407  1      !   DSR. It is asserted by default, and also whenever DSRPLUS is asserted.
;  R0408  1      !
;  R0409  1      !   Modules utilizing LN01 are:
;  R0410  1      !
;  R0411  1      !       DOOPTS  NOUT
;  R0412  1      !
;  R0413  1      COMPILETIME
;  R0414  1          ln01 =
;  R0415  2              ( (%VARIANT EQL 0) OR  %VARIANT/2 )
;  R0416  1          ;
;  R0417  1
;  R0418  1      !-----------------------------------------------------------------------
;  R0419  1      !   This variable (DSRPLUS) controls compilation for the DSRPLUS program.
;  R0420  1      !
;  R0421  1      !   All modules utilize DSRPLUS.
;  R0422  1      !
;  R0423  1      COMPILETIME
;  R0424  1          dsrplus =
;  R0425  2              ( %VARIANT/2 )
;  R0426  1          ;
;  R0427  1
;  R0428  1      !-----------------------------------------------------------------------
;  R0429  1      !   This variable (FLIP) controls compilation of FLIP features of DSRPLUS.
;  R0430  1      !   It assures that FLIP features are compiled only on VMS systems.
;  R0431  1      !
;  R0432  1      !   Modules utilizing FLIP are many and various.
;  R0433  1      !
;  R0434  1      COMPILETIME
;  R0435  1          flip =
```

```
;  R0436  2              ( %VARIANT/2 AND %BLISS(BLISS32) )
;  R0437  1          ;
;  R0438  1
;  R0439  1      !-----------------------------------------------------------------------
;  R0440  1      !       4-6    16     CLEAR =   English (American) version
;  R0441  1      !                     SET   =   16 = German (Austrian)
;  R0442  1      !                               32 = French
;  R0443  1      !                               48 = Italian
;  R0444  1      COMPILETIME
;  R0445  1          German  = ( %VARIANT/16 AND NOT %VARIANT/32 AND NOT %VARIANT/64 ) ;
;  R0446  1      COMPILETIME
;  R0447  1          French  = ( NOT %VARIANT/16 AND %VARIANT/32 AND NOT %VARIANT/64 ) ;
;  R0448  1      COMPILETIME
;  R0449  1          Italian = ( %VARIANT/16 AND %VARIANT/32 AND NOT %VARIANT/64 ) ;
;  R0450  1      !-----------------------------------------------------------------------
;  R0451  1      !                       End of RNODEF.REQ
```

```
;  R0452  1
; LR0453  1      %IF NOT DSRPLUS
;  R0454  1      %THEN
;  R0455  1
;  R0456  1      MACRO
;  R0457  1          CONTENTS$_BADVALUE  = DSRTOC$_BADVALUE  %,
;  R0458  1          CONTENTS$_OPENIN    = DSRTOC$_OPENIN    %,
;  R0459  1          CONTENTS$_OPENOUT   = DSRTOC$_OPENOUT   %,
;  R0460  1          CONTENTS$_VALERR    = DSRTOC$_VALERR    %,
;  R0461  1          CONTENTS$_CAPTIONS  = DSRTOC$_CAPTIONS  %,
;  R0462  1          CONTENTS$_CLOSEQUOT = DSRTOC$_CLOSEQUOT %,
;  R0463  1          CONTENTS$_CONFQUAL  = DSRTOC$_CONFQUAL  %,
;  R0464  1          CONTENTS$_CTRLCHAR  = DSRTOC$_CTRLCHAR  %,
;  R0465  1          CONTENTS$_EMPTYIN   = DSRTOC$_EMPTYIN   %,
;  R0466  1          CONTENTS$_IGNORED   = DSRTOC$_IGNORED   %,
;  R0467  1          CONTENTS$_INVINPUT  = DSRTOC$_INVINPUT  %,
;  R0468  1          CONTENTS$_INVRECORD = DSRTOC$_INVRECORD %,
;  R0469  1          CONTENTS$_OVERSTRK  = DSRTOC$_OVERSTRK  %,
;  R0470  1          CONTENTS$_COMPLETE  = DSRTOC$_COMPLETE  %,
;  R0471  1          CONTENTS$_CREATED   = DSRTOC$_CREATED   %,
;  R0472  1          CONTENTS$_IGNORENEW = DSRTOC$_IGNORENEW %,
;  R0473  1          CONTENTS$_IGNOREOLD = DSRTOC$_IGNOREOLD %,
;  R0474  1          CONTENTS$_PROCFILE  = DSRTOC$_PROCFILE  %,
;  R0475  1          CONTENTS$_TEXTD     = DSRTOC$_TEXTD     %,
;  R0476  1          CONTENTS$_TMS11     = DSRTOC$_TMS11     %,
;  R0477  1          CONTENTS$_IDENT     = DSRTOC$_IDENT     %;
;  R0478  1
;  R0479  1      %FI
;  R0480  1
;  R0481  1      EXTERNAL LITERAL
;  R0482  1          CONTENTS$_BADVALUE,       ! <'!AS' is an invalid keyword value>
;  R0483  1          CONTENTS$_OPENIN,         ! <error opening '!AS' for input>
;  R0484  1          CONTENTS$_OPENOUT,        ! <error opening '!AS' for output>
;  R0485  1          CONTENTS$_VALERR,         ! <specified value is out of legal range>
;  R0486  1          CONTENTS$_CAPTIONS,       ! <both ".HEADER x" and ".SEND TOC n" captions encountered>
;  R0487  1          CONTENTS$_CLOSEQUOT,      ! <the following line is missing a close quote>
;  R0488  1          CONTENTS$_CONFQUAL,       ! <conflicting qualifiers>
;  R0489  1          CONTENTS$_CTRLCHAR,       ! <the following line contains control characters - ignored>
;  R0490  1          CONTENTS$_EMPTYIN,        ! <empty input file '!AS'>
;  R0491  1          CONTENTS$_IGNORED,        ! <'!AS' ignored>
;  R0492  1          CONTENTS$_INVINPUT,       ! <invalid input file format in file '!AS'>
;  R0493  1          CONTENTS$_INVRECORD,      ! <invalid record type in file '!AS'>
;  R0494  1          CONTENTS$_OVERSTRK,       ! <the following line contains an overstrike sequence>
;  R0495  1          CONTENTS$_COMPLETE,       ! <processing complete '!AS'>
;  R0496  1          CONTENTS$_CREATED,        ! <'!AS' created>
;  R0497  1          CONTENTS$_IGNORENEW,      ! <".HEADER x" captions will be ignored>
;  R0498  1          CONTENTS$_IGNOREOLD,      ! <".SEND TOC n" captions will be ignored>
;  R0499  1          CONTENTS$_PROCFILE,       ! <processing file '!AS'>
;  R0500  1          CONTENTS$_TEXTD,          ! <!AD>
;  R0501  1          CONTENTS$_TMS11,          ! <output file full - continuing with file '!AS'>
;  R0502  1          CONTENTS$_IDENT;          ! <CONTENTS version !AD>
;  R0503  1
```

```
;  140          0504  1
;  141          0505  1 SWITCHES LIST (NOREQUIRE);
;  142          0506  1
;  143          0507  1 !
;  144          0508  1 ! TABLE OF CONTENTS:
;  145          0509  1 !
;  146          0510  1
;  147          0511  1 FORWARD ROUTINE
;  148          0512  1     cntcli,                 ! Command line interface routine
;  149          0513  1     call_tparse,            ! Procedure to invoke TPARSE
;  150          0514  1     enter_page,             ! Action routine - enter page number display type
;  151          0515  1     condition_handler,      ! Condition handler - sets termination status
;  152          0516  1     open_error;             ! File open error handler
;  153          0517  1
;  154        L 0518  1 %IF DSRPLUS
;  155        U 0519  1 %THEN
;  156        U 0520  1
;  157        U 0521  1 FORWARD ROUTINE
;  158        U 0522  1     enter_format,           ! Action routine - enter output format type
;  159        U 0523  1     enter_sect,             ! Action routine - enter section number display level
;  160        U 0524  1     enter_dot,              ! Action routine - enter leader dot character
;  161        U 0525  1     enter_hl_indent;        ! Action routine - enter HL indent value
;  162        U 0526  1
;  163          0527  1 %FI
;  164          0528  1
;  165          0529  1 !
;  166          0530  1 ! EQUATED SYMBOLS:
;  167          0531  1 !
;  168          0532  1
;  169          0533  1 LITERAL
;  170          0534  1     true  = 1,
;  171          0535  1     false = 0;
;  172          0536  1
;  173          0537  1 !
;  174          0538  1 ! OWN STORAGE:
;  175          0539  1 !
;  176          0540  1
;  177          0541  1 OWN
;  178          0542  1     qualifier_value,
;  179          0543  1     tmp_str : $str_descriptor (class = dynamic, string = (0, 0)),
;  180          0544  1     termination_status : INITIAL (sts$k_success);
;  181          0545  1
;  182          0546  1 !
;  183          0547  1 ! EXTERNAL REFERENCES:
;  184          0548  1 !
;  185          0549  1
;  186          0550  1 EXTERNAL LITERAL                ! Status codes returned by cli$present ()
;  187          0551  1     cli$_concat,
;  188          0552  1     cli$_present,
;  189          0553  1     cli$_defaulted,
;  190          0554  1     cli$_negated,
;  191          0555  1     cli$_absent;
;  192          0556  1
;  193          0557  1 EXTERNAL
;  194          0558  1     cmdblk : $contents_cmd,     ! Command line information block
;  195          0559  1     cntvrl,                     ! Length of version number string
;  196          0560  1     cntvrp;                     ! CH$PTR to version number string
```

```
;  197          0561  1
;  198          0562  1 BIND
;  199          0563  1     indents = cmdblk [contents$ag_hl_indent] : VECTOR;
;  200          0564  1
;  201          0565  1 EXTERNAL ROUTINE
;  202          0566  1     cli$present     : ADDRESSING_MODE (GENERAL),        ! Qualifier present?
;  203          0567  1     cli$get_value   : ADDRESSING_MODE (GENERAL),        ! Get parameter value
;  204          0568  1     lib$tparse      : ADDRESSING_MODE (GENERAL),        ! TPARSE parser
;  205          0569  1     toc,                                                ! Entry point
;  206          0570  1     tocfin;                                             ! Cleanup routine
;  207          0571  1
;  208          0572  1 !+
;  209          0573  1 !   TPARSE state tables
;  210          0574  1 !-
;  211          0575  1
;  212          0576  1 !
;  213          0577  1 ! Tables to parse a decimal number
;  214          0578  1 !
;  215          0579  1 $init_state (numb_state, numb_key);
;  216        P 0580  1 $state (,
;  217        P 0581  1     (tpa$_decimal,    ,           ,                 , qualifier_value),
;  218        P 0582  1     (tpa$_eos,        tpa$_exit)
;  219          0583  1     );
;  220        P 0584  1 $state (,
;  221        P 0585  1     (tpa$_eos,        tpa$_exit)
;  222          0586  1     );
;  223          0587  1
;  224          0588  1 !
;  225          0589  1 ! Tables to parse /PAGE_NUMBERS values
;  226          0590  1 !
;  227          0591  1 $init_state (page_state, page_key);
;  228        P 0592  1 $state (,
;  229        P 0593  1     ('RUNNING',       page_end,  enter_page,       , ,                 false),
;  230        P 0594  1     ('NORUNNING',     page_end,  enter_page,       , ,                 true),
;  231        P 0595  1
;  232        L 0596  1 %IF DSRPLUS
;  233        U 0597  1 %THEN
;  234        U 0598  1
;  235        U 0599  1     ('STANDARD',      page_end,  enter_page,       , ,                 true),
;  236        U 0600  1
;  237        P 0601  1 %FI
;  238        P 0602  1
;  239        P 0603  1     ('LEVEL')
;  240          0604  1     );
;  241        P 0605  1 $state (,
;  242        P 0606  1     ('='),
;  243        P 0607  1     (':')
;  244          0608  1     );
;  245        P 0609  1 $state (,
;  246        P 0610  1     (tpa$_decimal,    page_end,  ,                 , qualifier_value)
;  247          0611  1     );
;  248        P 0612  1 $state (page_end,
;  249        P 0613  1     (tpa$_eos,        tpa$_exit)
;  250          0614  1     );
;  251          0615  1
;  252        L 0616  1 %IF DSRPLUS
;  253        U 0617  1 %THEN
```

```
;  254     U 0618  1
;  255     U 0619  1 !
;  256     U 0620  1 ! Tables to parse /FORMAT values
;  257     U 0621  1 !
;  258     U 0622  1 $init_state (format_state, format_key);
;  259     U 0623  1 $state (,
;  260     U 0624  1     ('DSR',           ,          enter_format,    , ,          false),
;  261     U 0625  1     ('TMS11',         ,          enter_format,    , ,          true)
;  262     U 0626  1     );
;  263     U 0627  1 $state (,
;  264     U 0528  1     (tpa$_eos,        tpa$_exit)
;  265     U 0629  1     );
;  266     U 0630  1
;  267     U 0631  1 !
;  268     U 0632  1 ! Tables to parse /INDENT values
;  269     U 0633  1 !
;  270     U 0634  1 $init_state (ind_state, ind_key);
;  271     U 0635  1 $state (,
;  272     U 0636  1     ('CHAPTER',       ,          ,                , ,          0),
;  273     U 0637  1     ('TITLES',        ,          ,                , ,          1),
;  274     U 0638  1     ('PROGRESSIVE',   ,          ,                , ,          -1),
;  275     U 0639  1     ('HL1',           ,          ,                , ,          1),
;  276     U 0640  1     ('HL2',           ,          ,                , ,          2),
;  277     U 0641  1     ('HL3',           ,          ,                , ,          3),
;  278     U 0642  1     ('HL4',           ,          ,                , ,          4),
;  279     U 0643  1     ('HL5',           ,          ,                , ,          5),
;  280     U 0644  1     ('HL6',           ,          ,                , ,          6)
;  281     U 0645  1     );
;  282     U 0646  1 $state (,
;  283     U 0647  1     ('='),
;  284     U 0648  1     (':')
;  285     U 0649  1     );
;  286     U 0650  1 $state (,
;  287     U 0651  1     (tpa$_decimal,    ,          enter_hl_indent)
;  288     U 0652  1     );
;  289     U 0653  1 $state (,
;  290     U 0654  1     (tpa$_eos,        tpa$_exit)
;  291     U 0655  1     );
;  292     U 0656  1
;  293     U 0657  1 !
;  294     U 0658  1 ! Tables to parse /SECTION_NUMBERS values
;  295     U 0659  1 !
;  296     U 0660  1 $init_state (sect_state, sect_key);
;  297     U 0661  1 $state (,
;  298     U 0662  1     ('AS_INPUT',      sect_end,  enter_sect,      , ,          -1),
;  299     U 0663  1     ('ALL',           sect_end,  enter_sect,      , ,          6),
;  300     U 0664  1     ('NONE',          sect_end,  enter_sect,      , ,          -2),
;  301     U 0665  1     ('LEVEL')
;  302     U 0666  1     );
;  303     U 0667  1 $state (,
;  304     U 0668  1     ('='),
;  305     U 0669  1     (':')
;  306     U 0670  1     );
;  307     U 0671  1 $state (,
;  308     U 0672  1     (tpa$_decimal,    sect_end,  enter_sect,      , ,          0)
;  309     U 0673  1     );
;  310     U 0674  1 $state(sect_end,
```

```
;  311          U 0675  1      (tpa$_eos,       tpa$_exit)
;  312          U 0676  1      );
;  313          U 0677  1
;  314          U 0678  1 !
;  315          U 0679  1 ! Tables to parse /LEADER_DOTS values
;  316          U 0680  1 !
;  317          U 0681  1 $init_state (dot_state, dot_key);
;  318          U 0682  1 $state (,
;  319          U 0683  1      (tpa$_any,       ,               enter_dot),
;  320          U 0684  1      (tpa$_eos,       tpa$_exit)
;  321          U 0685  1      );
;  322          U 0686  1 $state (,
;  323          U 0687  1      (tpa$_eos,       tpa$_exit)
;  324          U 0688  1      );
;  325          U 0689  1
;  326            0690  1 %FI
```

```
;  328     0691  1 %SBTTL 'CNTCLI - CONTENTS VMS Command line interface'
;  329     0692  1 GLOBAL ROUTINE cntcli =
;  330     0693  1 !++
;  331     0694  1 !
;  332     0695  1 ! FUNCTIONAL DESCRIPTION:
;  333     0696  1 !
;  334     0697  1 !       This routine uses the VMS DCL CLE to obtain command
;  335     0698  1 !       line information that is, in turn, passed to the
;  336     0699  1 !       Table of Contents application in a transportable fashion.
;  337     0700  1 !
;  338     0701  1 ! FORMAL PARAMETERS:
;  339     0702  1 !
;  340     0703  1 !       None
;  341     0704  1 !
;  342     0705  1 ! IMPLICIT INPUTS:
;  343     0706  1 !
;  344     0707  1 !       The VMS command line
;  345     0708  1 !
;  346     0709  1 ! IMPLICIT OUTPUTS:
;  347     0710  1 !
;  348     0711  1 !       cmdblk - The command line information block is initialized
;  349     0712  1 !
;  350     0713  1 ! ROUTINE VALUE:
;  351     0714  1 ! COMPLETION CODES:
;  352     0715  1 !
;  353     0716  1 !       termination_status      - Set by CONDITION_HANDLER ()
;  354     0717  1 !
;  355     0718  1 ! SIDE EFFECTS:
;  356     0719  1 !
;  357     0720  1 !       None
;  358     0721  1 !
;  359     0722  1 !--
;  360     0723  1
;  361     0724  2     BEGIN
;  362     0725  2
;  363     0726  2     ENABLE
;  364     0727  2         condition_handler;
;  365     0728  2
;  366     0729  2     LOCAL
;  367     0730  2         status;
;  368     0731  2
;  369     0732  2     $str_desc_init (descriptor = cmdblk [contents$t_input_file], class = dynamic);
;  370     0733  2     $str_desc_init (descriptor = cmdblk [contents$t_output_file], class = dynamic);
;  371     0734  2     $str_desc_init (descriptor = cmdblk [contents$t_require_file], class = dynamic);
;  372     0735  2     $str_desc_init (descriptor = cmdblk [contents$t_command_line], class = dynamic);
;  373     0736  2
;  374     0737  2     !
;  375     0738  2     ! Get a copy of the whole command line.
;  376     0739  2     !
;  377     0740  2     cli$get_value (%ASCID'$LINE', cmdblk [contents$t_command_line]);
;  378     0741  2
;  379     0742  2     !
;  380     0743  2     ! /FORMAT = { DSR : TMS11 }
;  381     0744  2     !
;  382     0745  2     !               * W A R N I N G *
;  383     0746  2     !
;  384     0747  2     !   This qualifier must be processed before any other qualifier.
```

```
;  385          0748  2      ;   Other qualifiers depend on the value of this qualifier.
;  386          0749  2      ;
;  387          0750  2      ;           * W A R N I N G *
;  388          0751  2      ;
;  389          0752  2      cmdblk [contents$v_tms11] = false;
;  390          0753  2
;  391        L 0754  2  %IF DSRPLUS
;  392        U 0755  2  %THEN
;  393        U 0756  2
;  394        U 0757  2      IF  cli$present (%ASCID'FORMAT')
;  395        U 0758  2      THEN
;  396        U 0759  2          BEGIN
;  397        U 0760  2          cli$get_value (%ASCID'FORMAT', tmp_str);
;  398        U 0761  2
;  399        U 0762  2          IF NOT call_tparse (tmp_str, format_state, format_key, false)
;  400        U 0763  2          THEN
;  401        U 0764  2              SIGNAL_STOP (contents$_badvalue, 1, tmp_str);
;  402        U 0765  2
;  403        U 0766  2          END;
;  404        U 0767  2
;  405          0768  2  %FI
;  406          0769  2
;  407          0770  2      ;
;  408          0771  2      ; /LINE_WIDTH = n
;  409          0772  2      ;
;  410          0773  2      ;           * W A R N I N G *
;  411          0774  2      ;
;  412          0775  2      ;   This qualifier must be processed after /FORMAT before any other
;  413          0776  2      ;   qualifier. It depends on the value of /FORMAT and other qualifiers
;  414          0777  2      ;   depend on the value of this qualifier.
;  415          0778  2      ;
;  416          0779  2      ;           * W A R N I N G *
;  417          0780  2      ;
;  418          0781  2      qualifier_value = 70;
;  419          0782  2
;  420        L 0783  2  %IF DSRPLUS
;  421        U 0784  2  %THEN
;  422        U 0785  2
;  423        U 0786  2      IF  .cmdblk [contents$v_tms11]
;  424        U 0787  2      THEN
;  425        U 0788  2          BEGIN
;  426        U 0789  2          ;
;  427        U 0790  2          ; Generating TMS11 output.
;  428        U 0791  2          ;
;  429        U 0792  2          IF  cli$present (%ASCID'LINE_WIDTH')
;  430        U 0793  2          THEN
;  431        U 0794  2              SIGNAL (contents$_ignored, 1, %ASCID'LINE_WIDTH', contents$_confqual);
;  432        U 0795  2
;  433        U 0796  2          qualifier_value = -1;
;  434        U 0797  2          END
;  435        U 0798  2      ELSE
;  436        U 0799  2          BEGIN
;  437        U 0800  2
;  438        U 0801  2          IF  cli$present (%ASCID'LINE_WIDTH')
;  439        U 0802  2          THEN
;  440        U 0803  2              BEGIN
;  441        U 0804  2              cli$get_value (%ASCID'LINE_WIDTH', tmp_str);
```

```
;  442        U 0805  2
;  443        U 0806  2              IF  NOT call_tparse (tmp_str, numb_state, numb_key, false)
;  444        U 0807  2              THEN
;  445        U 0808  2                  SIGNAL_STOP (contents$_badvalue, 1, tmp_str);
;  446        U 0809  2
;  447        U 0810  2              IF  (.qualifier_value LSS 20) OR (.qualifier_value GTR 120)
;  448        U 0811  2              THEN
;  449        U 0812  2                  SIGNAL_STOP (contents$_badvalue, 1, tmp_str, contents$_valerr);
;  450        U 0813  2
;  451        U 0814  2              END;
;  452        U 0815  2
;  453        U 0816  2          END;
;  454        U 0817  2
;  455          0818  2 %FI
;  456          0819  2
;  457          0820  2      cmdblk [contents$g_page_width] = .qualifier_value;
;  458          0821  2
;  459          0822  2      !
;  460          0823  2      ! /DEEPEST_HEADER = n
;  461          0824  2      !
;  462          0825  2      !           * W A R N I N G *
;  463          0826  2      !
;  464          0827  2      !   This qualifier must be processed before /INDENT.
;  465          0828  2      !   The value of indent depends on the value of this qualifier.
;  466          0829  2      !
;  467          0830  2      !           * W A R N I N G *
;  468          0831  2      !
;  469          0832  2      qualifier_value = 6;
;  470          0833  2
;  471          0834  2      IF  cli$present (%ASCID'DEEPEST_HEADER')
;  472          0835  2      THEN
;  473          0836  3          BEGIN
;  474          0837  3          cli$get_value (%ASCID'DEEPEST_HEADER', tmp_str);
;  475          0838  3
;  476          0839  3          IF  NOT call_tparse (tmp_str, numb_state, numb_key, false)
;  477          0840  3          THEN
;  478          0841  3              SIGNAL_STOP (contents$_badvalue, 1, tmp_str);
;  479          0842  3
;  480          0843  3          IF  .qualifier_value GTR 6
;  481          0844  3          THEN
;  482          0845  3              SIGNAL_STOP (contents$_badvalue, 1, tmp_str, contents$_valerr);
;  483          0846  3
;  484          0847  2          END;
;  485          0848  2
;  486          0849  2      cmdblk [contents$g_headers] = .qualifier_value;
;  487          0850  2
;  488          0851  2      !
;  489          0852  2      ! /INDENT = ([CHAPTER = n], [TITLES = m], [PROGRESSIVE = p],
;  490          0853  2      !           [HL1 = m], [HL2 = q], [HL3 = r], [HL4 = s], [HL5 = t], [HL6 = u])
;  491          0854  2      !
;  492          0855  2      !           * W A R N I N G *
;  493          0856  2      !
;  494          0857  2      !   This qualifier must be processed after /FORMAT, /LINE_WIDTH and
;  495          0858  2      !   /DEEPEST_HEADER. It depends on their values.
;  496          0859  2      !
;  497          0860  2      !           * W A R N I N G *
;  498          0861  2      !
```

```
;  499          0862  2      indents [0] = 8;
;  500          0863  2      indents [1] = 8;
;  501          0864  2      indents [2] = 2;
;  502          0865  2
;  503        L 0866  2 %IF DSRPLUS
;  504        U 0867  2 %THEN
;  505        U 0868  2
;  506        U 0869  2      indents [3] = 2;
;  507        U 0870  2      indents [4] = 2;
;  508        U 0871  2      indents [5] = 2;
;  509        U 0872  2      indents [6] = 2;
;  510        U 0873  2
;  511          0874  2 %ELSE
;  512          0875  2
;  513          0876  2      indents [3] = 0;
;  514          0877  2      indents [4] = 0;
;  515          0878  2      indents [5] = 0;
;  516          0879  2      indents [6] = 0;
;  517          0880  2
;  518          0881  2 %FI
;  519          0882  2
;  520          0883  2      IF cli$present (%ASCID'INDENT')
;  521          0884  2      THEN
;  522          0885  3          BEGIN
;  523          0886  3
;  524        L 0887  3 %IF DSRPLUS
;  525        U 0888  3 %THEN
;  526        U 0889  3
;  527        U 0890  3          IF .cmdblk [contents$v_tms11]
;  528        U 0891  3          THEN
;  529        U 0892  3              BEGIN
;  530        U 0893  3              !
;  531        U 0894  3              ! Generating TMS11 output.
;  532        U 0895  3              !
;  533        U 0896  3              SIGNAL (contents$_ignored, 1, %ASCID'INDENT', contents$_confqual);
;  534        U 0897  3
;  535        U 0898  3              INCR i FROM 0 TO 6 DO indents [.i] = 0;
;  536        U 0899  3              END
;  537        U 0900  3          ELSE
;  538        U 0901  3              BEGIN
;  539        U 0902  3
;  540        U 0903  3              LOCAL
;  541        U 0904  3                  total_indent;
;  542        U 0905  3
;  543        U 0906  3              WHILE cli$get_value (%ASCID'INDENT', tmp_str) DO
;  544        U 0907  3                  IF NOT call_tparse (tmp_str, ind_state, ind_key, false)
;  545        U 0908  3                  THEN
;  546        U 0909  3                      SIGNAL_STOP (contents$_badvalue, 1, tmp_str);
;  547        U 0910  3
;  548        U 0911  3              !
;  549        U 0912  3              ! Validate left margin indent.
;  550        U 0913  3              !
;  551        U 0914  3              total_indent = .indents [0];
;  552        U 0915  3
;  553        U 0916  3              IF .total_indent GEQ .cmdblk [contents$g_page_width]
;  554        U 0917  3              THEN
;  555        U 0918  3                  BEGIN
```

```
;  556        U 0919  3                $str_copy (target = tmp_str,
;  557        U 0920  3                    string = $str_concat ('CHAPTER=', $str_ascii (.indents [0])));
;  558        U 0921  3
;  559        U 0922  3                SIGNAL_STOP (contents$_badvalue, 1, tmp_str, contents$_valerr);
;  560        U 0923  3                END;
;  561        U 0924  3
;  562        U 0925  3            !
;  563        U 0926  3            ! Validate HL1 indent.
;  564        U 0927  3            !
;  565        U 0928  3            total_indent = .total_indent + .indents [1];
;  566        U 0929  3
;  567        U 0930  3            IF .total_indent GEQ .cmdblk [contents$g_page_width]
;  568        U 0931  3            THEN
;  569        U 0932  3                BEGIN
;  570        U 0933  3                $str_copy (target = tmp_str,
;  571        U 0934  3                    string = $str_concat ('HL1=', $str_ascii (.indents [1])));
;  572        U 0935  3
;  573        U 0936  3                SIGNAL_STOP (contents$_badvalue, 1, tmp_str, contents$_valerr);
;  574        U 0937  3                END;
;  575        U 0938  3
;  576        U 0939  3            !
;  577        U 0940  3            ! Validate progressive indents
;  578        U 0941  3            !
;  579        U 0942  3            INCR i FROM 2 TO .cmdblk [contents$g_headers] DO
;  580        U 0943  3                BEGIN
;  581        U 0944  3                total_indent = .total_indent + .indents [.i];
;  582        U 0945  3
;  583        U 0946  3                IF .total_indent GEQ .cmdblk [contents$g_page_width]
;  584        U 0947  3                THEN
;  585        U 0948  3                    BEGIN
;  586        U 0949  3                    $str_copy (target = tmp_str,
;  587        U 0950  3                        string = $str_concat ('HL', $str_ascii (.i), '=',
;  588        U 0951  3                            $str_ascii (.indents [.i])));
;  589        U 0952  3
;  590        U 0953  3                    SIGNAL_STOP (contents$_badvalue, 1, tmp_str, contents$_valerr);
;  591        U 0954  3                    END;
;  592        U 0955  3
;  593        U 0956  3                END;
;  594        U 0957  3
;  595        U 0958  3            END;
;  596        U 0959  3
;  597          0960  3        %ELSE
;  598          0961  3
;  599          0962  3            indents [3] = 2;
;  600          0963  3            indents [4] = 2;
;  601          0964  3            indents [5] = 2;
;  602          0965  3            indents [6] = 2;
;  603          0966  3
;  604          0967  3        %FI
;  605          0968  3
;  606          0969  2            END;
;  607          0970  2
;  608          0971  2        !
;  609          0972  2        ! /[NO]LEADER_DOTS = k
;  610          0973  2        !
;  611          0974  2        !           * W A R N I N G *
;  612          0975  2        !
```

```
;  613          0976  2      !   This qualifier must be processed after /FORMAT.
;  614          0977  2      !   It depends on the value of /FORMAT.
;  615          0978  2      !
;  616          0979  2      !           * W A R N I N G *
;  617          0980  2      !
;  618          0981  2      CH$WCHAR (%C'.', CH$PTR (cmdblk [contents$c_leader_char]));
;  619          0982  2
;  620        L 0983  2  %IF DSRPLUS
;  621        U 0984  2  %THEN
;  622        U 0985  2
;  623        U 0986  2      IF .cmdblk [contents$v_tms11]
;  624        U 0987  2      THEN
;  625        U 0988  2          BEGIN
;  626        U 0989  2          !
;  627        U 0990  2          ! Generating TMS11 output.
;  628        U 0991  2          !
;  629        U 0992  2          SELECTONE cli$present (%ASCID'LEADER_DOTS') OF
;  630        U 0993  2              SET
;  631        U 0994  2
;  632        U 0995  2              [cli$_present, cli$_negated]:
;  633        U 0996  2                  !
;  634        U 0997  2                  ! Value explicitly given or negated - ignored for TMS.
;  635        U 0998  2                  !
;  636        U 0999  2                  SIGNAL (contents$_ignored, 1, %ASCID'LEADER_DOTS', contents$_contqual);
;  637        U 1000  2
;  638        U 1001  2              [OTHERWISE]:
;  639        U 1002  2                  !
;  640        U 1003  2                  ! Value defaulted
;  641        U 1004  2                  ! or value absent (not possible, value is present by default).
;  642        U 1005  2                  ! In any event, do nothing.
;  643        U 1006  2                  !
;  644        U 1007  2                  ;
;  645        U 1008  2
;  646        U 1009  2              TES;
;  647        U 1010  2
;  648        U 1011  2          CH$WCHAR (%C' ', CH$PTR (cmdblk [contents$c_leader_char]));
;  649        U 1012  2          END
;  650        U 1013  2      ELSE
;  651        U 1014  2          BEGIN
;  652        U 1015  2
;  653        U 1016  2          SELECTONE cli$present (%ASCID'LEADER_DOTS') OF
;  654        U 1017  2              SET
;  655        U 1018  2
;  656        U 1019  2              [cli$_present]:
;  657        U 1020  2                  BEGIN
;  658        U 1021  2                  !
;  659        U 1022  2                  ! Value explicitly given.
;  660        U 1023  2                  !
;  661        U 1024  2                  cli$get_value (%ASCID'LEADER_DOTS', tmp_str);
;  662        U 1025  2
;  663        U 1026  2                  IF NOT call_tparse (tmp_str, dot_state, dot_key, true)
;  664        U 1027  2                  THEN
;  665        U 1028  2                      SIGNAL_STOP (contents$_badvalue, 1, tmp_str);
;  666        U 1029  2
;  667        U 1030  2                  END;
;  668        U 1031  2
;  669        U 1032  2              [cli$_negated]:
```

```
;  670        U 1033  2                    !
;  671        U 1034  2                    ! Value explicitly negated.
;  672        U 1035  2                    !
;  673        U 1036  2                    CH$WCHAR (%C' ', CH$PTR (cmdblk [contents$c_leader_char]));
;  674        U 1037  2
;  675        U 1038  2                [OTHERWISE]:
;  676        U 1039  2                    !
;  677        U 1040  2                    ! Value defaulted
;  678        U 1041  2                    ! or qualifier absent (not possible - present by default).
;  679        U 1042  2                    ! In any event, do nothing.
;  680        U 1043  2                    !
;  681        U 1044  2                    ;
;  682        U 1045  2
;  683        U 1046  2                TES;
;  684        U 1047  2
;  685        U 1048  2            END;
;  686        U 1049  2
;  687          1050  2 %FI
;  688          1051  2
;  689          1052  2        !
;  690          1053  2        ! /PAGE_NUMBERS = ([[NO]RUNNING], [STANDARD], [LEVEL = n])
;  691          1054  2        !
;  692          1055  2        ! NORUNNING is the same as STANDARD.
;  693          1056  2        !
;  694          1057  2        !           * W A R N I N G *
;  695          1058  2        !
;  696          1059  2        !   This qualifier must be processed after /FORMAT.
;  697          1060  2        !   It depends on the value of /FORMAT.
;  698          1061  2        !
;  699          1062  2        !           * W A R N I N G *
;  700          1063  2        !
;  701          1064  2        cmdblk [contents$v_standard_page] = true;
;  702          1065  2        qualifier_value = 6;
;  703          1066  2
;  704          1067  2        IF  cli$present (%ASCID'PAGE_NUMBERS')
;  705          1068  2        THEN
;  706          1069  3            BEGIN
;  707          1070  3
;  708          1071  3            WHILE cli$get_value (%ASCID'PAGE_NUMBERS', tmp_str) DO
;  709          1072  3                IF  NOT call_tparse (tmp_str, page_state, page_key, false)
;  710          1073  3                THEN
;  711          1074  3                    SIGNAL_STOP (contents$_badvalue, 1, tmp_str);
;  712          1075  3
;  713          1076  4            IF  .cmdblk [contents$v_tms11] and (.qualifier_value NEQ 6)
;  714          1077  3            THEN
;  715          1078  4                BEGIN
;  716          1079  4                !
;  717          1080  4                ! LEVEL = n not allowed for TMS11 output.
;  718          1081  4                !
;  719          1082  4                SIGNAL (contents$_ignored, 1, %ASCID'LEVEL', contents$_confqual);
;  720          1083  4
;  721          1084  4                qualifier_value = 6;
;  722          1085  3                END;
;  723          1086  3
;  724          1087  2            END;
;  725          1088  2
;  726          1089  2        cmdblk [ccntents$g_page_level] = .qualifier_value;
```

```
;   727          1090  2
;   728          1091  2      !
;   729          1092  2      ! /[NO]BOLD = n
;   730          1093  2      !
;   731          1094  2      qualifier_value = -1;
;   732          1095  2
;   733          1096  2      IF  cli$present (%ASCID'BOLD')
;   734          1097  2      THEN
;   735          1098  2
;   736        L 1099  2  %IF DSRPLUS
;   737        U 1100  2  %THEN
;   738        U 1101  2
;   739        U 1102  2          BEGIN
;   740        U 1103  2          qualifier_value = 6;
;   741        U 1104  2          cli$get_value (%ASCID'BOLD', tmp_str);
;   742        U 1105  2
;   743        U 1106  2          IF  NOT call_tparse (tmp_str, numb_state, numb_key, false)
;   744        U 1107  2          THEN
;   745        U 1108  2              SIGNAL_STOP (contents$_badvalue, 1, tmp_str);
;   746        U 1109  2
;   747        U 1110  2          END;
;   748        U 1111  2
;   749          1112  2  %ELSE
;   750          1113  2
;   751          1114  2          qualifier_value = 6;
;   752          1115  2
;   753          1116  2  %FI
;   754          1117  2
;   755          1118  2      cmdblk [contents$g_bold] = .qualifier_value;
;   756          1119  2
;   757          1120  2      !
;   758          1121  2      ! /[NO]DOUBLE_SPACE[=n]
;   759          1122  2      !
;   760          1123  2      qualifier_value = -1;
;   761          1124  2
;   762        L 1125  2  %IF DSRPLUS
;   763        U 1126  2  %THEN
;   764        U 1127  2
;   765        U 1128  2      IF cli$present (%ASCID'DOUBLE_SPACE')
;   766        U 1129  2      THEN
;   767        U 1130  2          BEGIN
;   768        U 1131  2          qualifier_value = 1;
;   769        U 1132  2          cli$get_value (%ASCID'DOUBLE_SPACE', tmp_str);
;   770        U 1133  2
;   771        U 1134  2          IF NOT call_tparse (tmp_str, numb_state, numb_key, false)
;   772        U 1135  2          THEN
;   773        U 1136  2              SIGNAL_STOP (contents$_badvalue, 1, tmp_str);
;   774        U 1137  2
;   775        U 1138  2          IF .qualifier_value LSS 1
;   776        U 1139  2          THEN
;   777        U 1140  2              SIGNAL_STOP (contents$_badvalue, 1, tmp_str, contents$_valerr);
;   778        U 1141  2
;   779        U 1142  2          END;
;   780        U 1143  2
;   781          1144  2  %FI
;   782          1145  2
;   783          1146  2      cmdblk [contents$g_double_space] = .qualifier_value;
```

```
;  784          1147  2
;  785          1148  2      !
;  786          1149  2      ! /IDENTIFICATION
;  787          1150  2      !
;  788          1151  2      IF  cli$present (%ASCID'IDENTIFICATION')
;  789          1152  2      THEN
;  790          1153  2          SIGNAL (contents$_ident, 2, .cntvrl, .cntvrp);
;  791          1154  2
;  792          1155  2      !
;  793          1156  2      ! /[NO]LOG
;  794          1157  2      !
;  795          1158  2      IF  cli$present (%ASCID'LOG')
;  796          1159  2      THEN
;  797          1160  2          cmdblk [contents$v_log] = true
;  798          1161  2      ELSE
;  799          1162  2          cmdblk [contents$v_log] = false;
;  800          1163  2
;  801          1164  2      !
;  802          1165  2      ! /[NO]OUTPUT = filespec
;  803          1166  2      !
;  804          1167  2      IF  cli$present (%ASCID'OUTPUT')
;  805          1168  2      THEN
;  806          1169  3          BEGIN
;  807          1170  3          cmdblk [contents$v_output] = true;
;  808          1171  3          cli$get_value (%ASCID'OUTPUT', cmdblk [contents$t_output_file]);
;  809          1172  3          END
;  810          1173  2      ELSE
;  811          1174  2          cmdblk [contents$v_output] = false;
;  812          1175  2
;  813          1176  2      !
;  814          1177  2      ! /REQUIRE = filespec
;  815          1178  2      !
;  816          1179  2
;  817          1180  2      IF  cli$present (%ASCID'REQUIRE')
;  818          1181  2      THEN
;  819          1182  3          BEGIN
;  820          1183  3          cmdblk [contents$v_require] = true;
;  821          1184  3          cli$get_value (%ASCID'REQUIRE', cmdblk [contents$t_require_file]);
;  822          1185  3          END
;  823          1186  2      ELSE
;  824          1187  2          cmdblk [contents$v_require] = false;
;  825          1188  2
;  826          1189  2      !
;  827          1190  2      ! /SECTION_NUMBERS = ( AS_INPUT ! ALL ! NONE ! LEVEL = n )
;  828          1191  2      !
;  829          1192  2      cmdblk [contents$v_include_sections] = true;
;  830          1193  2
;  831        L 1194  2  %IF DSRPLUS
;  832        U 1195  2  %THEN
;  833        U 1196  2
;  834        U 1197  2      cmdblk [contents$g_sections] = -1;          ! Display section numbers AS_INPUT
;  835        U 1198  2
;  836        U 1199  2      IF  cli$present (%ASCID'SECTION_NUMBERS')
;  837        U 1200  2      THEN
;  838        U 1201  2          BEGIN
;  839        U 1202  2          cli$get_value (%ASCID'SECTION_NUMBERS', tmp_str);
;  840        U 1203  2
```

```
;  841        U 1204  2          IF  NOT call_tparse (tmp_str, sect_state, sect_key, false)
;  842        U 1205  2          THEN
;  843        U 1206  2              SIGNAL_STOP (contents$_badvalue, 1, tmp_str);
;  844        U 1207  2
;  845        U 1208  2          END;
;  846        U 1209  2
;  847           1210  2 %ELSE
;  848           1211  2
;  849           1212  2      cmdblk [contents$g_sections] = 6;           ! Display ALL section numbers
;  850           1213  2
;  851           1214  2      IF cli$present (%ASCID'SECTION_NUMBERS') EQL cli$_negated
;  852           1215  2      THEN
;  853           1216  3          BEGIN
;  854           1217  3          cmdblk [contents$v_include_sections] = false;
;  855           1218  3          cmdblk [contents$g_sections] = 0;
;  856           1219  2          END;
;  857           1220  2
;  858           1221  2 %FI
;  859           1222  2
;  860           1223  2      !
;  861           1224  2      ! /[NO]UNDERLINE = n
;  862           1225  2      !
;  863           1226  2      qualifier_value = -1;
;  864           1227  2
;  865           1228  2      IF  cli$present (%ASCID'UNDERLINE')
;  866           1229  2      THEN
;  867           1230  2
;  868        L  1231  2 %IF DSRPLUS
;  869        U  1232  2 %THEN
;  870        U  1233  2
;  871        U  1234  2          BEGIN
;  872        U  1235  2          qualifier_value = 6;
;  873        U  1236  2          cli$get_value (%ASCID'UNDERLINE', tmp_str);
;  874        U  1237  2
;  875        U  1238  2          IF  NOT call_tparse (tmp_str, numb_state, numb_key, false)
;  876        U  1239  2          THEN
;  877        U  1240  2              SIGNAL_STOP (contents$_badvalue, 1, tmp_str);
;  878        U  1241  2
;  879        U  1242  2          IF  .qualifier_value GTR 6
;  880        U  1243  2          THEN
;  881        U  1244  2              SIGNAL_STOP (contents$_badvalue, 1, tmp_str, contents$_valerr);
;  882        U  1245  2
;  883        U  1246  2          END;
;  884        U  1247  2
;  885           1248  2 %ELSE
;  886           1249  2
;  887           1250  2          qualifier_value = 6;
;  888           1251  2
;  889           1252  2 %FI
;  890           1253  2
;  891           1254  2      cmdblk [contents$g_underline] = .qualifier_value;
;  892           1255  2
;  893           1256  2      !
;  894           1257  2      ! Process input file(s) and positional qualifiers.
;  895           1258  2      !
;  896           1259  2      WHILE (status = cli$get_value (%ASCID'INPUT', cmdblk [contents$t_input_file])) DO
;  897           1260  3          BEGIN
```

```
;  898          1261  3          toc ();                                 ! Process input file.
;  899          1262  3
;  900          1263  3          !
;  901          1264  3          ! Generate Figures, Tables, and Examples and finish up if
;  902          1265  3          ! the current input file is not concatenated to the next.
;  903          1266  3          !
;  904          1267  3          IF .status NEQ cli$_concat THEN tocfin ();
;  905          1268  2          END;
;  906          1269  2
;  907          1270  2      RETURN (.termination_status OR sts$m_inhib_msg);
;  908          1271  1      END;


                                                        .TITLE  CNTVMS CNTVMS - CONTENTS VMS command Line Inter
;                                                                       face
                                                        .IDENT  \V04-000\

                                                        .PSECT  _LIB$KEY1$,NOWRT,  SHR,  PIC,1

                                                00000 ;TPA$KEYSTO
                                                      U.9:      .BLKB   0
                        47  4E  49  4E  4E  55  52     00000 ;TPA$KEYST
                                                      U.11:     .ASCII  \RUNNING\                               ;
                                                FF    00007     .BYTE   -1                                      ;
                                                00008 ;TPA$KEYSTO
                                                      U.18:     .BLKB   0
                    47  4E  49  4B  4E  55  52  4F  4E 00008 ;TPA$KEYST
                                                      U.20:     .ASCII  \NORUNNING\                             ;
                                                FF    00011     .BYTE   -1                                      ;
                                                00012 ;TPA$KEYSTO
                                                      U.26:     .BLKB   0
                            4C  45  56  45  4C  00012 ;TPA$KEYST
                                                      U.28:     .ASCII  \LEVEL\                                 ;
                                                FF    00017     .BYTE   -1                                      ;
                                                FF    00018 ;TPA$KEYFILL
                                                      U.30:     .BYTE   -1                                      ;

                                                        .PSECT  _LIB$STATE$,NOWRT,  SHR,  PIC,1

                                                00000 NUMB_STATE::
                                                      .BLKB   0
                                            41F3  00000 ;TPA$TYPE
                                                      U.2:      .WORD   16883                                   ;
                                        00000000* 00002 ;TPA$ADDR
                                                      U.3:      .LONG   <<QUALIFIER_VALUE-U.3>-4>               ;
                                            15F7  00006 ;TPA$TYPE
                                                      U.4:      .WORD   5623                                    ;
                                            FFFF  00008 ;TPA$TARGET
                                                      U.5:      .WORD   -1                                      ;
                                            15F7  0000A ;TPA$TYPE
                                                      U.6:      .WORD   5623                                    ;
                                            FFFF  0000C ;TPA$TARGET
                                                      U.7:      .WORD   -1                                      ;
                                                0000E     .BLKB   2
                                                00010 PAGE_STATE::
                                                      .BLKB   0
                                            9300  00010 ;TPA$TYPE
```

```
                                                U.12:   .WORD   -27904                  ;
                      01        00012 ;TPA$FLAGS2
                                                U.13:   .BYTE   1                       ;
                00000000        00013 ;TPA$PARAM
                                                U.14:   .LONG   0                       ;
                00000000V       00017 ;TPA$ACTION
                                                U.15:   .LONG   <<ENTER_PAGE-U.15>-4>   ;
                    0000*       0001B ;TPA$TARGET
                                                U.17:   .WORD   <<U.16-U.17>-2>         ;
                    9301        0001D ;TPA$TYPE
                                                U.21:   .WORD   -27903                  ;
                      01        0001F ;TPA$FLAGS2
                                                U.22:   .BYTE   1                       ;
                00000001        00020 ;TPA$PARAM
                                                U.23:   .LONG   1                       ;
                00000000V       00024 ;TPA$ACTION
                                                U.24:   .LONG   <<ENTER_PAGE-U.24>-4>   ;
                    0000*       00028 ;TPA$TARGET
                                                U.25:   .WORD   <<U.16-U.25>-2>         ;
                    0502        0002A ;TPA$TYPE
                                                U.29:   .WORD   1282                    ;
                    003D        0002C ;TPA$TYPE
                                                U.31:   .WORD   61                      ;
                    043A        0002E ;TPA$TYPE
                                                U.32:   .WORD   1082                    ;
                    55F3        00030 ;TPA$TYPE
                                                U.33:   .WORD   22003                   ;
                00000000*       00032 ;TPA$ADDR
                                                U.34:   .LONG   <<QUALIFIER_VALUE-U.34>-4>  ;
                    0000*       00036 ;TPA$TARGET
                                                U.35:   .WORD   <<U.16-U.35>-2>         ;
                                00038 ;PAGE_END
                                                U.16:   .BLKB   0
                    15F7        00038 ;TPA$TYPE
                                                U.36:   .WORD   5623                    ;
                    FFFF        0003A ;TPA$TARGET
                                                U.37:   .WORD   -1                      ;

                                                        .PSECT  _LIB$KEY0$,NOWRT,  SHR,  PIC,1

                                00000 NUMB_KEY::
                                                        .BLKB   0
                                00000 ;TPA$KEY0
                                                U.1:    .BLKB   0
                                00000 PAGE_KEY::
                                                        .BLKB   0
                                00000 ;TPA$KEY0
                                                U.8:    .BLKB   0
                    0000*       00000 ;TPA$KEY
                                                U.10:   .WORD   <U.9-U.8>               ;
                    0000*       00002 ;TPA$KEY
                                                U.19:   .WORD   <U.18-U.8>              ;
                    0000*       00004 ;TPA$KEY
                                                U.27:   .WORD   <U.26-U.8>              ;

                                                        .PSECT  $PLIT$,NOWRT,NOEXE,2
```

```
                                00 00 00 45 4E 49 4C 24  00000 P.AAB:   .ASCII  \$LINE\<0><0><0>
                                                010E0005 00008 P.AAA:   .LONG   17694725
                                                00000000' 0000C         .ADDRESS P.AAB
00 52 45 44 41 45 48 5F 54 53 45 50 45 45 44  00010 P.AAD:   .ASCII  \DEEPEST_HEADER\<0><0>
                                                      00 0001F
                                                010E000E 00020 P.AAC:   .LONG   17694734
                                                00000000' 00024         .ADDRESS P.AAD
00 52 45 44 41 45 48 5F 54 53 45 50 45 45 44  00028 P.AAF:   .ASCII  \DEEPEST_HEADER\<0><0>
                                                      00 00037
                                                010E000E 00038 P.AAE:   .LONG   17694734
                                                00000000' 0003C         .ADDRESS P.AAF
                                00 00 54 4E 45 44 4E 49  00040 P.AAH:   .ASCII  \INDENT\<0><0>
                                                010E0006 00048 P.AAG:   .LONG   17694726
                                                00000000' 0004C         .ADDRESS P.AAH
                   53 52 45 42 4D 55 4E 5F 45 47 41 50  00050 P.AAJ:   .ASCII  \PAGE_NUMBERS\
                                                010E000C 0005C P.AAI:   .LONG   17694732
                                                00000000' 00060         .ADDRESS P.AAJ
                   53 52 45 42 4D 55 4E 5F 45 47 41 50  00064 P.AAL:   .ASCII  \PAGE_NUMBERS\
                                                010E000C 00070 P.AAK:   .LONG   17694732
                                                00000000' 00074         .ADDRESS P.AAL
                                00 00 00 4C 45 56 45 4C  00078 P.AAN:   .ASCII  \LEVEL\<0><0><0>
                                                010E0005 00080 P.AAM:   .LONG   17694725
                                                00000000' 00084         .ADDRESS P.AAN
                                                   44 4C 4F 42  00088 P.AAP:   .ASCII  \BOLD\
                                                010E0004 0008C P.AAO:   .LONG   17694724
                                                00000000' 00090         .ADDRESS P.AAP
00 4E 4F 49 54 41 43 49 46 49 54 4E 45 44 49  00094 P.AAR:   .ASCII  \IDENTIFICATION\<0><0>
                                                      00 000A3
                                                010E000E 000A4 P.AAQ:   .LONG   17694734
                                                00000000' 000A8         .ADDRESS P.AAR
                                                   00 47 4F 4C  000AC P.AAT:   .ASCII  \LOG\<0>
                                                010E0003 000B0 P.AAS:   .LONG   17694723
                                                00000000' 000B4         .ADDRESS P.AAT
                                00 00 54 55 50 54 55 4F  000B8 P.AAV:   .ASCII  \OUTPUT\<0><0>
                                                010E0006 000C0 P.AAU:   .LONG   17694726
                                                00000000' 000C4         .ADDRESS P.AAV
                                00 00 54 55 50 54 55 4F  000C8 P.AAX:   .ASCII  \OUTPUT\<0><0>
                                                010E0006 000D0 P.AAW:   .LONG   17694726
                                                00000000' 000D4         .ADDRESS P.AAX
                                00 45 52 49 55 51 45 52  000D8 P.AAZ:   .ASCII  \REQUIRE\<0>
                                                010E0007 000E0 P.AAY:   .LONG   17694727
                                                00000000' 000E4         .ADDRESS P.AAZ
                                00 45 52 49 55 51 45 52  000E8 P.ABB:   .ASCII  \REQUIRE\<0>
                                                010E0007 000F0 P.ABA:   .LONG   17694727
                                                00000000' 000F4         .ADDRESS P.ABB
53 52 45 42 4D 55 4E 5F 4E 4F 49 54 43 45 53  000F8 P.ABD:   .ASCII  \SECTION_NUMBERS\<0>
                                                      00 00107
                                                010E000F 00108 P.ABC:   .LONG   17694735
                                                00000000' 0010C         .ADDRESS P.ABD
                   00 00 00 45 4E 49 4C 52 45 44 4E 55  00110 P.ABF:   .ASCII  \UNDERLINE\<0><0><0>
                                                010E0009 0011C P.ABE:   .LONG   17694729
                                                00000000' 00120         .ADDRESS P.ABF
                                00 00 00 54 55 50 4E 49  00124 P.ABH:   .ASCII  \INPUT\<0><0><0>
                                                010E0005 00128 P.ABG:   .LONG   17694725
                                                00000000' 00130         .ADDRESS P.ABH

                                                                        .PSECT  $OWN$,NOEXE,2
```

```
                        00000 QUALIFIER_VALUE:
                                        .BLKB   4
                          0000  00004 TMP_STR:.WORD   0
                        02  0E  00006          .BYTE   14, 2
                      00000000  00008          .LONG   0
                      00000001  0000C TERMINATION_STATUS:
                                        .LONG   1

                                        .EXTRN  DSRTOC$_BADVALUE
                                        .EXTRN  DSRTOC$_OPENIN, DSRTOC$_OPENOUT
                                        .EXTRN  DSRTOC$_VALERR, DSRTOC$_CAPTIONS
                                        .EXTRN  DSRTOC$_CLOSEQUOT
                                        .EXTRN  DSRTOC$_CONFQUAL
                                        .EXTRN  DSRTOC$_CTRLCHAR
                                        .EXTRN  DSRTOC$_EMPTYIN
                                        .EXTRN  DSRTOC$_IGNORED
                                        .EXTRN  DSRTOC$_INVINPUT
                                        .EXTRN  DSRTOC$_INVRECORD
                                        .EXTRN  DSRTOC$_OVERSTRK
                                        .EXTRN  DSRTOC$_COMPLETE
                                        .EXTRN  DSRTOC$_CREATED
                                        .EXTRN  DSRTOC$_IGNORENEW
                                        .EXTRN  DSRTOC$_IGNOREOLD
                                        .EXTRN  DSRTOC$_PROCFILE
                                        .EXTRN  DSRTOC$_TEXTD, DSRTOC$_TMS11
                                        .EXTRN  DSRTOC$_IDENT, CLI$_CONCAT
                                        .EXTRN  CLI$_PRESENT, CLI$_DEFAULTED
                                        .EXTRN  CLI$_NEGATED, CLI$_ABSENT
                                        .EXTRN  CMDBLK, CNTVRL, CNTVRP
                                        .EXTRN  CLI$PRESENT, CLI$GET_VALUE
                                        .EXTRN  LIB$TPARSE, TOC
                                        .EXTRN  TOCFIN

                                        .PSECT  $CODE$,NOWRT,2

                            0FFC 00000  .ENTRY  CNTCLI, Save R2,R3,R4,R5,R6,R7,R8,R9,R10,-  ; 0692
                                                R11
                5B 00000000V   EF  9E 00002  MOVAB  CALL_TPARSE,   1                        ;
                5A 00000000'   EF  9E 00009  MOVAB  NUMB_KEY, R10                           ;
                59 00000000G   00  9E 00010  MOVAB  LIB$STOP, R9                            ;
                58 00000000G   8F  D0 00017  MOVL   #DSRTOC$_BADV    , R8                   ;
                57 00000000G   00  9E 0001E  MOVAB  CLI$GET_VALUE,                          ;
                56 00000000G   00  9E 00025  MOVAB  CLI$PRESENT, R6                         ;
                55 00000000'   EF  9E 0002C  MOVAB  P.AAA, R5                               ;
                54 00000000'   EF  9E 00033  MOVAB  QUALIFIER_VALUE, R4                     ;
                53 00000000G   EF  9E 0003A  MOVAB  CMDBLK, R3                              ;
                6D      020A   CF  DE 00041  MOVAL  19$, (FP)                               ; 0724
          3C    A3 020E0000    8F  D0 00046  MOVL   #34471936, $STR$DESC                   ; 0732
                        40     A3  D4 0004E  CLRL   $STR$DESC+4
          44    A3 020E0000    8F  D0 00051  MOVL   #34471936, $STR$DESC                   ; 0733
                        48     A3  D4 00059  CLRL   $STR$DESC+4
          4C    A3 020E0000    8F  D0 0005C  MOVL   #34471936, $STR$DESC                   ; 0734
                        50     A3  D4 00064  CLRL   $STR$DESC+4
          54    A3 020E0000    8F  D0 00067  MOVL   #34471936, $STR$DESC                   ; 0735
                        58     A3  D4 0006F  CLRL   $STR$DESC+4
                        54     A3  9F 00072  PUSHAB CMDBLK+84                              ; 0740
```

```
                                                55  DD 00075          PUSHL   R5                                                  ;
                                            67  02  FB 00077          CALLS   #2, CLI$GET_VALUE                                   ;
                                            63  02  8A 0007A          BICB2   #2, CMDBLK                                          ; 0752
                                            64      46  8F  9A 0007D  MOVZBL  #70, QUALIFIER_VALUE                                ; 0781
                                        18  A3      64  D0 00081      MOVL    QUALIFIER_VALUE, CMDBLK+24                          ; 0820
                                            64      06  D0 00085      MOVL    #6, QUALIFIER_VALUE                                 ; 0832
                                                18  A5  9F 00088      PUSHAB  P.AAC                                               ; 0834
                                            66      01  FB 0008B      CALLS   #1, CLI$PRESENT                                     ;
                                            38      50  E9 0008E      BLBC    R0, 2$                                              ;
                                                04  A4  9F 00091      PUSHAB  TMP_STR                                             ; 0837
                                                30  A5  9F 00094      PUSHAB  P.AAE
                                            67      02  FB 00097      CALLS   #2, CLI$GET_VALUE                                   ;
                                                    7E  D4 0009A      CLRL    -(SP)                                               ; 0839
                                                    5A  DD 0009C      PUSHL   R10                                                 ;
                                          00000000'     EF  9F 0009E  PUSHAB  NUMB_STATE                                          ;
                                                04      A4  9F 000A4  PUSHAB  TMP_STR                                             ;
                                            6B          04  FB 000A7  CALLS   #4, CALL_TPARSE                                     ;
                                            0A          50  E8 000AA  BLBS    R0, 1$                                              ;
                                                04      A4  9F 000AD  PUSHAB  TMP_STR                                             ; 0841
                                                        01  DD 000B0  PUSHL   #1                                                  ;
                                                        58  DD 000B2  PUSHL   R8                                                  ;
                                            69          03  FB 000B4  CALLS   #3, LIB$STOP                                       ;
                                            06          64  D1 000B7  1$:     CMPL    QUALIFIER_VALUE, #6                         ; 0843
                                                        10  15 000BA  BLEQ    2$                                                  ;
                                          00000000G     8F  DD 000BC  PUSHL   #DSRTOC$_VALERR                                     ; 0845
                                                04      A4  9F 000C2  PUSHAB  TMP_STR                                             ;
                                                        01  DD 000C5  PUSHL   #1                                                  ;
                                                        58  DD 000C7  PUSHL   R8                                                  ;
                                            69          04  FB 000C9  CALLS   #4, LIB$STOP                                       ;
                                        04  A3          64  D0 000CC  2$:     MOVL    QUALIFIER_VALUE, CMDBLK+4                   ; 0849
                                        20  A3          08  D0 000D0      MOVL    #8, INDENTS                                     ; 0862
                                        24  A3          08  D0 000D4      MOVL    #8, INDENTS+4                                   ; 0863
                                        28  A3          02  7D 000D8      MOVQ    #2, INDENTS+8                                   ; 0864
                                                30  A3  7C 000DC      CLRQ    INDENTS+16                                          ; 0877
                                                38  A3  D4 000DF      CLRL    INDENTS+24                                          ; 0879
                                                40  A5  9F 000E2      PUSHAB  P.AAG                                               ; 0883
                                            66      01  FB 000E5      CALLS   #1, CLI$PRESENT                                     ;
                                            10      50  E9 000E8      BLBC    R0, 3$                                              ;
                                        2C  A3          02  D0 000EB      MOVL    #2, INDENTS+12                                  ; 0962
                                        30  A3          02  D0 000EF      MOVL    #2, INDENTS+16                                  ; 0963
                                        34  A3          02  D0 000F3      MOVL    #2, INDENTS+20                                  ; 0964
                                        38  A3          02  D0 000F7      MOVL    #2, INDENTS+24                                  ; 0965
                                        02  A3          2E  90 000FB  3$:     MOVB    #46, CMDBLK+2                               ; 0981
                                            63          08  88 000FF      BISB2   #8, CMDBLK                                      ; 1064
                                            64          06  D0 00102      MOVL    #6, QUALIFIER_VALUE                             ; 1065
                                                54  A5  9F 00105      PUSHAB  P.AAI                                               ; 1067
                                            66      01  FB 00108      CALLS   #1, CLI$PRESENT                                     ;
                                            4F      50  E9 0010B      BLBC    R0, 6$                                              ;
                                                04  A4  9F 0010E  4$:     PUSHAB  TMP_STR                                         ; 1071
                                                68  A5  9F 00111      PUSHAB  P.AAK
                                            67      02  FB 00114      CALLS   #2, CLI$GET_VALUE                                   ;
                                            1F      50  E9 00117      BLBC    R0, 5$                                              ;
                                                    7E  D4 0011A      CLRL    -(SP)                                               ; 1072
                                                    5A  DD 0011C      PUSHL   R10                                                 ;
                                          00000000'     EF  9F 0011E  PUSHAB  PAGE_STATE                                          ;
                                                04      A4  9F 00124  PUSHAB  TMP_STR                                             ;
                                            6B          04  FB 00127  CALLS   #4, CALL_TPARSE                                     ;
```

```
                        E1         50  E8 0012A         BLBS    R0, 4$                          ;
                             04    A4  9F 0012D         PUSHAB  TMP_STR                         ; 1074
                                   01  DD 00130         PUSHL   #1                              ;
                                   58  DD 00132         PUSHL   R8                              ;
                        69         03  FB 00134         CALLS   #3, LIB$STOP                    ;
                                   D5  11 00137         BRB     4$                              ; 1072
              20        63         01  E1 00139 5$:     BBC     #1, CMDBLK, 6$                  ; 1076
                        06         64  D1 0013D         CMPL    QUALIFIER_VALUE, #6             ;
                                   1B  13 00140         BEQL    6$                              ;
                    00000000G      8F  DD 00142         PUSHL   #DSRTOC$_CONFQUAL               ; 1082
                             78    A5  9F 00148         PUSHAB  P.AAM                           ;
                                   01  DD 0014B         PUSHL   #1                              ;
                    00000000G      8F  DD 0014D         PUSHL   #DSRTOC$_IGNORED                ;
          00000000G     00         04  FB 00153         CALLS   #4, LIB$SIGNAL                  ;
                        64         06  D0 0015A         MOVL    #6, QUALIFIER_VALUE             ; 1084
                 08     A3         64  D0 0015D 6$:     MOVL    QUALIFIER_VALUE, CMDBLK+8       ; 1089
                        64         01  CE 00161         MNEGL   #1, QUALIFIER_VALUE             ; 1094
                           0084    C5  9F 00164         PUSHAB  P.AAO                           ; 1096
                        66         01  FB 00168         CALLS   #1, CLI$PRESENT                 ;
                        03         50  E9 0016B         BLBC    R0, 7$                          ;
                        64         06  D0 0016E         MOVL    #6, QUALIFIER_VALUE             ; 1114
                 10     A3         64  D0 00171 7$:     MOVL    QUALIFIER_VALUE, CMDBLK+16      ; 1118
                        64         01  CE 00175         MNEGL   #1, QUALIFIER_VALUE             ; 1123
                 1C     A3         64  D0 00178         MOVL    QUALIFIER_VALUE, CMDBLK+28      ; 1146
                           009C    C5  9F 0017C         PUSHAB  P.AAQ                           ; 1151
                        66         01  FB 00180         CALLS   #1, CLI$PRESENT                 ;
                        1B         50  E9 00183         BLBC    R0, 8$                          ;
                    00000000G      EF  DD 00186         PUSHL   CNTVRP                          ; 1153
                    00000000G      EF  DD 0018C         PUSHL   CNTVRL                          ;
                                   02  DD 00192         PUSHL   #2                              ;
                    00000000G      8F  DD 00194         PUSHL   #DSRTOC$_IDENT                  ;
          00000000G     00         04  FB 0019A         CALLS   #4, LIB$SIGNAL                  ;
                           00A8    C5  9F 001A1 8$:     PUSHAB  P.AAS                           ; 1158
                        66         01  FB 001A5         CALLS   #1, CLI$PRESENT                 ;
                        05         50  E9 001A8         BLBC    R0, 9$                          ;
                        63         20  88 001AB         BISB2   #32, CMDBLK                     ; 1160
                                   03  11 001AE         BRB     10$                             ;
                        63         20  8A 001B0 9$:     BICB2   #32, CMDBLK                     ; 1162
                           00B8    C5  9F 001B3 10$:    PUSHAB  P.AAU                           ; 1167
                        66         01  FB 001B7         CALLS   #1, CLI$PRESENT                 ;
                        0F         50  E9 001BA         BLBC    R0, 11$                         ;
                        63         01  88 001BD         BISB2   #1, CMDBLK                      ; 1170
                             44    A3  9F 001C0         PUSHAB  CMDBLK+68                       ; 1171
                           00C8    C5  9F 001C3         PUSHAB  P.AAW                           ;
                        67         02  FB 001C7         CALLS   #2, CLI$GET_VALUE               ;
                                   03  11 001CA         BRB     12$                             ; 1167
                        63         01  8A 001CC 11$:    BICB2   #1, CMDBLK                      ; 1174
                           00D8    C5  9F 001CF 12$:    PUSHAB  P.AAY                           ; 1180
                        66         01  FB 001D3         CALLS   #1, CLI$PRESENT                 ;
                        0F         50  E9 001D6         BLBC    R0, 13$                         ;
                        63         04  88 001D9         BISB2   #4, CMDBLK                      ; 1183
                             4C    A3  9F 001DC         PUSHAB  CMDBLK+76                       ; 1184
                           00E8    C5  9F 001DF         PUSHAB  P.ABA                           ;
                        67         02  FB 001E3         CALLS   #2, CLI$GET_VALUE               ;
                                   03  11 001E6         BRB     14$                             ; 1180
                        63         04  8A 001E8 13$:    BICB2   #4, CMDBLK                      ; 1187
                        63         10  88 001EB 14$:    BISB2   #16, CMDBLK                     ; 1192
```

```
                                14   A3                06  D0 001EE                MOVL    #6, CMDBLK+20                           ; 1212
                                              0100      C5  9F 001F2                PUSHAB  P.ABC                                   ; 1214
                                66                      01  FB 001F6                CALLS   #1, CLI$PRESENT                         ;
                    00000000G   8F                      50  D1 001F9                CMPL    R0, #CLI$_NEGATED                       ;
                                                        06  12 00200                BNEQ    15$                                     ;
                                63                      10  8A 00202                BICB2   #16, CMDBLK                             ; 1217
                                                  14    A3  D4 00205                CLRL    CMDBLK+20                               ; 1218
                                64                      01  CE 00208 15$:           MNEGL   #1, QUALIFIER_VALUE                     ; 1226
                                              0114      C5  9F 0020B                PUSHAB  P.ABE                                   ; 1228
                                66                      01  FB 0020F                CALLS   #1, CLI$PRESENT                         ;
                                03                      50  E9 00212                BLBC    R0, 16$                                 ;
                                64                      06  D0 00215                MOVL    #6, QUALIFIER_VALUE                     ; 1250
                                0C   A3                64  D0 00218 16$:           MOVL    QUALIFIER_VALUE, CMDBLK+12              ; 1254
                                                  3C    A3  9F 0021C 17$:           PUSHAB  CMDBLK+60                               ; 1259
                                              0124      C5  9F 0021F                PUSHAB  P.ABG                                   ;
                                67                      02  FB 00223                CALLS   #2, CLI$GET_VALUE                       ;
                                52                      50  D0 00226                MOVL    R0, STATUS                              ;
                                19                      52  E9 00229                BLBC    STATUS, 18$                             ;
                    00000000G   EF                      00  FB 0022C                CALLS   #0, TOC                                 ; 1261
                    00000000G   8F                      52  D1 00233                CMPL    STATUS, #CLI$_CONCAT                    ; 1267
                                                        E0  13 0023A                BEQL    17$                                     ;
                    00000000G   EF                      00  FB 0023C                CALLS   #0, TOCFIN                              ;
                                                        D7  11 00243                BRB     17$                                     ; 1259
                50      0C   A4 10000000    8F         C9  00245 18$:              BISL3   #268435456, TERMINATION_STATUS, R0      ; 1270
                                                        04  0024E                   RET                                             ; 1271
                                                      0000  0024F 19$:              .WORD   Save nothing                            ; 0724
                                                   7E   D4  00251                   CLRL    -(SP)                                   ;
                                                   5E   DD  00253                   PUSHL   SP                                      ;
                                7E        04       AC   7D  00255                   MOVQ    4(AP), -(SP)                            ;
                    00000000V   EF                   03   FB  00259                CALLS   #3, CONDITION_HANDLER                   ;
                                                        04  00260                   RET                                             ;

; Routine Size:  609 bytes,    Routine Base:  $CODE$ + 0000
```

```
;  910     1272  1 %SBTTL 'CALL_TPARSE -- Invoke TPARSE to process qualifier values'
;  911     1273  1 ROUTINE call_tparse (string : REF $str_descriptor (), state_tab, key_tab, blanks) =
;  912     1274  1 !++
;  913     1275  1 !
;  914     1276  1 ! FUNCTIONAL DESCRIPTION:
;  915     1277  1 !
;  916     1278  1 !       This routine calls TPARSE to parse the given string with
;  917     1279  1 !       the given state and key tables.
;  918     1280  1 !
;  919     1281  1 ! FORMAL PARAMETERS:
;  920     1282  1 !
;  921     1283  1 !       string    - Address of a string descriptor of string to parse
;  922     1284  1 !       state_tab - Address of TPARSE state tables
;  923     1285  1 !       key_tab   - Address of TPARSE key tables
;  924     1286  1 !       blanks    - true if blanks are to be processed explicitly
;  925     1287  1 !
;  926     1288  1 ! IMPLICIT INPUTS:
;  927     1289  1 !
;  928     1290  1 !       None
;  929     1291  1 !
;  930     1292  1 ! IMPLICIT OUTPUTS:
;  931     1293  1 !
;  932     1294  1 !       None
;  933     1295  1 !
;  934     1296  1 ! ROUTINE VALUE:
;  935     1297  1 ! COMPLETION CODES:
;  936     1298  1 !
;  937     1299  1 !       Returns completion code of lib$tparse.
;  938     1300  1 !
;  939     1301  1 ! SIDE EFFECTS:
;  940     1302  1 !
;  941     1303  1 !       None
;  942     1304  1 !
;  943     1305  1 !--
;  944     1306  1
;  945     1307  2     BEGIN
;  946     1308  2
;  947     1309  2     LOCAL
;  948     1310  2         tparse_block : BLOCK [tpa$k_length0, BYTE],
;  949     1311  2         status;
;  950     1312  2
;  951     1313  2     !
;  952     1314  2     ! Initialize the TPARSE parameter block.
;  953     1315  2     !
;  954     1316  2     tparse_block [tpa$l_count]     = tpa$k_count0;
;  955     1317  2     tparse_block [tpa$l_options]   = tpa$m_abbrev;
;  956     1318  2     tparse_block [tpa$v_blanks]    = .blanks;
;  957     1319  2     tparse_block [tpa$l_stringcnt] = .string [str$h_length];
;  958     1320  2     tparse_block [tpa$l_stringptr] = .string [str$a_pointer];
;  959     1321  2     tparse_block [tpa$l_tokencnt]  = 0;
;  960     1322  2     tparse_block [tpa$l_tokenptr]  = 0;
;  961     1323  2     tparse_block [tpa$l_number]    = 0;
;  962     1324  2     tparse_block [tpa$l_param]     = 0;
;  963     1325  2
;  964     1326  2     !
;  965     1327  2     ! Parse the string and return parse status.
;  966     1328  2     !
```

```
;  967          1329  2     RETURN lib$tparse (tparse_block, .state_tab, .key_tab);
;  968          1330  1     END;


                                                0000 00000 CALL_TPARSE:
                                                           .WORD   Save nothing                                          ; 1273
                                     5E                20  C2 00002          SUBL2   #32, SP                            ;
                                                       08  DD 00005          PUSHL   #8                                 ; 1316
                                  04 AE                02  D0 00007          MOVL    #2, TPARSE_BLOCK+4                 ; 1317
      04 AE                 01                       00  10  AC  F0 0000B    INSV    BLANKS, #0, #1, TPARSE_BLOCK+4     ; 1318
                                                     50  04  AC  D0 00012    MOVL    STRING, R0                         ; 1319
                                  08 AE                60  3C 00016          MOVZWL  (R0), TPARSE_BLOCK+8               ;
                                  0C AE              04  A0  D0 0001A        MOVL    4(R0), TPARSE_BLOCK+12             ; 1320
                                                     10  AE  7C 0001F        CLRQ    TPARSE_BLOCK+16                    ; 1321
                                                     1C  AE  7C 00022        CLRQ    TPARSE_BLOCK+28                    ; 1323
                                     7E              08  AC  7D 00025        MOVQ    STATE_TAB, -(SP)                   ; 1329
                                                     08  AE  9F 00029        PUSHAB  TPARSE_BLOCK                       ;
                           00000000G 00                  03  FB 0002C        CALLS   #3, LIB$TPARSE                     ;
                                                         04 00033          RET                                        ; 1330

; Routine Size:  52 bytes,    Routine Base:  $CODE$ + 0261
```

```
;  970          1331  1 %SBTTL 'ENTER_PAGE -- Action routine - enter page display type'
;  971          1332  1 ROUTINE enter_page =
;  972          1333  1 !++
;  973          1334  1 !
;  974          1335  1 ! FUNCTIONAL DESCRIPTION:
;  975          1336  1 !
;  976          1337  1 !       This routine is called as an action routine by TPARSE.
;  977          1338  1 !       It sets contents$v_standard page from tpa$l_param.
;  978          1339  1 !
;  979          1340  1 ! FORMAL PARAMETERS:
;  980          1341  1 !
;  981          1342  1 !       AP [tpa$l_param] - value to set contents$v_standard_page
;  982          1343  1 !
;  983          1344  1 ! IMPLICIT INPUTS:
;  984          1345  1 !
;  985          1346  1 !       None
;  986          1347  1 !
;  987          1348  1 ! IMPLICIT OUTPUTS:
;  988          1349  1 !
;  989          1350  1 !       cmdblk [contents$v_standard_page]
;  990          1351  1 !
;  991          1352  1 ! ROUTINE VALUE:
;  992          1353  1 ! COMPLETION CODES:
;  993          1354  1 !
;  994          1355  1 !       ss$_normal
;  995          1356  1 !
;  996          1357  1 ! SIDE EFFECTS:
;  997          1358  1 !
;  998          1359  1 !       None
;  999          1360  1 !
; 1000          1361  1 !--
; 1001          1362  1
; 1002          1363  2     BEGIN
; 1003          1364  2
; 1004          1365  2     BUILTIN
; 1005          1366  2         AP;
; 1006          1367  2
; 1007          1368  2     MAP
; 1008          1369  2         AP : REF BLOCK [, BYTE];
; 1009          1370  2
; 1010          1371  2     cmdblk [contents$v_standard_page] = .AP [tpa$l_param];
; 1011          1372  2
; 1012          1373  2     RETURN ss$_normal;
; 1013          1374  1     END;


                                                0000 00000 ENTER_PAGE:
                                                           .WORD   Save nothing                                    ; 1332
00000000G  EF           01          03      20  AC  F0 00002      INSV    32(AP), #3, #1, CMDBLK                  ; 1371
                                    50          01  D0 0000C      MOVL    #1, R0                                  ; 1373
                                                    04 0000F      RET                                             ; 1374

; Routine Size:  16 bytes,    Routine Base:  $CODE$ + 0295
```

```
;  1015        L 1375  1 %IF DSRPLUS
;  1016        U 1376  1 %THEN
;  1017        U 1377  1
;  1018        U 1378  1 %SBTTL 'ENTER_FORMAT -- Action routine - Enter output format'
;  1019        U 1379  1 ROUTINE enter_format =
;  1020        U 1380  1 !++
;  1021        U 1381  1 !
;  1022        U 1382  1 ! FUNCTIONAL DESCRIPTION:
;  1023        U 1383  1 !
;  1024        U 1384  1 !       This routine is called as an action routine by TPARSE.
;  1025        U 1385  1 !
;  1026        U 1386  1 !       It sets the value of contents$v_tms11 based on the value of
;  1027        U 1387  1 !       the parameter passed by TPARSE.
;  1028        U 1388  1 !
;  1029        U 1389  1 ! FORMAL PARAMETERS:
;  1030        U 1390  1 !
;  1031        U 1391  1 !       AP [tpa$l_param]        - true if generating TMS output, false otherwise
;  1032        U 1392  1 !
;  1033        U 1393  1 ! IMPLICIT INPUTS:
;  1034        U 1394  1 !
;  1035        U 1395  1 !       None
;  1036        U 1396  1 !
;  1037        U 1397  1 ! IMPLICIT OUTPUTS:
;  1038        U 1398  1 !
;  1039        U 1399  1 !       cmdblk [contents$v_tms11] - set to the value of AP [tpa$l_param]
;  1040        U 1400  1 !
;  1041        U 1401  1 ! ROUTINE VALUE:
;  1042        U 1402  1 ! COMPLETION CODES:
;  1043        U 1403  1 !
;  1044        U 1404  1 !       ss$_normal
;  1045        U 1405  1 !
;  1046        U 1406  1 ! SIDE EFFECTS:
;  1047        U 1407  1 !
;  1048        U 1408  1 !       None
;  1049        U 1409  1 !--
;  1050        U 1410  1     BEGIN
;  1051        U 1411  1     BUILTIN
;  1052        U 1412  1         AP;
;  1053        U 1413  1
;  1054        U 1414  1     MAP
;  1055        U 1415  1         AP : REF BLOCK [, BYTE];
;  1056        U 1416  1
;  1057        U 1417  1     cmdblk [contents$v_tms11] = .AP [tpa$l_param];
;  1058        U 1418  1     RETURN ss$_normal;
;  1059        U 1419  1     END;
;  1060        U 1420  1
;  1061          1421  1 %FI
```

```
;  1063        L 1422  1 %IF DSRPLUS
;  1064        U 1423  1 %THEN
;  1065        U 1424  1
;  1066        U 1425  1 %SBTTL 'ENTER_SECT -- Action routine - enter section number display level'
;  1067        U 1426  1 ROUTINE enter_sect =
;  1068        U 1427  1 !++
;  1069        U 1428  1 !
;  1070        U 1429  1 ! FUNCTIONAL DESCRIPTION:
;  1071        U 1430  1 !
;  1072        U 1431  1 !       This routine is called as an action routine by TPARSE.
;  1073        U 1432  1 !       It sets the level of section number to be displayed based on the
;  1074        U 1433  1 !       value passed by TPARSE.
;  1075        U 1434  1 !
;  1076        U 1435  1 ! FORMAL PARAMETERS:
;  1077        U 1436  1 !
;  1078        U 1437  1 !       AP [tpa$l_param]        = -1 - display section numbers AS_INPUT
;  1079        U 1438  1 !                                 =  6 - display ALL section numbers
;  1080        U 1439  1 !                                 = -2 - don't display section numbers
;  1081        U 1440  1 !                                 =  0 - user specified deepest level to display
;  1082        U 1441  1 !       AP [tpa$l_number]       =      user specified level
;  1083        U 1442  1 !
;  1084        U 1443  1 ! IMPLICIT INPUTS:
;  1085        U 1444  1 !
;  1086        U 1445  1 !       None
;  1087        U 1446  1 !
;  1088        U 1447  1 ! IMPLICIT OUTPUTS:
;  1089        U 1448  1 !
;  1090        U 1449  1 !       cmdblk [contents$v_include_sections]    = true if sections are to be
;  1091        U 1450  1 !                                                 displayed
;  1092        U 1451  1 !       cmdblk [contents$g_sections]            = deepest level to display
;  1093        U 1452  1 !
;  1094        U 1453  1 ! ROUTINE VALUE:
;  1095        U 1454  1 ! COMPLETION CODES:
;  1096        U 1455  1 !
;  1097        U 1456  1 !       ss$_normal
;  1098        U 1457  1 !
;  1099        U 1458  1 ! SIDE EFFECTS:
;  1100        U 1459  1 !
;  1101        U 1460  1 !       None
;  1102        U 1461  1 !
;  1103        U 1462  1 !--
;  1104        U 1463  1
;  1105        U 1464  1     BEGIN
;  1106        U 1465  1
;  1107        U 1466  1     BUILTIN
;  1108        U 1467  1         AP;
;  1109        U 1468  1
;  1110        U 1469  1     MAP
;  1111        U 1470  1         AP : REF BLOCK [, BYTE];
;  1112        U 1471  1
;  1113        U 1472  1     SELECTONE .AP [tpa$l_param] OF
;  1114        U 1473  1         SET
;  1115        U 1474  1
;  1116        U 1475  1         [-2]:
;  1117        U 1476  1             BEGIN
;  1118        U 1477  1             !
;  1119        U 1478  1             ! Don't display section numbers.
```

```
; 1120          U 1479  1                !
; 1121          U 1480  1                cmdblk [contents$v_include_sections] = false;
; 1122          U 1481  1                cmdblk [contents$g_sections] = 0;
; 1123          U 1482  1                END;
; 1124          U 1483  1
; 1125          U 1484  1            [-1]:
; 1126          U 1485  1                BEGIN
; 1127          U 1486  1                !
; 1128          U 1487  1                ! Display section numbers AS_INPUT.
; 1129          U 1488  1                !
; 1130          U 1489  1                cmdblk [contents$v_include_sections] = true;
; 1131          U 1490  1                cmdblk [contents$g_sections] = -1;
; 1132          U 1491  1                END;
; 1133          U 1492  1
; 1134          U 1493  1            [0]:
; 1135          U 1494  1                BEGIN
; 1136          U 1495  1                !
; 1137          U 1496  1                ! User specified deepest level to display.
; 1138          U 1497  1                !
; 1139          U 1498  1                cmdblk [contents$v_include_sections] = true;
; 1140          U 1499  1                cmdblk [contents$g_sections] = .AP [tpa$l_number];
; 1141          U 1500  1                END;
; 1142          U 1501  1
; 1143          U 1502  1            [6]:
; 1144          U 1503  1                BEGIN
; 1145          U 1504  1                !
; 1146          U 1505  1                ! Display ALL section numbers.
; 1147          U 1506  1                !
; 1148          U 1507  1                cmdblk [contents$v_include_sections] = true;
; 1149          U 1508  1                cmdblk [contents$g_sections] = 6;
; 1150          U 1509  1                END;
; 1151          U 1510  1
; 1152          U 1511  1            TES;
; 1153          U 1512  1
; 1154          U 1513  1        RETURN ss$_normal;
; 1155          U 1514  1        END;
; 1156          U 1515  1
; 1157            1516  1 %FI
```

```
;  1159        L 1517  1 %IF DSRPLUS
;  1160        U 1518  1 %THEN
;  1161        U 1519  1
;  1162        U 1520  1 %SBTTL 'ENTER_DOT -- Action routine - enter leader dot character'
;  1163        U 1521  1 ROUTINE enter_dot =
;  1164        U 1522  1 !++
;  1165        U 1523  1 !
;  1166        U 1524  1 ! FUNCTIONAL DESCRIPTION:
;  1167        U 1525  1 !
;  1168        U 1526  1 !       This routine is called as an action routine by TPARSE.
;  1169        U 1527  1 !       This routine saves the leader dot character specified by the user.
;  1170        U 1528  1 !
;  1171        U 1529  1 ! FORMAL PARAMETERS:
;  1172        U 1530  1 !
;  1173        U 1531  1 !       AP [tpa$b_char] - leader dot character
;  1174        U 1532  1 !
;  1175        U 1533  1 ! IMPLICIT INPUTS:
;  1176        U 1534  1 !
;  1177        U 1535  1 !       None
;  1178        U 1536  1 !
;  1179        U 1537  1 ! IMPLICIT OUTPUTS:
;  1180        U 1538  1 !
;  1181        U 1539  1 !       cmdblk [contents$c_leader_char] - character is saved here
;  1182        U 1540  1 !
;  1183        U 1541  1 ! ROUTINE VALUE:
;  1184        U 1542  1 ! COMPLETION CODES:
;  1185        U 1543  1 !
;  1186        U 1544  1 !       ss$_normal
;  1187        U 1545  1 !
;  1188        U 1546  1 ! SIDE EFFECTS:
;  1189        U 1547  1 !
;  1190        U 1548  1 !       None
;  1191        U 1549  1 !
;  1192        U 1550  1 !--
;  1193        U 1551  1
;  1194        U 1552  1     BEGIN
;  1195        U 1553  1
;  1196        U 1554  1     BUILTIN
;  1197        U 1555  1         AP;
;  1198        U 1556  1
;  1199        U 1557  1     MAP
;  1200        U 1558  1         AP : REF BLOCK [, BYTE];
;  1201        U 1559  1
;  1202        U 1560  1     CH$WCHAR (.AP [tpa$b_char], CH$PTR (cmdblk [contents$c_leader_char]));
;  1203        U 1561  1
;  1204        U 1562  1     RETURN ss$_normal;
;  1205        U 1563  1     END;
;  1206        U 1564  1
;  1207          1565  1 %FI
```

```
;  1209        L 1566  1 %IF DSRPLUS
;  1210        U 1567  1 %THEN
;  1211        U 1568  1
;  1212        U 1569  1 %SBTTL 'ENTER_HL_INDENT - Action routine - enter HL indent value'
;  1213        U 1570  1 ROUTINE enter_hl_indent =
;  1214        U 1571  1 !
;  1215        U 1572  1 ! FUNCTIONAL DESCRIPTION:
;  1216        U 1573  1 !
;  1217        U 1574  1 !       This routine is called as an action routine by TPARSE.
;  1218        U 1575  1 !
;  1219        U 1576  1 !       It assigns values for progressive indenting.
;  1220        U 1577  1 !
;  1221        U 1578  1 ! FORMAL PARAMETERS:
;  1222        U 1579  1 !
;  1223        U 1580  1 !       AP [tpa$l_number]       - value to set contents$ag_hl_indent
;  1224        U 1581  1 !       AP [tpa$l_param]        - HL number (0 = CHAPTER, -1 = PROGRESSIVE)
;  1225        U 1582  1 !
;  1226        U 1583  1 ! IMPLICIT INPUTS:
;  1227        U 1584  1 !
;  1228        U 1585  1 !       None
;  1229        U 1586  1 !
;  1230        U 1587  1 ! IMPLICIT OUTPUTS:
;  1231        U 1588  1 !
;  1232        U 1589  1 !       None
;  1233        U 1590  1 !
;  1234        U 1591  1 ! ROUTINE VALUE:
;  1235        U 1592  1 ! COMPLETION CODES:
;  1236        U 1593  1 !
;  1237        U 1594  1 !       ss$_normal
;  1238        U 1595  1 !
;  1239        U 1596  1 ! SIDE EFFECTS·
;  1240        U 1597  1 !
;  1241        U 1598  1 !       None
;  1242        U 1599  1 !
;  1243        U 1600  1 !--
;  1244        U 1601  1     BEGIN
;  1245        U 1602  1
;  1246        U 1603  1     BUILTIN
;  1247        U 1604  1         AP;
;  1248        U 1605  1
;  1249        U 1606  1     MAP
;  1250        U 1607  1         AP : REF BLOCK [, BYTE];
;  1251        U 1608  1
;  1252        U 1609  1     IF .AP [tpa$l_param] EQL -1
;  1253        U 1610  1     THEN
;  1254        U 1611  1         BEGIN
;  1255        U 1612  1         !
;  1256        U 1613  1         ! /INDENT=PROGRESSIVE=n.
;  1257        U 1614  1         ! Set HL2 through HL6
;  1258        U 1615  1         !
;  1259        U 1616  1         INCR i FROM 2 TO 6 DO
;  1260        U 1617  1             indents [.i] = .AP [tpa$l_number];
;  1261        U 1618  1
;  1262        U 1619  1         END
;  1263        U 1620  1     ELSE
;  1264        U 1621  1         BEGIN
;  1265        U 1622  1         !
```

```
;  1266          U 1623  1          ! CHAPTER and HL1 through HL6
;  1267          U 1624  1          !
;  1268          U 1625  1          indents [.AP [tpa$l_param]] = .AP [tpa$l_number];
;  1269          U 1626  1          END;
;  1270          U 1627  1
;  1271          U 1628  1      RETURN ss$_normal;
;  1272          U 1629  1      END;
;  1273          U 1630  1
;  1274            1631  1 %FI
```

```
;  1276          1632  1 %SBTTL 'CONDITION_HANDLER - Main program condition handler - sets termination status'
;  1277          1633  1 ROUTINE condition_handler (sig : REF BLOCK [, BYTE], mch : REF BLOCK [, BYTE]) =
;  1278          1634  1 !++
;  1279          1635  1 !
;  1280          1636  1 ! FUNCTIONAL DESCRIPTION:
;  1281          1637  1 !
;  1282          1638  1 !       This routine is enabled by CNTCLI as a condition handler.
;  1283          1639  1 !       Whenever a signal is generated, the signal severity is examined.
;  1284          1640  1 !       If the condition is more severe than any previous condition,
;  1285          1641  1 !       (success, warning, error, severe erro') the severity is recorded
;  1286          1642  1 !       in termination_status which is the condition severity. CNTCLI
;  1287          1643  1 !       returns the value of TERMINATION_STATUS as the program status
;  1288          1644  1 !       which will set the value of the DCL $STATUS variable.
;  1289          1645  1 !
;  1290          1646  1 ! FORMAL PARAMETERS:
;  1291          1647  1 !
;  1292          1648  1 !       sig                     - address of signal array
;  1293          1649  1 !       mch                     - address of mechanism array
;  1294          1650  1 !
;  1295          1651  1 ! IMPLICIT INPUTS:
;  1296          1652  1 !
;  1297          1653  1 !       termination_status      - current termination severity
;  1298          1654  1 !
;  1299          1655  1 ! IMPLICIT OUTPUTS:
;  1300          1656  1 !
;  1301          1657  1 !       termination_status      - may be set to the severity level in the
;  1302          1658  1 !                                 signalled condition if it is more severe
;  1303          1659  1 !
;  1304          1660  1 ! ROUTINE VALUE:
;  1305          1661  1 ! COMPLETION CODES:
;  1306          1662  1 !
;  1307          1663  1 !       ss$_resignal
;  1308          1664  1 !
;  1309          1665  1 ! SIDE EFFECTS:
;  1310          1666  1 !
;  1311          1667  1 !       None
;  1312          1668  1 !--
;  1313          1669  2     BEGIN
;  1314          1670  2
;  1315          1671  2     BIND
;  1316          1672  2         signalled_condition = sig [chf$l_sig_name] : BLOCK [, BYTE];
;  1317          1673  2
;  1318          1674  2     SELECTONE .signalled_cordition [sts$v_severity] OF
;  1319          1675  2         SET
;  1320          1676  2
;  1321          1677  2         [sts$k_warning]:
;  1322          1678  2             IF .termination_status EQL sts$k_success
;  1323          1679  2             THEN
;  1324          1680  2                 !
;  1325          1681  2                 ! A warning changes the termination status only if it was
;  1326          1682  2                 ! 'success' previously.
;  1327          1683  2                 !
;  1328          1684  2                 termination_status = sts$k_warning;
;  1329          1685  2
;  1330          1686  2         [sts$k_error]:
;  1331          1687  2             IF .termination_status LSS sts$k_error
;  1332          1688  2             THEN
```

```
;  1333          1689  2                    !
;  1334          1690  2                    ! An error status changes the termination status only if it
;  1335          1691  2                    ! was 'success' or 'warning' previously.
;  1336          1692  2                    !
;  1337          1693  2                    termination_status = sts$k_error;
;  1338          1694  2
;  1339          1695  2          [sts$k_severe]:                         ! Severe error
;  1340          1696  2              termination_status = sts$k_severe;  ! set the termination status
;  1341          1697  2
;  1342          1698  2          [OTHERWISE]:                            ! Success or Informational
;  1343          1699  2              ;                                   ! Do nothing
;  1344          1700  2
;  1345          1701  2          TES;
;  1346          1702  2
;  1347          1703  2      RETURN ss$_resignal;                        ! Continue processing condition
;  1348          1704  1      END;


                                        0004 00000 CONDITION_HANDLER:
                                                   .WORD   Save R2                                                  ;  1633
                    52 00000000'    EF  9E 00002           MOVAB   TERMINATION_STATUS, R2
          50        04              AC  04 C1 00009        ADDL3   #4, SIG, R0                                      ;  1672
                                    07  60 93 0000E        BITB    (R0), #7                                         ;  1677
                                        09 12 00011        BNEQ    1$
                                    01  62 D1 00013        CMPL    TERMINATION_STATUS, #1                           ;  1678
                                        1F 12 00016        BNEQ    3$
                                        62 D4 00018        CLRL    TERMINATION_STATUS                               ;  1684
                                        1B 11 0001A        BRB     3$                                               ;  1678
          02            60            03  00 ED 0001C 1$:  CMPZV   #0, #3, (R0), #2                                ;  1686
                                        0A 12 00021        BNEQ    2$
                                    02  62 D1 00023        CMPL    TERMINATION_STATUS, #2                           ;  1687
                                        0F 18 00026        BGEQ    3$
                                    62  02 D0 00028        MOVL    #2, TERMINATION_STATUS                           ;  1693
                                        0A 11 0002B        BRB     3$                                               ;  1687
          04            60            03  00 ED 0002D 2$:  CMPZV   #0, #3, (R0), #4                                ;  1695
                                        03 12 00032        BNEQ    3$
                                    62  04 D0 00034        MOVL    #4, TERMINATION_STATUS                           ;  1696
                                    50      0918    8F  3C 00037 3$:  MOVZWL  #2328, R0                             ;  1703
                                                    04 0003C           RET                                          ;  1704

; Routine Size:  61 bytes,    Routine Base:  $CODE$ + 02A5
```

```
;1350     1705  1 %SBTTL 'OPEN_ERROR - Handle File Open Errors'
;1351     1706  1 GLOBAL ROUTINE open_error (function_code, primary_code, secondary_code, iob : REF $xpo_iob ()) =
;1352     1707  1 !++
;1353     1708  1 !
;1354     1709  1 ! FUNCTIONAL DESCRIPTION:
;1355     1710  1 !
;1356     1711  1 !       This routine is called as an action routine to report
;1357     1712  1 !       file open errors.
;1358     1713  1 !
;1359     1714  1 ! FORMAL PARAMETERS:
;1360     1715  1 !
;1361     1716  1 !       function_code   - XPORT failure action routine function code
;1362     1717  1 !       primary_code    - primary failure completion code
;1363     1718  1 !       secondary_code  - secondary failure completion code
;1364     1719  1 !       iob             - Address of file IOB
;1365     1720  1 !
;1366     1721  1 ! IMPLICIT INPUTS:      None
;1367     1722  1 !
;1368     1723  1 ! IMPLICIT OUTPUTS:     None
;1369     1724  1 !
;1370     1725  1 ! ROUTINE VALUE:
;1371     1726  1 ! COMPLETION CODES:
;1372     1727  1 !
;1373     1728  1 !       Returns the value of primary_code if success is indicated.
;1374     1729  1 !
;1375     1730  1 ! SIDE EFFECTS:
;1376     1731  1 !
;1377     1732  1 !       Signals a fatal error terminating program execution if failure
;1378     1733  1 !       is indicated by primary_code.
;1379     1734  1 !--
;1380     1735  1
;1381     1736  2     BEGIN
;1382     1737  2
;1383     1738  2     BIND
;1384     1739  2         file_spec = .iob [iob$a_file_spec] : $str_descriptor (),
;1385     1740  2         resultant =  iob [iob$t_resultant] : $str_descriptor ();
;1386     1741  2
;1387     1742  2     LOCAL
;1388     1743  2         file_name : REF $str_descriptor ();
;1389     1744  2
;1390     1745  2     !
;1391     1746  2     ! Point to best file name.
;1392     1747  2     !
;1393     1748  2     file_name = (IF   .resultant [str$h_length] NEQ 0 THEN resultant ELSE file_spec);
;1394     1749  2
;1395     1750  2     IF  NOT .primary_code
;1396     1751  2     THEN
;1397     1752  3         BEGIN
;1398     1753  3         !
;1399     1754  3         ! File was not opened.
;1400     1755  3         !
;1401     1756  3         IF  .iob [iob$v_input]
;1402     1757  3         THEN
;1403     1758  3             SIGNAL_STOP (contents$_openin, 1, .file_name,
;1404     1759  3                 .iob [iob$g_comp_code], 1, .iob [iob$g_2nd_code])
;1405     1760  3
;1406     1761  3         ELSE
```

```
;  1407          1762  3              SIGNAL_STOP (contents$_openout, 1, .file_name,
;  1408          1763  3                  .iob [iob$g_comp_code], 1, .iob [iob$g_2nd_code]);
;  1409          1764  3
;  1410          1765  2          END;
;  1411          1766  2
;  1412          1767  2      RETURN .primary_code;
;  1413          1768  1      END;


                                        0000 00000          .ENTRY  OPEN_ERROR, Save nothing                        ; 1706
                                50        10   AC   D0 00002          MOVL    IOB, R0                                 ; 1739
                                          1C   A0   B5 00006          TSTW    28(R0)                                  ; 1748
                                               06   13 00009          BEQL    1$                                      ;
                                51        1C   A0   9E 0000B          MOVAB   28(R0), FILE_NAME                       ;
                                               04   11 0000F          BRB     2$                                      ;
                                51        04   A0   D0 00011 1$:      MOVL    4(R0), FILE_NAME                        ;
                                35        08   AC   E8 00015 2$:      BLBS    PRIMARY_CODE, 5$                        ; 1750
                                16        2E   A0   E9 00019          BLBC    46(R0), 3$                              ; 1756
                                        00DC   C0   DD 0001D          PUSHL   220(R0)                                 ; 1759
                                               01   DD 00021          PUSHL   #1                                      ; 1758
                                        00D8   C0   DD 00023          PUSHL   216(R0)                                 ; 1759
                                               51   DD 00027          PUSHL   FILE_NAME                               ; 1758
                                               01   DD 00029          PUSHL   #1                                      ;
                                   00000000G   8F   DD 0002B          PUSHL   #DSRTOC$_OPENIN                         ;
                                               14   11 00031          BRB     4$                                      ;
                                        00DC   C0   DD 00033 3$:      PUSHL   220(R0)                                 ; 1763
                                               01   DD 00037          PUSHL   #1                                      ; 1762
                                        00D8   C0   DD 00039          PUSHL   216(R0)                                 ; 1763
                                               51   DD 0003D          PUSHL   FILE_NAME                               ; 1762
                                               01   DD 0003F          PUSHL   #1                                      ;
                                   00000000G   8F   DD 00041          PUSHL   #DSRTOC$_OPENOUT                        ;
                        00000000G  00               06   FB 00047 4$:      CALLS   #6, LIB$STOP                            ;
                                50        08   AC   D0 0004E 5$:      MOVL    PRIMARY_CODE, R0                        ; 1767
                                               04   00052          RET                                             ; 1768

; Routine Size:  83 bytes,    Routine Base:  $CODE$ + 02E2

;  1414          1769  1
;  1415          1770  1 END                                   ! End of module
;  1416          1771  0 ELUDOM



                                                                .EXTRN  LIB$SIGNAL, LIB$STOP

;                                       PSECT SUMMARY
;
;       Name                            Bytes                           Attributes
;
;  $OWN$                                   16  NOVEC,  WRT,  RD ,NOEXE,NOSHR,  LCL,  REL,  CON,NOPIC,ALIGN(2)
;  _LIB$KEY0$                               6  NOVEC,NOWRT,  RD ,  EXE,  SHR,  LCL,  REL,  CON,  PIC,ALIGN(1)
;  _LIB$STATE$                             60  NOVEC,NOWRT,  RD ,  EXE,  SHR,  LCL,  REL,  CON,  PIC,ALIGN(1)
```

```
;  _LIB$KEY1$                      25  NOVEC,NOWRT,  RD ,  EXE,  SHR,  LCL,  REL,  CON,  PIC,ALIGN(1)
;  $PLIT$                         308  NOVEC,NOWRT,  RD ,NOEXE,NOSHR,  LCL,  REL,  CON,NOPIC,ALIGN(2)
;  $CODE$                         821  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]STARLET.L32;1       9776        22         0         581       00:01.1
;  _$255$DUA28:[SYSLIB]TPAMAC.L32;1          42        25        59          14       00:00.1
;  _$255$DUA28:[SYSLIB]XPORT.L32;1          590       130        22         252       00:00.6




;                                    COMMAND QUALIFIERS

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

; Size:         821 code + 415 data bytes
; Run Time:       00:39.3
; Elapsed Time:   01:34.5
; Lines/CPU Min:   2704
; Lexemes/CPU-Min: 52940
; Memory Used:  270 pages
; Compilation Complete
```

CNVDAT
LIS

CONVBB
LIS

CONVBR
LIS

CNTVMSMSG
LIS

CONTENTS
LIS

CNTVMS
LIS

CNTVRS
LIS

CONTRL
LIS

CONVBI
LIS